

**BASAK BISTRO ONLINE FOOD ORDERING SYSTEM
IN BATUAN, BOHOL**

**College of Technology and Allied Sciences
BOHOL ISLAND STATE UNIVERSITY
Zamora, Bilal, Bohol**

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**BASAK BISTRO ONLINE FOOD ORDERING SYSTEM
IN BATUAN, BOHOL**

A Thesis
Presented to the Faculty of the
College of Technology and Allied Sciences
BOHOL ISLAND STATE UNIVERSITY
Zamora, Bilar, Bohol

In Partial Fulfillment
Of the Requirements for the Degree
Bachelor of Science in Computer Science

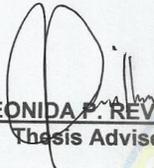
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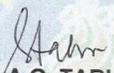
This thesis entitled "Basak Bistro Online Food Ordering System, Poblacion Norte, Batuan, Bohol" prepared and submitted by *Halette J. Bandong, Jonebelle L. Espina, and Shela Mae P. Polinar* in partial fulfillment of the requirements for the degree Bachelor of Science in Computer Science has been examined and recommended for acceptance and approval for oral defense.

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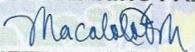

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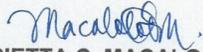

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ABSTRACT

The study aimed to develop an Online Food Ordering System of Basak Bistro Poblacion Norte, Batuan, Bohol. Currently, the operation of the restaurant uses the manual recording of customer's information, management of orders and generation of sales report. These, along with the unexpected emergence of the pandemic has caused the establishment multiple challenges such as redundancy of entry, ordering mistakes, difficulty in retrieving files and customizing reports, and unsecured information. The identified problems and issues had led the researchers to come up with a solution that overcomes the disadvantages of the traditional queuing system, secures the customers information to prevent conflicts in records, and provide an easier method for ordering. With the needs identified, the online food ordering system was developed with the following modules: obnline ordering, acquisition, cataloguing, administration, and generation of reports. Functionality of the developed system was performed to the identified users using the web usability questionnaire adopted from MIT information Technology and Services. The evaluation result was rated 4.5 which means that the system had an excellent rating indicating the achievement of the individual's expectations on the features. With this, it is highly recommended to implement the Online Food Ordering System of Basak Bistro, Poblacion Norte, Batuan, Bohol.

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Chapter 1

THE PROBLEM AND ITS SCOPE

Rationale

Nowadays, the most prevalent method of promoting a business is done online. Using the internet, where linked web pages are served from a single domain, is important for advertising and online transactions. This information helps local and foreign viewers to access information through the website. Accessing the site through online ordering and purchasing were the trends of commercialization in the market (Inson et al., 2017).

Since the emergence of the pandemic, many entrepreneurs are experiencing drastic changes in managing their businesses due to the number of customers choosing to do their transactions online instead of going out. In the fast-paced time of today, when everyone is squeezed for time, the majority of people are finicky when it comes to placing a food order. Customers are not only attracted because of the convenience of online ordering but also because of the visibility of the items offered and extremely simplified navigation for the order.

Basak Bistro is a local pizzeria and restaurant situated in Poblacion Norte, Batuan, Bohol. They offer a variety of cuisines (Asian fusions), drinks, food packages and comfort foods that satisfy every craving for every occasion. Their growing business and their operation in the midst of the pandemic has given way to the increase in traffic with orders which became a grueling task for their employees.

The researchers' observation revealed that in light of the current circumstances, online ordering has gone from a desirable convenience to an absolute must for restaurant survival. The advent of appealing, user-friendly apps and websites, coupled with changing consumer expectations, has unlocked ready-to-eat food delivery as a major category. Lockdowns and physical-distancing requirements early on in the pandemic gave the category an enormous boost, with delivery becoming a lifeline for the hurting restaurant industry. Moving forward, it is poised to remain a permanent fixture in the dining landscape.

This has led the researchers to come to Basak Bistro's aid and propose an online food ordering system that enables ease for both their customers and employees. It overcomes the disadvantages of the traditional queuing system. This system improves the method of taking the order from customers by setting up a food menu online where they can easily place their order as per their wish. The payment will follow a cash-on-delivery method which we deemed more convenient than paying online since most of their customers don't own an online bank account or an e-wallet.

Currently, Basak Bistro adapts a manual medium of operation by writing down orders, generating reports, and keeping records on a piece of paper which increases the workload. The management also took to social media to accept customers' orders which was proven less convenient due to having problematic orders as some people find it confusing who to contact resulting in duplicate or missed orders.

Literature Background

According to Article XIV Section 2 of the 1987 Constitution of the Republic of the Philippines, the State should recognize the use of technology in nation-building, such as the use of computerization in promoting and expanding tourism by improving service delivery in restaurants, hotels, pension houses, and resorts. Businesses must integrate with cutting-edge technology so that they can easily react to difficulties and changes in order to boost the country's economy. The developed website must be capable of providing trustworthy information to site visitors, as well as accepting accurate data of various orders or reservations from customers into the database.

Technology Adoption Model (TAM, Davis, 1989) has been one of the most significant models in terms of technology acceptance for measuring the efficacy of technology utilization. It employs perceived usability and perceived simplicity of use as its two main determinants of a person's inclination to use new technology. According to Davis, perceived usefulness refers to how much a person thinks utilizing a specific system would improve their ability to accomplish their jobs, whereas perceived ease of use refers to how much they think using a certain system would be effortless. The TAM's emphasis on potential users' views enables the developers to determine whether those users will be happy with the suggested system.

The rule of the Relational Database Management System (Codd, 1965) is followed in the concept database. The law states that for a system to qualify as an RDBMS, it must be able to manage the database entirely through the relational

capabilities. The designs of tables in the database are related to the use of keys to connect tables. Such practice promotes the integrity of data and dynamic updates. Moreover, data can be retrieved from a relational database in sets constructed of data from multiple tables (Codd, 1965). The researchers cited this theory because this helps in managing the data of the system to be developed.

According to the “The Application of Wireless Food Ordering System” (Khairunnisa, et al., 2009), the goal of this project is to create and develop a restaurant's wireless food ordering system. In this system, the technical operations of the Wireless Ordering System (WOS) were discussed, including the system architecture, function, limitations, and recommendations.

De Leon, E. (De Leon, 2008) mentioned that there are several aspects that should be included in a good, automated ordering system. System should be simple to navigate, not clustered and easy to make an order. The system should also be able to keep track on orders and sales history easily as well as generate a comprehensive sales report.

Most businesses nowadays already have an existing website and an online ordering system in place to make their daily transactions more convenient. Some related open-source systems that might be used as a reference include the following:

1. ATLANTA HAWKS PLAYER'S CLUB MOBILE FOOD ORDERING (Cruz et al., USA, 2019) stated that the proposed system will give customers the option to place their orders on their phones. The new system will display an estimated fulfillment time for each

order once it is placed, to give customers an idea of when they will have to pick up their order. An extension of the proposed system will be the option of having a delivery runner bring the customer's order directly to their seat. The delivery runners will be given the customer's seat location and order number.

2. AUTOMATED CANTEEN ORDERING SYSTEM (Anthonia Obanghe, 2020) mentioned that her canteen automation system enables the end users to register online, read and select the food from the e-menu card and order food online by just selecting the food that the user want to have.
3. FOODCOURT: AN ONLINE FOOD ORDERING PLATFORM (Bentahar, Morocco, 2019) stated that the purpose of his project, "Foodcourt," is to design and implement a web application that lets user order from restaurants online. This project will help users find restaurants that match their needs, other functionalities are added as well, such as the possibility to post a review, and the possibility of checking the whole menu for a given restaurant.
4. ONLINE FOOD ORDERING SYSTEM (Adithya et al., India, 2017) states that their system overcomes the disadvantages of the traditional queuing system. It is described as a medium to order online food hassle free from restaurants as well as mess service. The said system improves the method of taking the order from customer. The online food ordering system sets up a food menu online and

customers can easily place the order as per their wish. This system also provides a feedback system in which user can rate the food items.

5. JOLLIBEE SELF-ORDER KIOSKS (Philippines, 2018-present) are designed to make choosing and ordering meals easier and more convenient. With its user-friendly interface, it only takes 3 simple steps to complete one's order in these self-order kiosks. To order, customers need to simply (1) touch the screen to see the menu where they can select their orders for dine-in or take-out; (2) proceed to pay using several options, via cards or paying cash at the counter; (3) and wait for their queue numbers to be called for claiming of their orders at the counter.

The related studies listed above influence how the developed system is configured. The system that was created for the study is quite functional and updated, and it covers the aspects of efficient online ordering in Basak Bistro, Poblacion Norte, Batuan, Bohol. The existence of related systems and the developed system has variances in terms of characteristics and information due to the system's provision of online ordering.

THE PROBLEM

Statement of the Problem

The purpose of this study was to develop an Online Food Ordering System for Basak Bistro, Poblacion Norte, Batuan, Bohol.

Specifically, the study sought to answer the following questions:

1. What current processes does Basak Bistro practice in order to cater to their customers' needs?
2. What are the needs and problems encountered by the management of Basak Bistro?
3. What can be offered to improve the performance of Basak Bistro's services?
4. What is the level of web acceptability and system usability as perceived by the target users?

The developed system is to be called Basak Bistro Online Ordering System and it would integrate the following processes:

1. Implement an online system that will help the customers in ordering and allows the owner to manage the orders
2. Design and implement the following modules:
 - a. Acquisition,
 - b. Cataloguing,
 - c. Ordering,
 - d. Administration, and

3. Implement business intelligence technique for decision-support to the establishment

Scope and Delimitations

The Basak Bistro still uses a manual method for transactions, ordering, payments, and even in generating reports, therefore the researchers wanted to establish an electronic-based ordering system for them. The system would include a number of key modules to meet both the business' and customers' requirements.

The development of the proposed system focused on the following processes:

1. **Online Mechanism** – This feature facilitates a web-based ordering system by providing modular components and methodology, and a portable, web-based interface that suits the needs and requirements of Basak Bistro.
2. **Acquisition** – This includes the inquiry process of both customer and administration regarding the availability of items. It also incorporates a simple search facility.
3. **Cataloguing** – This includes adding and managing categories in general where the owner can insert new items depending on its classification to Basak Bistro's online catalogue or menu.
4. **Ordering** – This feature facilitates the ordering process of between Basak Bistro and its customers. This also includes the delivery

process and the two available modes of payment namely, cash-on-delivery and GCash.

5. **Administration** – This function provides administrative tools for system maintenance and configuration and facilitates the management of users, privileges, and security.
6. **Reporting** – The function that provides electronic reporting to serve the strategic management of the system. It will provide a tabular sales report that is filterable according to the owner's preference making it easier for them to monitor the total sales at any specific date/s. It will also provide a graphical report for both the monthly and yearly sales.

The study was limited only to the operation and procedures of Basak Bistro, Poblacion Norte, Batuan, Bohol in the managing of products, ordering, and sales, as well as transactions needed by the establishment. Users of the developed system were also limited to the owner, cashier, and customers.

Significance of the Study

The study aimed to develop a Basak Bistro Online Food Ordering System, Poblacion Norte, Batuan, Bohol. It would help the establishment manage orders from customers as well as advertise promotion. Furthermore, the study would benefit the following:

Owner/Manager. The owner of the business would be the one to monitor, manage and maintain the system. As the primary beneficiary of the proposed project. It would be easy for them to manage their customers and their food catalog.

It is a great advantage for a business owner to have a website to easily sell and advertise their products and services online.

Cashier. The cashier would be the stand-in personnel who accepts the order and manages the system in case the owner has some important matters to attend to and isn't able to make it to the restaurant. With the developed system, the cashier could also efficiently accommodate orders and generate reports.

Customers. The customers would greatly benefit from this system as it would become more convenient for them to browse and order food from Basak Bistro without the real-time queuing. By having the ability to look at the menu and make their selections, they no longer need to ask what's available, what side choices are options, or whether or not your restaurant carries a certain product. Customers are free to peruse the menu for as long as necessary before placing their order without tying up valuable time on the phone with one of your employees. Customers could order quickly and efficiently, which means they have to wait less time for their food to be ready. Online ordering gives customers the convenience of ordering their meal from home, then driving to the restaurant to pick it up at the scheduled time, with as little waiting as possible.

Researchers. The output of this study would be used as a resource for future students who wish to do similar or related research. Researchers would also be able to increase their ability to communicate with others by collecting data and conducting observations.

RESEARCH METHODOLOGY

Development Framework

Figure 1 presents the conceptual diagram of the system, Basak Bistro Online Food Ordering, Poblacion Norte, Batuan, Bohol, which follows the principles of the input-process-output. The processes include the acquisition, cataloguing, ordering, and administration. The inputs are coming from the owner, the cashier, and the customer. The output provides decision support to the owner/administrator/cashier.

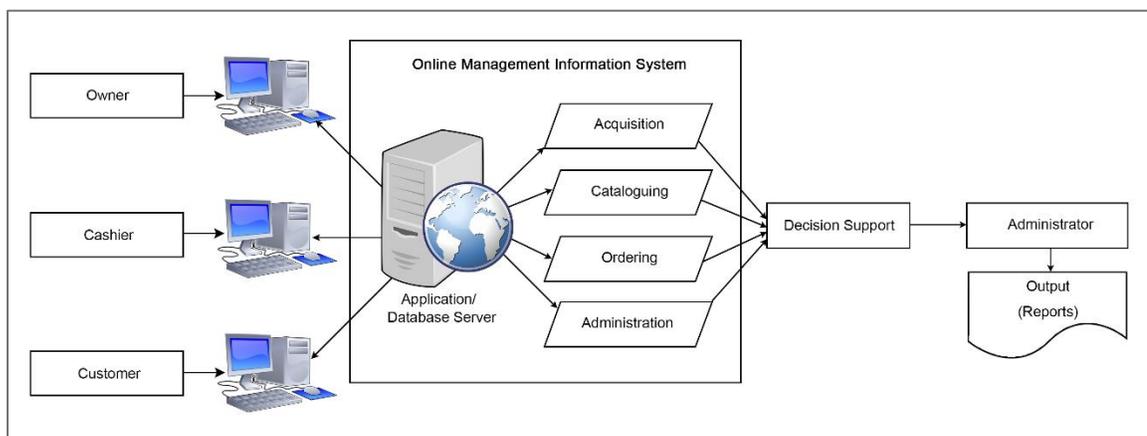


Figure 1. Conceptual Diagram of the System

Figure 2 shows the Block Diagram of the proposed Basak Bistro Online Food Ordering System. It covers the basic functionality of the system that represents the entities who will be involved in using and maintaining the system. It provides the specification of the basic features of the system that serves with the entities, functionalities, inputs, and expected outputs of the system.

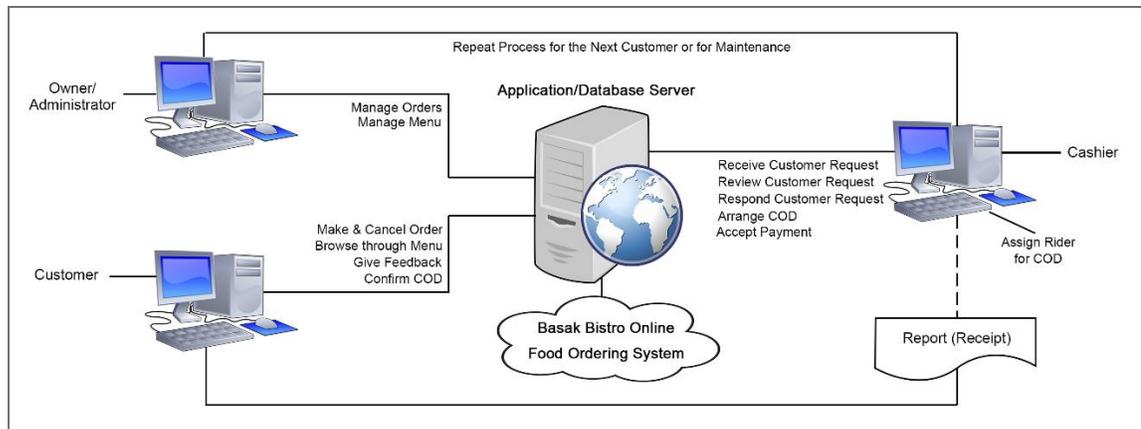


Figure 2. Block Diagram of the System

Development Model and Approaches

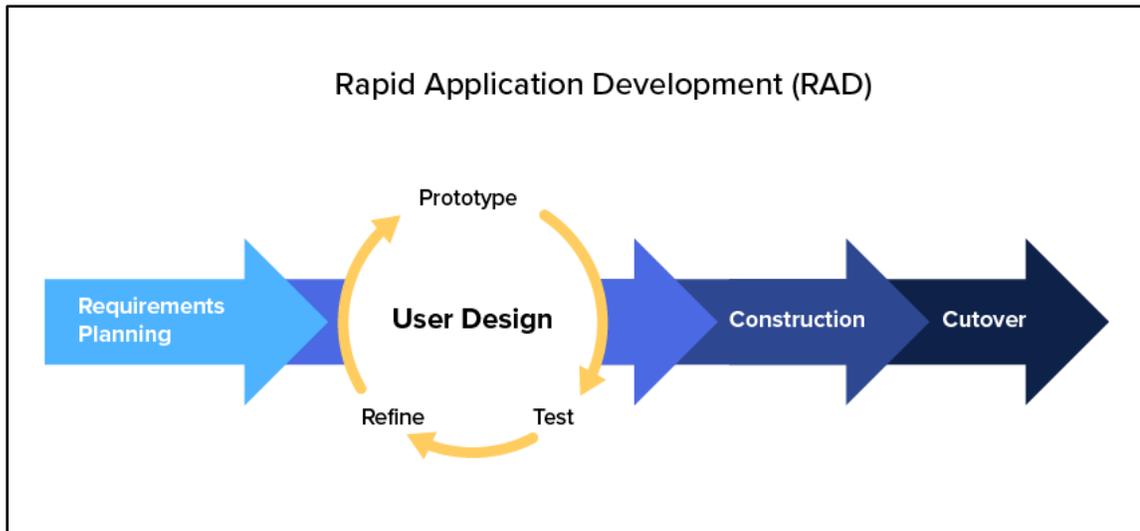
The development of Basak Bistro Online Food Ordering System was implemented using the **Rapid Application Development (RAD)**, which is a progressive development model that gives more importance to rapid prototyping and speedy feedback over a lengthy development and testing cycle. This model allows the researchers to make multiple iterations and updates to a software quickly, without the need to restart a development schedule from scratch every time. The overall concept behind this methodology is to treat software projects like clay, rather than steel. RAD focuses more on the quality of outcome rather than the techniques and timeframe used for delivery.

The development process follows the stages as enumerated with the corresponding activities taken:

- a. **Analysis and Quick Design** – During this stage, the researchers should be able to meet with their client as an initial step to determine the goals and expectations for the project. They must also discuss the current and potential challenges that may need to be addressed during development. When creating

- software, researchers must first understand the issue that the solution will try to solve. For the program to be successful, the researchers must comprehend the features, operations, behavior, and performance of the system. In the design stage, the solution's functionality is described. After management has approved the software's structure, the program's architecture is now constructed. Identifying the predicted requirements for the system is the main objective of this step.
- b. **Prototype Cycles** – During this stage, the researchers will create a simple prototype with different features and functions which will then be shown to the client for their feedback and suggestions. A prototype is built just to show off certain features, without proper polish. This is normal, and the final product is only created during the finalization stage where the client and researchers can both agree on the final product.
 - c. **Testing** – At this stage, the prototype designed in the previous phase will then be converted into working models. Since majority of the glitches and changes were addressed during the iterative design phase, it becomes easier and quicker for researchers to construct the final working model. Nonetheless, the client can still give input anytime during the process and suggest modifications, adjustments, or even new ideas that can solve problems as they arise. The product is worked upon by the researchers and testers until the final product meets the client's expectations and objectives.
 - d. **Implementation** – **Finally, after the lengthy process of system modification, a trial product or the final product itself will be implemented**

and set for launching. During this stage all the final changes are made, data conversion, testing, and changeover to the new system is done. User training is also imparted during this phase.



Adopted from <https://kissflow.com/low-code/rad/rapid-application-development/>

Figure 3. Rapid Application Development Model

The following were the tools that are going to be used in the development and analysis phase of the proposed system, Basak Bistro Online Food Ordering System, Poblacion Norte, Batuan, Bohol:

Windows Server 2010 – a server operating system developed by Microsoft, which builds on the enhancements built into Windows Server 2010. The operating system (OS), which is highly integrated with the client edition of Windows 10, offers improvements in scalability and availability, as well as power consumption. It was used to host the Basak Bistro Online Food Ordering System.

Wampserver – it is a window web development environment. It allows the researcher to create web applications with apache2, PHP, Python, or Perl and MySQL Database that are used to create an application on online viewing and data

basing of the system (Christensson, 2013). It was used in the connectivity of the Apache server and MySQL databases.

Hostgator – HostGator is a popular web hosting service that offers shared hosting plans, a cPanel dashboard for managing your website, and excellent customer service. It is used in the online implementation of Basak Bistro Online Food Ordering System.

Notepad++ – it is a free source code editor and notepad replacement that supports several languages that is used to edit PHP scripting language. This tool enables the researchers to easily make modifications during the development of the system. It was used to edit PHP scripting language.

MySQL – is an open-source database which enables cost-effective delivery of reliable, high-performance and scalable Web-based and embedded database applications. It will be used in the connectivity of databases in the programming of the proposed system.

Adobe Photoshop – is an image editing software that is going to be used in creating cohesive layout and theme for the proposed system.

Hypertext Pre-processor (PHP) – is an open-source web researcher used for creating websites. It will be used in the scripting language for the development of the Basak Bistro Online Food Ordering System.

Cascading Style Sheets (CSS) – is a style sheet language designed primarily to enable the separation of a documented content from document presentation, including elements such as layout, colors, fonts, and the interface

design of the developed system (Meyer, 2006). It is used to design the interface of the Basak Bistro Online Food Ordering System.

Bootstrap – is a free and open-source CSS framework which contains CSS – and, optionally, JavaScript – based design templates for typography, forms, buttons, navigation, and other interface components. It is used to design the interface of the Basak Bistro Online Food Ordering System.

jQuery – is a script library that allows web researchers to add extra functionality to their websites. It can also work with scripting languages such as PHP and ASP, to access data from the database develop.

JavaScript – is a scripting language, primarily used on the web. It is used to enhance HTML code. It is also an intercepted language. It helps to render Basak Bistro Online Food Ordering System’s web pages interactively and dynamically.

Environment and Participants

The study was conducted at Basak Bistro, located at Pob. Norte, Batuan, Bohol, owned by Mrs. Lira Mae Paraguya. It is 15 kilometers away from Bohol Island State University – Bilar Campus Zamora, Bilar, Bohol. In this study, the respondents were the owner, the cashier and the staff. The researchers personally interviewed these respondents to gather the exact data needed in the survey.

Data Collection

The researchers asked the owner for the conduct of the study through a letter request. They were then asked about the manual operations practiced by the establishment through personal interviews, document review and observation. The observation was conducted on the existing operations. In the document review,

different documents were analyzed and evaluated such as the record books, order slips, daily sales report, etc. Other business documents were reviewed with regards to the procedures and processes of the existing operations, which is needed for the development of Basak Bistro Online Food Ordering System of Poblacion Norte, Batuan, Bohol.

Testing and evaluation were performed to determine the general acceptability of the system. Performance evaluation of the system was expressed in terms of system and web usability. In the web usability, a developed questionnaire by MIT (1995) information and technology was adopted and used as an instrument to determine the perception of the target users as to web acceptability. In the usability, the operation and features of the system were presented to the target clients.

There were (30) respondents who answered the web usability survey. The (30) respondents were the Basak Bistro's owner, staff and a few customers. After the presentation, the clients were allowed to do hands-on activities with the system.

After the orientation and hands-on activities, a system and web usability questionnaire were provided to the respondents to assess the level of system acceptability. The respondents were given enough time to rate the number of items in the adopted questionnaire.

Table 1

Summary of Respondents in the Web and System Usability

Respondents	No. of Respondents
Owner	1
Cashier	2
IT Expert	2
Customer	25
Total	30

In the web usability, operation, and features, the system was presented to all possible users. After the orientations and hands-on activities, a questionnaire was provided to assess the level of web usability and acceptability. Table 2 below shows the guide for the interpretation of the results in the web usability.

Table 2

Interpretative Guide of the Web Usability

Weight	Range	Description	Interpretation
5	4.3 – 5.0	Excellent	The correspondents find the application to be excellent with regards to web usability.
4	3.5 – 4.2	Very Good	The respondents find the application to be very good, with minor inconsistencies and aesthetics.
3	2.7 – 3.4	Good	The respondents find the system to be good with non-critical errors causing confusion.
2	1.9 – 2.6	Fair	The respondents find the system to be fair, having serious problems that need high priority fix.
1	1.0 – 1.8	Poor	The respondents find the system poor with severe problems.

Adopted from [Massachusetts Institute of Technology \(1995\)](#)

To evaluate/assess the system acceptability level, the researchers computed the average weighted mean score using the following formula:

$$WMS = \frac{1f_1 + 2f_2 + 3f_3 + 4f_4 + 5f_5}{n}$$

Where:

WMS = Weighted Mean Score

f_1 = frequency of respondents given a rate of 1

f_2 = frequency of respondents given a rate of 2

f_3 = frequency of respondents given a rate of 3

f_4 = frequency of respondents given a rate of 4

f_5 = frequency of respondents given a rate of 5

n = total number of respondents

1, 2...5 = constant (rating to the service provided)

Table 3

Interpretative Guide of the System Usability

Weight	Range	Description	Interpretation
7	6.4 – 7.0	Strongly Agree	The respondents strongly believe and confident that the system is very usable.
6	5.5 – 6.3	Agree	The respondents believe and confident that the system is usable.
5	4.6 – 5.4	Tend to Agree	The respondents tend to agree that the system is usable.
4	3.7 – 4.5	Neither Agree or Disagree	The respondents neutral in trusting that the system is usable.
3	2.8 – 3.6	Tend to Disagree	The respondents tend not to trust the system is usable.
2	1.9 – 2.7	Disagree	The respondents believe that the system is not usable.
1	1.0 – 1.8	Strongly Disagree	The respondents strongly confident that the system is not usable.

OPERATIONAL DEFINITION OF TERMS

The terminologies and acronyms used in this study were defined further, respectively:

COD. Cash on delivery, sometimes called collect on delivery or cash on demand, is the sale of goods by mail order where payment is made on delivery rather than in advance.

Module. A software component or part of a program that contains one or more routines. Modules make a programmer's job easy by allowing the programmer to focus on only one area of the functionality of the software application. Modules are typically incorporated into the program (software) through interfaces.

Online Catalog. Also known as a digital catalog or B2B ecommerce catalog, Online Catalog is an extensive electronic catalog on a website that showcases all the products you sell and allows buyers to shop and purchase.

Online Food Ordering System. Defined as a software that allows restaurant businesses to accept and manage orders placed over the internet.

Prototype. A rudimentary working model of a product or information system, usually built for demonstration purposes or as part of the development process.

Web-based Ordering Management System. Name of the ordering system website to be developed by the researchers to automate the current manual system being practiced by the establishmen

Chapter 2

PRESENTATION OF FINDINGS, ANALYSIS AND INTERPRETATION OF DATA

Existing Operational Processes

The study focused on the processes of management of Basak Bistro, Poblacion Norte, Batuan, Bohol. These were the following manual processes that took place in the Restaurant Management System of Basak Bistro, Poblacion Norte, Batuan, Bohol.

A. Recording of Products

The owner/cashier would record the information of the items on their catalogue or menu in a record book. This process involves identifying the category where the item belongs to this way customers and staff can find it easily. During this process, the owner can also make changes to the product information.

B. Service Inquiry

In inquiry, the customer asks the owner via Facebook Page for the availability of products and other matters that concern certain items on their menu. The customer also makes inquiries about the transaction.

C. Ordering of Products

In the ordering of products, the customer asks the cashier or the owner for the availability of a certain product from Basak Bistro's catalogue. The price is based on the type of the product. The customer will have to pay cash-on-delivery or with GCash which will then be recorded in the record book.

It is also worth noting that deliveries are only exclusive within Batuan and certain areas of its neighboring municipalities, Bilar and Carmen. Orders coming from municipalities not mentioned are settled through personal agreements.

As mentioned, the customer can also order through Facebook, chat and text/call, or walk-ins. If the customer wants to cancel an order, the customer must contact the owner through the platform where they made the transaction. Provided that the customer has given a valid reason for the cancellation of order, no refunds will happen since the payment is done through COD. If the customer has paid via GCash beforehand, the owner/cashier will give a refund. The cashier/owner will then cross out the order from their record book.

D. Customer Pays Order

The customer can pay their orders over-the-counter, Cash-on-Delivery, and via GCash depending on how they did the ordering transaction. Upon payment, they will be provided with an invoice, a receipt/e-receipt, or shown a screenshot of their order transaction as proof of payment.

E. Order Gets Delivered to the Customer

Since Basak Bistro is a family-owned business, they don't need to hire a delivery person. They just need to ask one of their attendants (owner's cousin, or the owner themselves) to deliver the order to the customer's address.

Upon arriving to the customer's home, he/she must hand over the exact amount of payment for the order to the delivery person. Upon delivery, they will be provided with an invoice, or shown a screenshot of their order transaction as proof of payment.

F. Generation of Report

Based on manual operation, the important documents were kept in a record book or in the owner's personal computer. The owner will check the daily sales record and the generated report based on the daily sales report that is stored in the record book or in her personal computer.

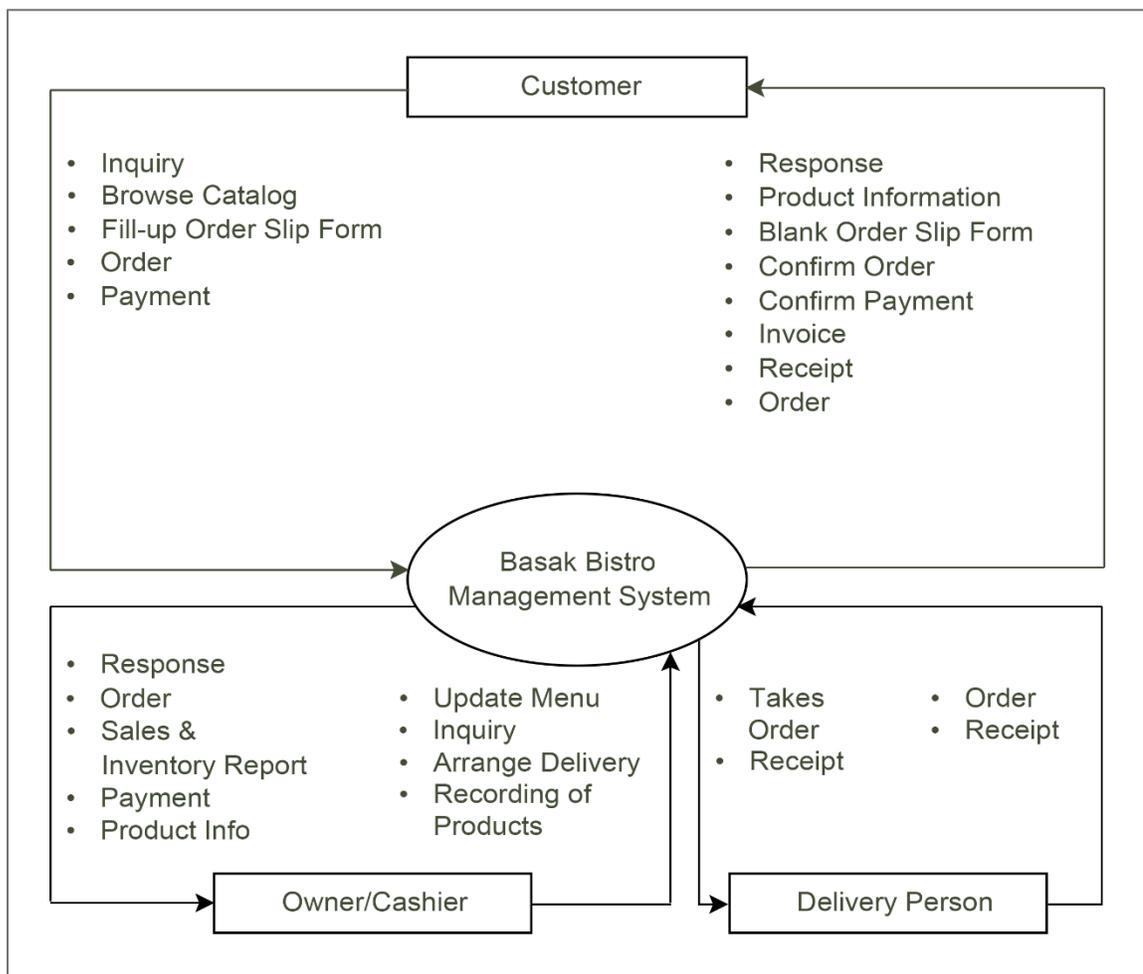


Figure 4. Contextual Diagram of the Present System

Event Specification

Event List:

1. Owner records the product
2. Customer inquire services
3. Customer orders products
4. Customer pays ordered/purchased product
5. Owner arranges delivery/Customer Receives Order
6. Owner generates report

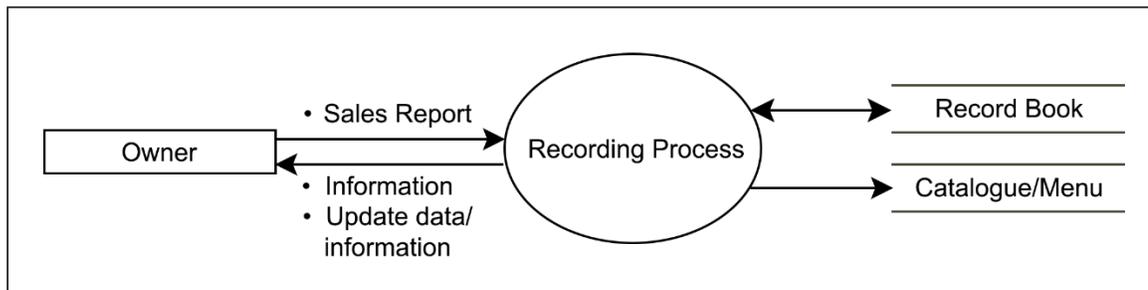


Figure 5 (Event 1). Owner Records Products

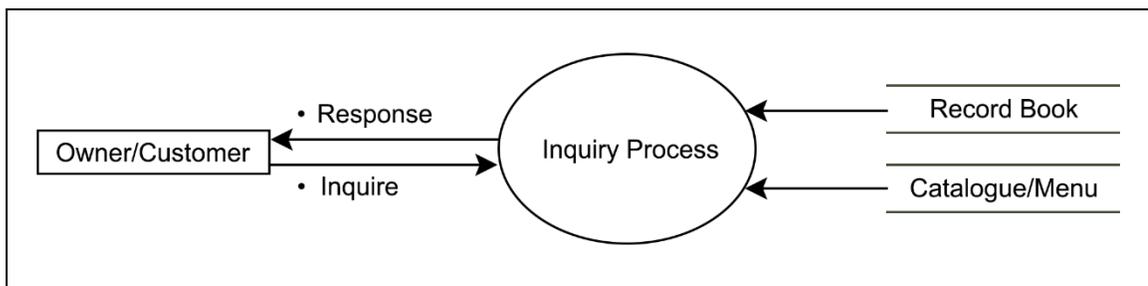


Figure 6 (Event 2). Customer Makes Inquiries about Services

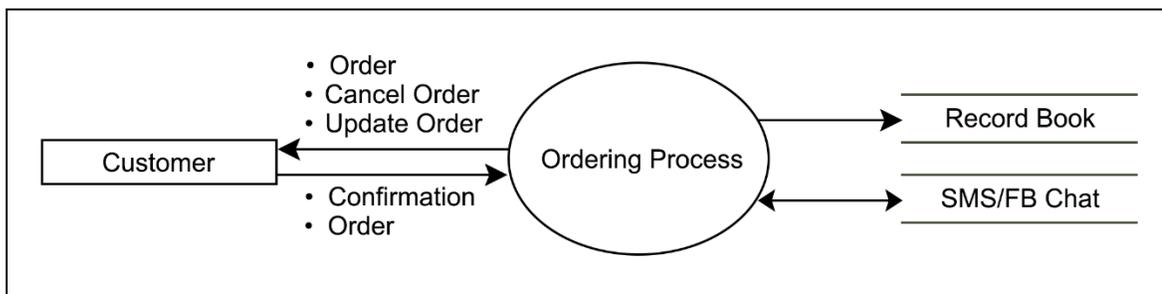


Figure 7 (Event 3). Customer Orders Products

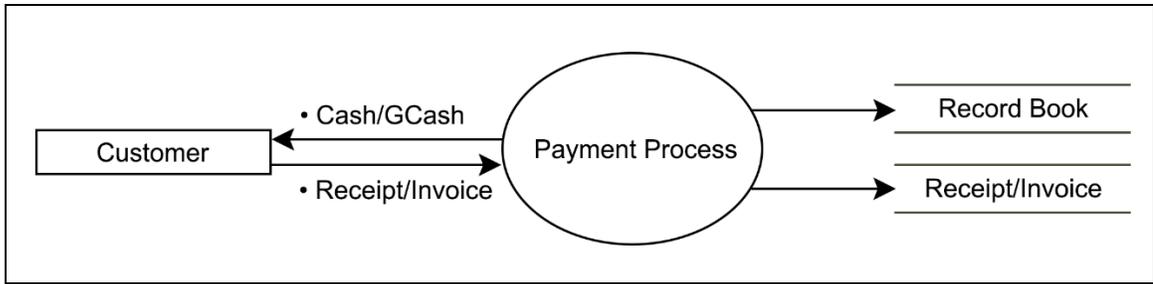


Figure 8 (Event 4). Customer Pays

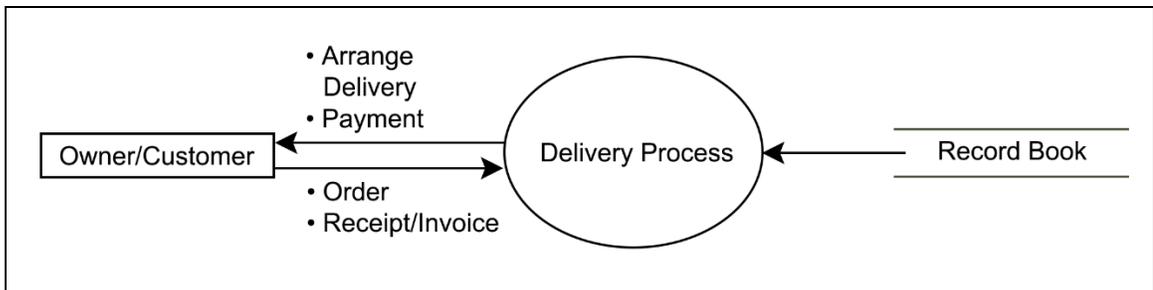


Figure 9 (Event 5). Owner Arranges Delivery & Customer Receives Order

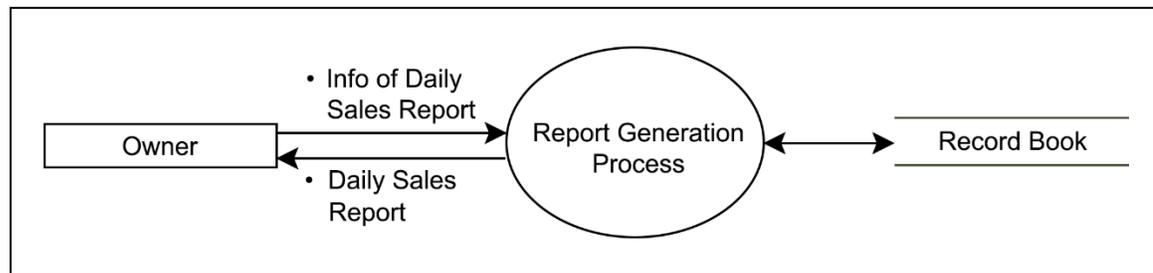


Figure 10 (Event 6). Generation of Report

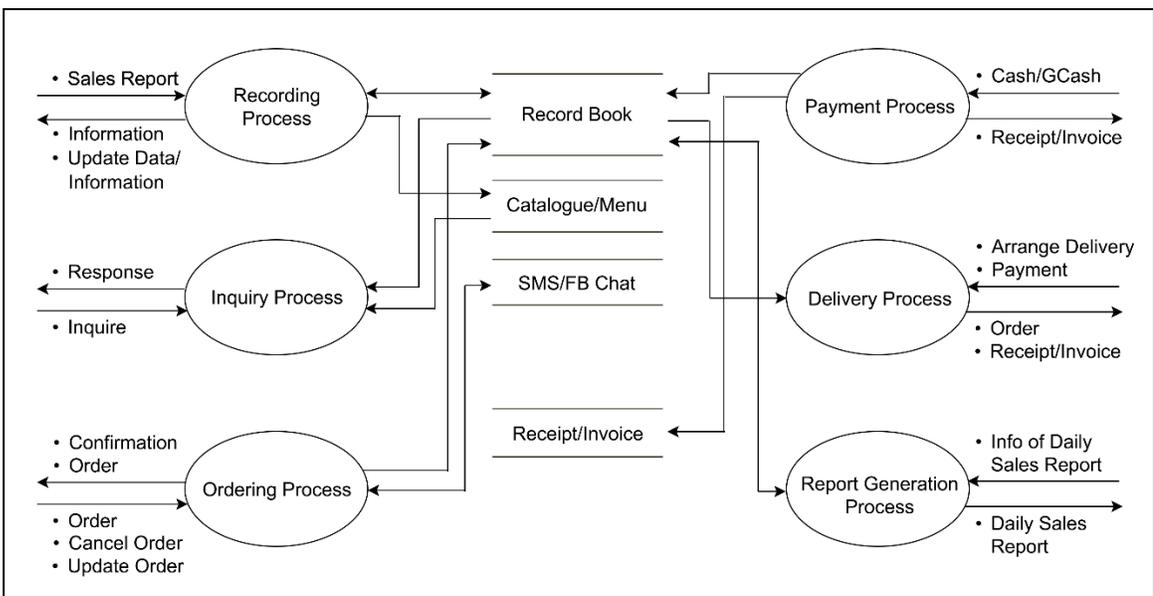


Figure 11. Top Level of the Present System

Needs of the Existing Operation

Due to the rapid advancement of computer technology in practically all domains of operation, as well as its use in relation to information management, it has become necessary to investigate the development of an online ordering system for businesses to meet the customer's needs.

Based on the identified problems with consideration to the existing operation and processes in the management of the restaurant, the researchers had observed and identified the following needs:

1. A platform for online purchase, and delivery of fast food.
2. Reduced workload in the present system.
3. A way to help customers save time so they do not have to wait in queues to get the food.
4. Generation of reports.
5. Secured database for online order management.
6. Adopt online ordering system for fast, accessible and efficient data management such as management of orders.

Basak Bistro Online Food Ordering System of Poblacion Norte, Batuan, Bohol

The needs of the present system serve as the basis for the development of the features of the Basak Bistro Online Food Ordering System, Poblacion Norte, Batuan, Bohol. This study is expected to address the problems encountered in the present system.

A. Administration

Only the administrator (owner) has access to the admin dashboard. The said dashboard allows the admin to add another authorized person, perhaps a cashier. It also allows them to manage customer accounts and their orders. The dashboard lets them add items to their menu as well.

B. Ordering

The customer could order by searching and choosing their desired product, adding it to their cart then check out their order.

C. Payment

The customer could pay their order via Cash-on-Delivery or GCash.

D. Reports

The cashier and owner can generate reports such as daily sales report.

Use Case Diagram

In the Unified Modeling Language (UML), a use case diagram can summarize the details of your system's users (also known as actors) and their interactions with the system. Use case diagrams are usually referred to as behavior diagrams used to describe a set of actions (use cases) a system can perform in collaboration with one or more external users of the system (actors). Each use case should provide some observable and valuable result to the actors or other stakeholders of the system. To build one, you'll use a set of specialized symbols and connectors. An effective use case diagram can help your team discuss and represent (1) scenarios in which your system or application interacts with people, organizations, or external systems, (2) goals that the system or

application helps those entities (known as actors) achieve, and (3) the scope of the system (Retrieved from <https://www.lucidchart.com/pages/uml-use-case-diagram>).

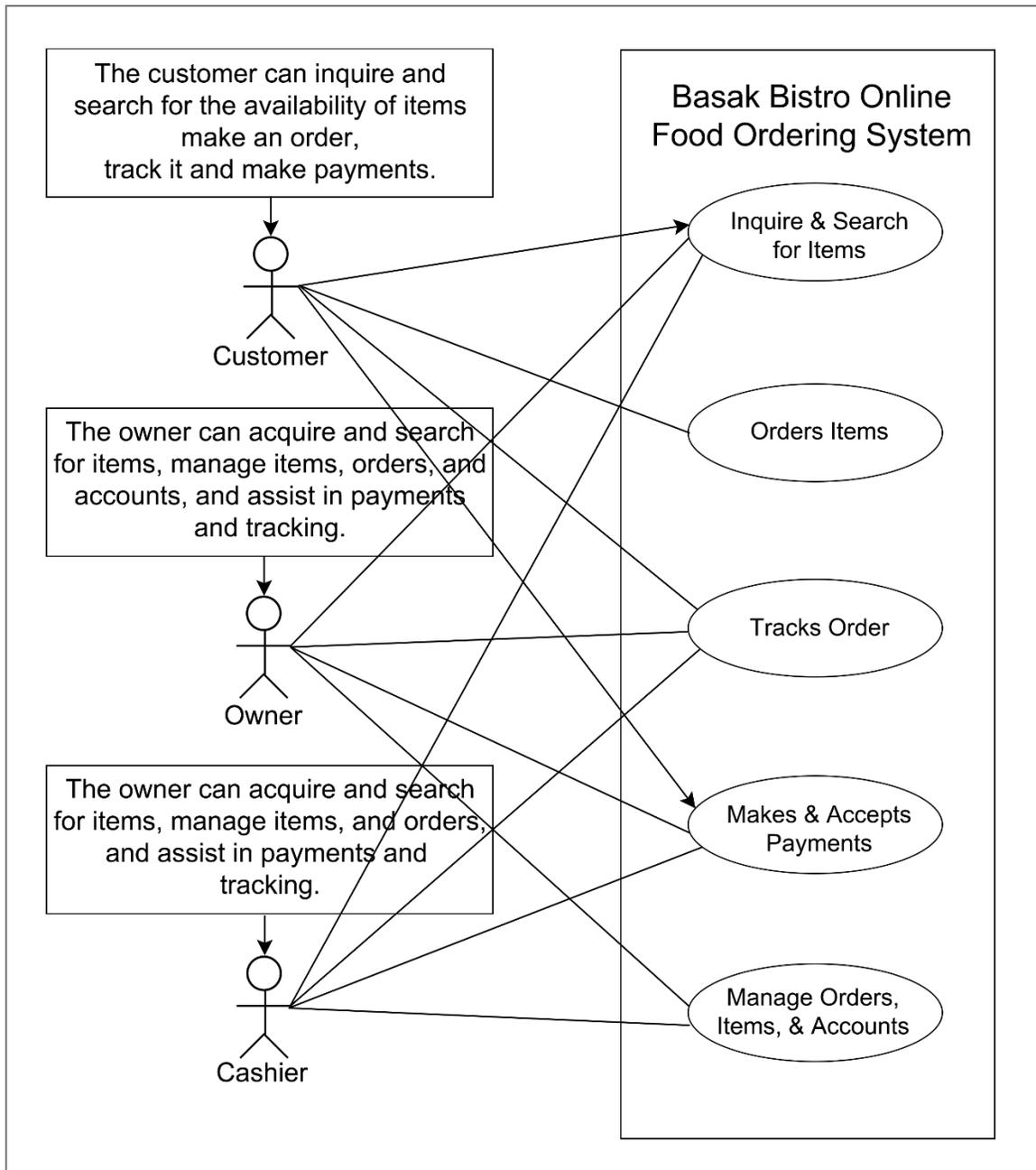


Figure 12. Use Case Diagram – Basak Bistro Online Food Ordering System

Use case narrative describing a use case that requires both the frame context of the use case and describe the dialogue between the user (actor or use case) and use case. In every use case narrative, there are preconditions, process and post-conditions. Use Case 1 is inquiring or searching of available products for all three entities. Use Case 2 is ordering wherein a customer can place an order. Use Case 3 is tracking of orders by the customer which will be assisted by the owner or the cashier. Use Case 4 is payments which will be provided by the customer and is accepted by the owner or the cashier. Use case 5 is the management of orders wherein both the owner and cashier are expected to update and/or record orders and view order information; manage items on the catalogue wherein both the owner and the cashier can add, update, and delete items from the catalogue; and manage accounts which is accessed exclusively by the owner.

Table 4. Use Case Narrative – Inquire and Search for Items

Inquire and Search for Items (UC1)	
Scope Level	Online Food Ordering
Goal in Context	User Goal Presents a menu from which one can inquire or search for available items and view its information.
Primary Actors	Owner, Cashier, & Customer
Stakeholders	Owner & Cashier: Wants to give the customer product information through the system. Customer: Wants to view the available product, its information, and order information.
Preconditions	Enter the required information
Triggers	Owner & Cashier: Adds item information. Customer: Select item from the menu then view its information.
Success Guarantee	Online Food Ordering: Waits for user input

Main Success Scenario:

~~~~~

Owner & Cashier: Adds item information for the customers to see.  
 Customer: Selects item from the menu and view its information.  
 The system displays the information they needed.

Table 5. Use Case Narrative – Ordering

| <b>Ordering (UC2)</b>                                                                                                                                                                         |                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Scope Level                                                                                                                                                                                   | Online Food Ordering                                                                                                 |
| Goal in Context                                                                                                                                                                               | User Goal<br>Presents a menu from which one can order available product and view order information.                  |
| Primary Actors                                                                                                                                                                                | Customer                                                                                                             |
| Stakeholders                                                                                                                                                                                  | Customer: Wants to enter and view available product, product information, order product, and view order information. |
| Preconditions                                                                                                                                                                                 | Enter the required information                                                                                       |
| Triggers                                                                                                                                                                                      | Customer: Choose a product from the menu then select a product to add to cart, order it, and view order status.      |
| Success Guarantee                                                                                                                                                                             | Online Food Ordering: Waits for user input                                                                           |
| Main Success Scenario:<br>Customer: Choose a product from the menu then select a product to add to cart, order it, and view order status.<br>The system displays the information they needed. |                                                                                                                      |

Table 6. Use Case Narrative – Order Tracking

| <b>Order Tracking (UC3)</b> |                                                                                                                                                                       |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scope Level                 | Online Food Ordering                                                                                                                                                  |
| Goal in Context             | User Goal<br>Owner and cashier updates order status so the customer can track his order.                                                                              |
| Primary Actors              | Owner, Cashier, & Customer                                                                                                                                            |
| Stakeholders                | Owner & Cashier: Wants to provide customer with order status and keep tabs on delivery person's whereabouts by contacting him.<br>Customer: Wants to track his order. |
| Preconditions               | Enter the required information                                                                                                                                        |
| Triggers                    | Owner & Cashier: Updates order status and contacts delivery person for his whereabouts.<br>Customer: Tracks order status from the Order History page.                 |

|                                                                                                                |                                            |
|----------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| Success Guarantee                                                                                              | Online Food Ordering: Waits for user input |
| Main Success Scenario:                                                                                         |                                            |
| Owner & Cashier: Updates order status and contacts delivery person for his whereabouts.                        |                                            |
| Customer: Tracks order status from the Order History page.<br>The system displays the information they needed. |                                            |

Table 7. Use Case Narrative – Payments

| <b>Payments (UC4)</b>                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scope Level                                                                                                                                                                                          | Online Food Ordering                                                                                                                                                                                                                                                                                                                                                               |
| Goal in Context                                                                                                                                                                                      | User Goal<br>Owner & cashier provide customer with payment options and accepts his payment.                                                                                                                                                                                                                                                                                        |
| Primary Actors                                                                                                                                                                                       | Owner, Cashier, & Customer                                                                                                                                                                                                                                                                                                                                                         |
| Stakeholders                                                                                                                                                                                         | Owner & Cashier: Wants to give customer payment options (Cash & GCash).<br>Customer: Wants to pay his order with his chosen payment option.                                                                                                                                                                                                                                        |
| Preconditions                                                                                                                                                                                        | Enter the required information                                                                                                                                                                                                                                                                                                                                                     |
| Triggers                                                                                                                                                                                             | Owner & Cashier: Provides customer with payment option which he has to fulfill upon receiving his order. The delivery person will have to ask the customer to show his payment transaction as proof.<br>Customer: Picks his desired payment option and pays the exact amount of payment for his order to the delivery person and shows the payment and order transaction as proof. |
| Success Guarantee                                                                                                                                                                                    | Online Food Ordering: Waits for user input                                                                                                                                                                                                                                                                                                                                         |
| Main Success Scenario:                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                    |
| Owner & Cashier: Provides customer with payment option which he has to fulfill upon receiving his order. The delivery person will have to ask the customer to show his payment transaction as proof. |                                                                                                                                                                                                                                                                                                                                                                                    |
| Customer: Picks his desired payment option and pays the exact amount of payment for his order to the delivery person and shows the payment and order transaction as proof.                           |                                                                                                                                                                                                                                                                                                                                                                                    |

Table 8. Use Case Narrative – Manage Order, Items, and Accounts

| <b>Manage Order, Items, and Accounts (UC5)</b>                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scope Level                                                                                                                                                                                                                                                                                                                                           | Online Food Ordering                                                                                                                                                                                                                                                                                                                                                                                                   |
| Goal in Context                                                                                                                                                                                                                                                                                                                                       | User Goal<br>Management of orders<br>Allows the owner and cashier to manage orders and manage items by adding, updating, and deleting items in the catalogue.<br>Gives the owner exclusive access to adding and managing cashier accounts.                                                                                                                                                                             |
| Primary Actors                                                                                                                                                                                                                                                                                                                                        | Owner & Cashier                                                                                                                                                                                                                                                                                                                                                                                                        |
| Stakeholders                                                                                                                                                                                                                                                                                                                                          | Owner: (1) Wants to manage customer's orders from the admin dashboard. (2) Wants to manage the catalogue by adding new items, and updating and deleting existing items. (3) Wants to add a new cashier account or update an existing one.<br>Cashier: (1) Wants to manage customer's orders from the admin dashboard. (2) Wants to manage the catalogue by adding new items, and updating and deleting existing items. |
| Preconditions                                                                                                                                                                                                                                                                                                                                         | Enter the required information                                                                                                                                                                                                                                                                                                                                                                                         |
| Triggers                                                                                                                                                                                                                                                                                                                                              | Owner: Update order status from the admin dashboard. Add, update, and delete items and categories from the catalogue. Adds, updates, and deletes cashier information.<br>Cashier: Update order status from the admin dashboard. Add, update, and delete items and categories from the catalogue.                                                                                                                       |
| Success Guarantee                                                                                                                                                                                                                                                                                                                                     | Online Food Ordering: Waits for user input                                                                                                                                                                                                                                                                                                                                                                             |
| Main Success Scenario:                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Owner: Update order status from the admin dashboard. Add, update, and delete items and categories from the catalogue. Adds, updates, and deletes cashier information.<br>Customer: Update order status from the admin dashboard. Add, update, and delete items and categories from the catalogue.<br>The system displays the information they needed. |                                                                                                                                                                                                                                                                                                                                                                                                                        |

## **Database Design**

Database design is an essential activity in the system development cycle. It is the process of defining the architecture components, modules, interfaces, and data for the system to satisfying requirements. Systems design could be seen as the application of systems theory to product development. In order to enhance the present information system, the researchers designed a new system that would be used by the client in each operation.

This would show the design of the developed system, and forms involve in the management of orders. The purpose of the design is to illustrate the framework of the forms, database and procedure involved in the database management.

The design would be typically shown by screen appearance, and program hierarchy presented. The design would also serve as the specification for the working relations between all the parts of a system in terms of their actions, functions, and capabilities.

## **Class Diagram**

In software engineering, a class diagram in the Unified Modelling Language (UML) is a type of static structure diagram that describes the structure of a system by showing the systems classes, their attributes, operational methods, and the relationships among objects.

The UML is a standardized modeling language enabling developers to specify, visualize, construct and document artifacts of a software system. Thus, UML makes these artifacts scalable, secure and robust in execution. UML is an important aspect involved in object-oriented software development. It uses graphic

notation to create visual models of software systems. (Retrieved from <https://www.techopedia.com/definition/3243/unified-modeling-language-uml>).

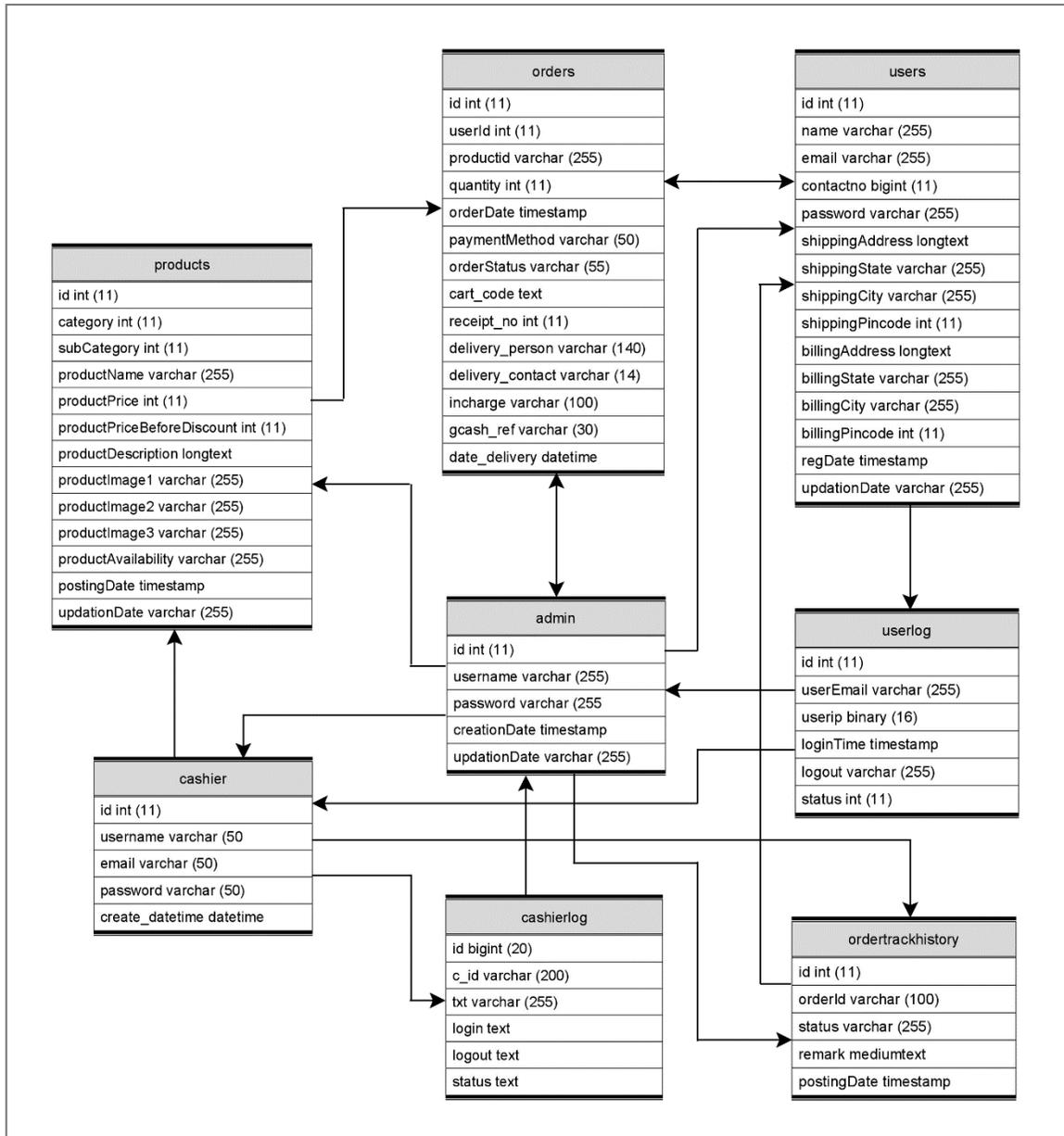


Figure 13. Class Diagram of the System

## Data Structure

A database structure or “schema” represents the logical configuration of all or part of a relational database. It can exist both as a visual representation and as a set of formulas known as integrity constraints that govern a database. These formulas are expressed in a data definition language, such as SQL. As part of a data dictionary, a database schema indicates how the entities that make up the database relate to one another, including tables and its structure.

The following database tables were used in storing the information inputted in the system together with the collection of operations that facilitate searching, sorting, recombination, and of similar activities.

Table 9

Database Structure for Administrator

| Field | Field Name     | Type      | Width | Description                |
|-------|----------------|-----------|-------|----------------------------|
| 1     | id             | Int       | 11    | I.D. of Administrator      |
| 2     | username       | varchar   | 255   | Username of Administrator  |
| 3     | password       | varchar   | 255   | Password of Administrator  |
| 4     | creationDate   | timestamp |       | Date Admin Account Created |
| 5     | updatationDate | varchar   | 255   | Date Admin Account Updated |

Table 10

Database Structure for Cashier

| Field | Field Name      | Type     | Width | Description                  |
|-------|-----------------|----------|-------|------------------------------|
| 1     | id              | int      | 11    | I.D. of Cashier              |
| 2     | username        | varchar  | 50    | Username of Cashier          |
| 3     | email           | varchar  | 50    | E-mail of Cashier            |
| 4     | password        | varchar  | 50    | Password of Cashier          |
| 5     | create_datetime | datetime |       | Date Cashier Account Created |

Table 11

## Database Structure for Cashier Log

| Field | Field Name | Type    | Width | Description                    |
|-------|------------|---------|-------|--------------------------------|
| 1     | id         | bigint  | 20    | I.D. of Time Cashier Logged In |
| 2     | c_id       | varchar | 200   | I.D. of Cashier                |
| 3     | login      | Text    |       | Login Time of Cashier          |
| 4     | logout     | Text    |       | Logout Time of Cashier         |
| 5     | status     | Text    |       | Login/Logout Status of Cashier |

Table 12

## Database Structure for Categories

| Field | Field Name          | Type      | Width | Description             |
|-------|---------------------|-----------|-------|-------------------------|
| 1     | id                  | int       | 11    | I.D. of Category        |
| 2     | categoryName        | varchar   | 255   | Name of Category        |
| 3     | categoryDescription | longtext  |       | Description of Category |
| 4     | creationDate        | timestamp |       | Date Category Created   |
| 5     | updationDate        | varchar   | 255   | Date Category Updated   |

Table 13

## Database Structure for Orders

| Field | Field Name    | Type      | Width | Description         |
|-------|---------------|-----------|-------|---------------------|
| 1     | id            | int       | 11    | I.D. of Order       |
| 2     | userId        | int       | 11    | I.D. of Customer    |
| 3     | productId     | varchar   | 255   | I.D. of Product     |
| 4     | quantity      | int       | 11    | Quantity of Product |
| 5     | orderDate     | timestamp |       | Date of Order       |
| 6     | paymentMethod | varchar   | 50    | Method of Payment   |
| 7     | orderStatus   | varchar   | 55    | Status of Order     |
| 8     | cart_code     | text      |       | I.D. of Order Group |

Table 14

## Database Structure for Order Track History

| Field | Field Name  | Type      | Width | Description               |
|-------|-------------|-----------|-------|---------------------------|
| 1     | id          | int       | 11    | I.D. of Time Order Placed |
| 2     | orderId     | int       | 11    | I.D. of Order             |
| 3     | status      | varchar   | 255   | Status of Order           |
| 4     | postingDate | timestamp |       | Date Order Status Updated |

Table 15  
Database Structure for Sub-Category

| Field | Field Name     | Type      | Width | Description               |
|-------|----------------|-----------|-------|---------------------------|
| 1     | id             | int       | 11    | I.D. of Sub-Category      |
| 2     | categoryId     | int       | 11    | I.D. of Category          |
| 3     | subcategory    | varchar   | 255   | Name of Sub-Category      |
| 4     | creationDate   | timestamp |       | Date Sub-Category Created |
| 5     | updatationDate | varchar   | 255   | Date Sub-Category Updated |

Table 16  
Database Structure for Product Reviews

| Field | Field Name | Type      | Width | Description           |
|-------|------------|-----------|-------|-----------------------|
| 1     | id         | Int       | 11    | I.D. of Review        |
| 2     | productId  | Int       | 11    | I.D. of Product       |
| 3     | quality    | Int       | 11    | Quality Review        |
| 4     | price      | Int       | 11    | Price Review          |
| 5     | value      | Int       | 11    | Value Review          |
| 6     | name       | varchar   | 255   | Name of Customer      |
| 7     | summary    | varchar   | 255   | Summary of Review     |
| 8     | review     | longtext  |       | Full Review           |
| 9     | reviewDate | timestamp |       | Date Product Reviewed |

Table 17  
Database Structure for Products

| Field | Field Name          | Type      | Width | Description             |
|-------|---------------------|-----------|-------|-------------------------|
| 1     | id                  | int       | 11    | I.D. of Product         |
| 2     | category            | int       | 11    | Category of Product     |
| 3     | subCategory         | int       | 11    | Sub-Category of Product |
| 4     | productName         | varchar   | 255   | Name of Product         |
| 5     | productPriceBefore  | int       | 11    | Price of Product Before |
| 6     | productPrice        | int       | 11    | Price of Product        |
| 7     | productDescription  | longtext  |       | Description of Product  |
| 8     | productImage1       | varchar   | 255   | Image of Product        |
| 9     | productImage2       | varchar   | 255   | Image of Product        |
| 10    | productImage3       | varchar   | 255   | Image of Product        |
| 11    | productAvailability | varchar   | 255   | Availability of Product |
| 12    | postingDate         | timestamp |       | Date Product Posted     |
| 13    | updatationDate      | varchar   | 255   | Date Product Updated    |

Table 18  
Database Structure for Customer Log

| Field | Field Name | Type      | Width | Description                     |
|-------|------------|-----------|-------|---------------------------------|
| 1     | id         | Int       | 11    | I.D. of Time Customer Logged In |
| 2     | userEmail  | Varchar   | 255   | E-mail of Customer              |
| 3     | userip     | Binary    | 16    | I.P. Address of Customer        |
| 4     | loginTime  | timestamp |       | Time Customer Logged In         |
| 5     | logout     | Varchar   | 255   | Time Customer Logged Out        |
| 6     | status     | Int       | 11    | Active Status of Customer       |

Table 19  
Database Structure for Customer

| Field | Field Name      | Type      | Width | Description                   |
|-------|-----------------|-----------|-------|-------------------------------|
| 1     | id              | Int       | 11    | I.D. of Customer              |
| 2     | name            | varchar   | 255   | Name of Customer              |
| 3     | email           | varchar   | 255   | E-mail of Customer            |
| 4     | contactno       | bigint    | 11    | Contact Number of Customer    |
| 5     | password        | varchar   | 255   | Password of Customer          |
| 6     | shippingAddress | longtext  |       | Shipping Address of Customer  |
| 7     | shippingState   | varchar   | 255   | Shipping State of Customer    |
| 8     | shippingCity    | varchar   | 255   | Shipping City of Customer     |
| 9     | shippingPincode | Int       | 11    | Shipping Pin Code of Customer |
| 10    | billingAddress  | longtext  |       | Billing Address of Customer   |
| 11    | billingState    | varchar   | 255   | Billing State of Customer     |
| 12    | billingCity     | varchar   | 255   | Billing City of Customer      |
| 13    | billingPincode  | Int       | 11    | Billing Pin Code of Customer  |
| 14    | regDate         | timestamp |       | Date Customer Registered      |
| 15    | updataionDate   | varchar   | 255   | Date Customer Updated Info    |

### Program Hierarchy

Hierarchy is a chart which shows the breakdown of a system to its lowest manageable levels. Each module is represented by a box, which contains the modules name. As a design tool, it allows the programmer in dividing and accomplishing a large software problem by presenting modules in each event that is likely to occur in the system.

The **hierarchy chart** or **structure chart** shows the relationship of various units. Its name comes from its general use in showing the organization (or structure) of a business in this case, a system. Within the context of a computer program, it shows the relationship between modules. Detail logic of the program is not presented. It does represent the organization of the functions used within the program.

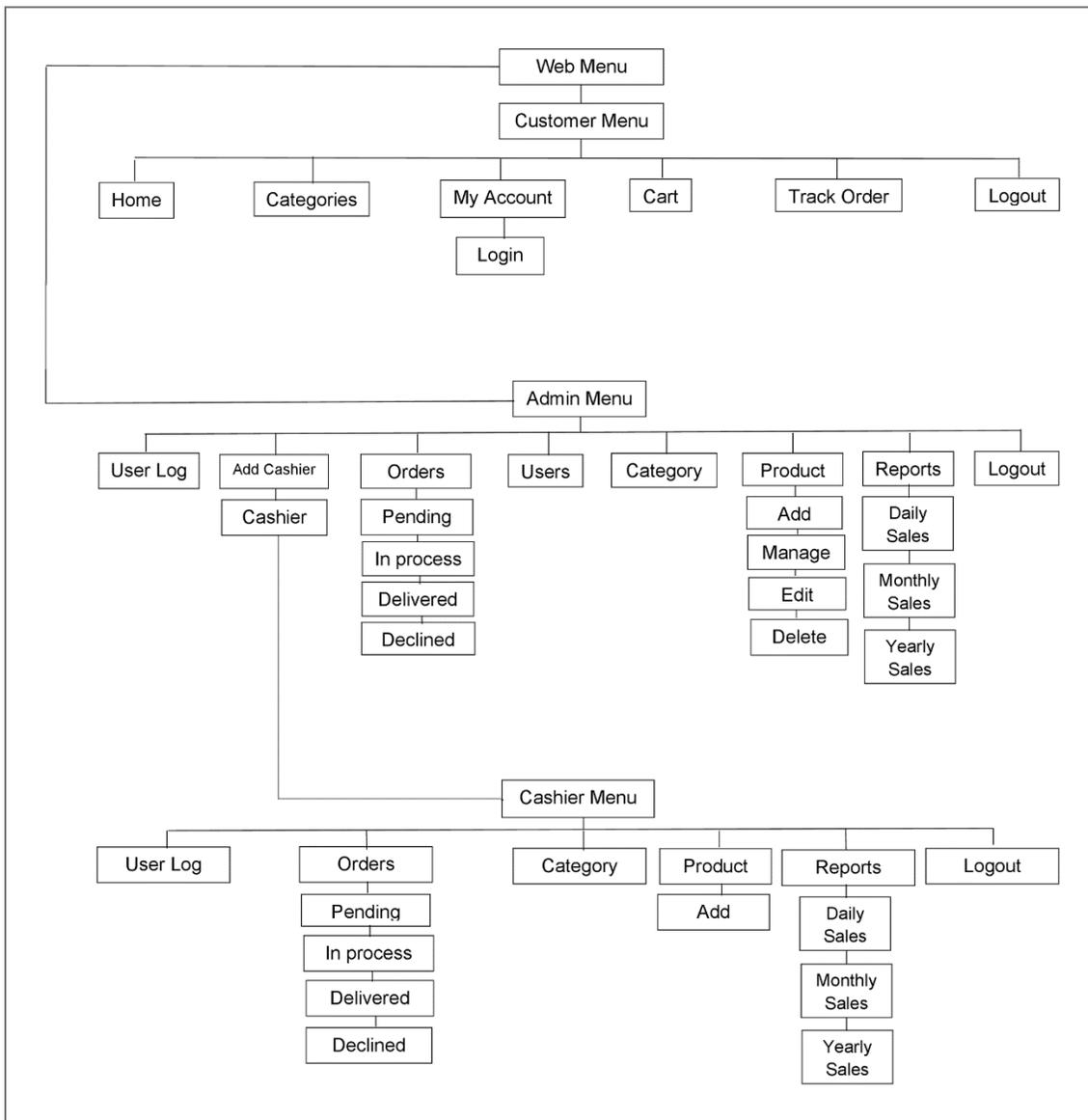


Figure 14. Program Hierarchy of the System

## Functional Requirements

A functional requirement defines a function of a software system or its components. A function is described as a set of inputs, behavior and outputs. The functional requirement may be shown as calculations, technical details, data manipulation and processing and other specific functionality that define what a system is supposed to accomplish. The functionalities of a system are as follows:

### 1. Acquisition

FREQ 1: The system should allow the customer, admin, and cashier to inquire for available items.

FREQ 2: The system should allow the customer, admin, and cashier to search for items.

### 2. Cataloguing

FREQ 3: The system should allow the owner and cashier to add, update, and delete categories on the catalogue.

FREQ 4: The system should allow the owner and cashier to add, update, and delete items on the catalogue.

### 3. Ordering

FREQ 5: The system should allow the customer to place an order.

FREQ 6: The system should allow the owner and cashier to manage orders.

### 4. Administration

FREQ 8: The system should allow the owner to have general access of the system including modules that are exclusive to admin access only.

FREQ 9: The system should allow the cashier to have partial access to the system in case the owner is not available.

#### 5. Inquire Reports

FREQ 18: The system should provide the statistical reports for the decision support of the owner and cashier.

FREQ 19: The system should provide daily sales report for librarian decision.

#### 6. Access the System

FREQ 10: System must be password protected.

FREQ 11: To be able to access the system, the username and password provided should be matching.

### **Non-Functional Requirements**

A non-functional requirement is a requirement that specifies criteria that can be used to judge the operation of the system, rather than specific behavior. This should be contrasted with functional requirements that define specific behavior of functions.

1. The system must have protection from unauthorized users by using username and password.
2. The system should be used any web browser (online).
3. The system should be made available yearly.

### **Test Cases**

Test cases are a series of simple steps that has to be done to check the particular functionality or feature of an application. It is a set of conditions of a

variable under which a tester will determine whether a software system or one of the features is working correctly or not. It may test case to determine that a requirement is fully satisfied. These are the test case scenarios conducted during the acceptance testing. The plan is to let the user system and follow the instructions in each test case to test the proposed system. The system should perform the expected result each test case in order to be considered successful.

These are the test case scenarios conducted during the acceptance testing. The test plan is to let the users use the system and follow the instructions in each test case to test the proposed system. The system should perform the expected result in each test case in order to be considered successful. Test case 1 is a module for “Acquisition” for “Search and Inquiry” command wherein it is expected to show results when specific items are being searched and viewed. On the other hand, the “Cataloguing” Test Case 1 is a module for registering new category and sub-category to the catalogue/menu. Test Case 2 is a module for updating or removing existing categories and sub-categories. Test Case 3 is a module for registering new products. Test Case 4 is a module for updating an existing product’s information. And Test Case 5 is a module for removing products from the catalogue/menu.

Furthermore, the “Ordering” Test Case 1 is a module for ordering items and Test Case 2 is a module for tracking order status.

The “Administration” Test Case 1 is a module for admin and cashier login. Test Cases 2, 3, and 4 are modules for registering new cashier accounts, updating

existing cashier accounts, and removing cashier accounts from the system, respectively.

The “Customer Account” Test Case 1 is a module for customer login for customers who already have an existing account while Test Case 2 is a module for new customer account registration.

Finally, the “Reports” Test Case 1 is a module for processing sales report wherein it is expected that the report information should be viewed or printed.

The following are the details of each test case:

### **Acquisition**

Test Case: 1

Module: “Search and Inquiry” command

Severity: 1

Instructions:

1. On the search bar located on the main header, input the keyword.
2. Click the option “Search” button.
3. Click on the searched item to view information.

Expected Result:

1. Item should be successfully displayed.

Cleanup: Click “Home” button to return to homepage.

### **Cataloguing**

Test Case: 1

Module: “Registering New Category and Sub-Category” command

Severity: 1

Instructions:

1. On the main menu, click “Category” or “Sub-Category”.
2. Input category and sub-category information.
3. Click the “Insert” button.

Expected Result:

1. The newly added category and sub-category should be successfully saved to the database and displayed.

Cleanup: Click any button from the sidebar to go to other modules.

Test Case: 2

Module: “Updating or Removing Existing Category and Sub-Category”  
command

Severity: 1

Instructions:

1. On the main menu, click “Category” or “Sub-Category”.
2. To update, click the “Update” button.
3. Edit category and sub-category information.
4. Click the “Update” button.
5. To remove, click the “X” button.
6. Confirm category and sub-category deletion.

Expected Result:

1. For the “Update” option, the updated category and sub-category should be successfully saved to the database and displayed.

2. For the “Remove” option, the deleted category and sub-category should be successfully removed from the database.

Cleanup: Click any button from the sidebar to go to other modules.

#### Test Case: 3

Module: “Register New Product” command

Severity: 1

Instructions:

1. On the main menu, click “Insert Product”.
2. Input product information.
3. Click the “Insert” button.

Expected Result:

1. The newly added products should be successfully saved to the database.

Cleanup: Click any button from the sidebar to go to other modules.

#### Test Case: 4

Module: Updating Product

Severity: 1

Instructions:

1. Click the “Manage Products button.
2. Click the pencil icon button on the right side of the table of the product you want to update.
3. Correct some of the fields.
4. Click the “Update” button.

Expected Result:

1. Product information successfully updated and displayed.

Cleanup: Click any button from the sidebar to go to other modules.

Test Case 5:

Module: Removing Product

Severity: 1

Instructions:

1. Click the "Manage Products button.
2. Click the "X" icon button on the right side of the table of the product you want to remove.
3. Click "Yes" button from the alert.

Expected Result:

1. The product should be removed successfully.

Cleanup: Click any button from the sidebar to go to other modules.

## **Ordering**

Test Case: 1

Module: "Order Product" command

Severity: 1

Instructions:

1. On the Webpage, click "Menu" then select product from the categories or search for it.
2. Click on the desired product.
3. Click the "Add to Cart" button.

4. Make changes or click “Check-out” button to place order.
5. Choose a payment method and select a delivery date and time.
6. Place order.

Expected Result:

1. The product you want will be successfully placed.

Cleanup: Click the “Home” button or any button to leave “Order History” page and view other modules.

Test Case: 2

Module: “Tracking Order Status” Command

Severity: 1

Instructions:

1. On the Webpage, click “Order History”.
2. Click on the “Track” button on the far right of the table.
3. View order tracking status.

Expected Result:

1. Order successfully tracked.

Cleanup: Click the “Home” button or any button to leave “Order History” page and view other modules.

## **Administration**

Test Case: 1

Module: “Admin and Cashier Account Login” command

Severity: 1

Instructions:

1. On the Admin login page, input username and password.
2. Then click the option “Login” button.

Expected Result:

1. For the Admin account, user will be redirected to the admin dashboard and will be able to access all the modules of the system.
2. For the Cashier account, user will be redirected to the cashier dashboard and will have access to limited modules on the system.

Clean-up: Click the “Logout” button to leave admin or cashier dashboard.

#### Test Case: 2

Module: “Register New Cashier” command

Severity: 1

Instructions:

1. Admin Side – On the menu, click Cashier.
2. Click Add New Cashier.
3. Input Cashier’s Information.
4. Then click the option “Add Cashier” button.

Expected Result:

1. The cashier is successfully added in the database.

Clean-up: Click the “Logout” button to leave admin or cashier dashboard.

#### Test Case: 3

Module: “Updating Cashier Account” command

Severity: 1

Instructions:

1. Click the pencil icon button on the right side of the table.
2. Correct some of the fields.
3. Then click “Update Cashier” button.

Expected results:

1. The cashier information has been successfully updated.

Clean-up: Click the “Logout” button to leave admin or cashier dashboard.

Test Case: 4

Module: “Removing Cashier Account” command

Severity: 1

Instructions:

1. Click the trash icon on the right side of the table.
2. Click “Yes” from the alert.

Expected results:

1. The Cashier is successfully removed from the database.

Clean-up: Click the “Logout” button to leave admin or cashier dashboard.

## **Customer Account**

Test Case: 1

Module: “Customer Login” command

Severity: 1

Instructions:

1. On the Webpage click My Account, then click login.
2. Input username and password.
3. Then click the option “Login” button.

Expected Result:

1. User can access their account and can now order products.

Clean-up: Click the “Logout” button to close module.

Test Case: 2

Module: “Customer Account Registration” command

Severity: 1

Instructions:

1. On the Webpage click My Account then click Login.
2. Click Create Account then input Customer Information.
3. Click Register.

Expected Result:

1. Customer is successfully added in the database.

Clean-up: Closes browser to close the module.

## **Reports**

Test Case 1:

Module: “Sales Report Generation” command

Severity: 1

Instructions:

1. On the Admin menu, click “Reports”. Then select “Sales” in the submenu.

Expected Result:

1. Sales record will be displayed.

Cleanup: Click any button from the sidebar to go to other modules.

## **Technical Requirements**

A wise selection of hardware, software and people involved in the operation is important. Proper identification of the components is necessary so that the system will be used correctly. Implementation of the system is a necessity to ensure that it is applicable and effective.

The hardware component is the physical part of a computer system. It includes the following: computer case, motherboard which contains the Central Processing Unit (CPU). Random Access Memory (RAM), basic input-output devices; buses; power supply, USB hard disk, soundcard and networking, keyboard, mouse, printer, monitor, headset and speakers, and other peripherals. These part work together, responsible for fast and accurate processing of data and provide space for data storage.

Software is simply a list of instructions for the computers they execute. Commonly software is of an algorithm form that translates into being to a sequence of machine instructions. This would be accurate, effective and understandable to the users.

Peopleware refers to the user who would operate the computer system. He should have the ability to do the task correctly to ensure the effectiveness of the system and generate efficient result in every information processing.

## **Minimum Hardware Requirements**

This covers the least hardware specification needed by the software in order to work. The consideration of these specifications was based on what is available in the market and what most computer package system offers.

| <b>Component</b>                               | <b>Specification</b>                                                           |
|------------------------------------------------|--------------------------------------------------------------------------------|
| Laptop/Desktop<br>Android Device<br>iOS Device | Runs with any laptop/desktop with internet connection on any internet browsers |

### **Minimum Software Specification**

The Ordering and Sales Management System requires software to function properly. This software was enumerated below with its corresponding specifications. These specifications as provided were based on the specifications of the computer units utilized during the development of the system.

| <b>Component</b> | <b>Specification</b>                                                      |
|------------------|---------------------------------------------------------------------------|
| Operating System | Runs only devices with a browser application and in any operating system. |
| Internet Browser | Any internet Browser                                                      |

### **Hosting and Implementation**

Web hosting is a type of internet hosting service that allows individuals and organizations to make their website accessible via the World Wide Web.

In order to host and apply the built system, the researchers used a domain owned by BISU-Bilar in Hostgator, a web hosting service provider, allowing the upload of the establishment's database and web page for testing. The researchers were granted access to the Basak Bistro Online Food Ordering System, Poblacion Norte, Batuan, Bohol as well as hosting for websites on virtual servers. Individuals and businesses can use web hosting to make their website available via the World Wide Web. The system could be accessed through <http://basakbistrobatuan.bisubilar.org/BasakBistro/index.php>.

## Business Intelligence Integration

In the existing theories, business intelligence means the ability of an organization to collect, maintain, and organize knowledge. It aims to support better business techniques and decision-making with solutions that the business intelligence (BI) to a whole new level and getting the right information. The system will be able to determine the history of the products ordered by the customer. The system will be able to determine daily sales using a tabular form and display monthly and yearly sales reports in graphical form.

Preview 1 shows the system view of the Daily Sales Report presented in a filterable table.

### Daily Sales Report

Print

From Date

To Date

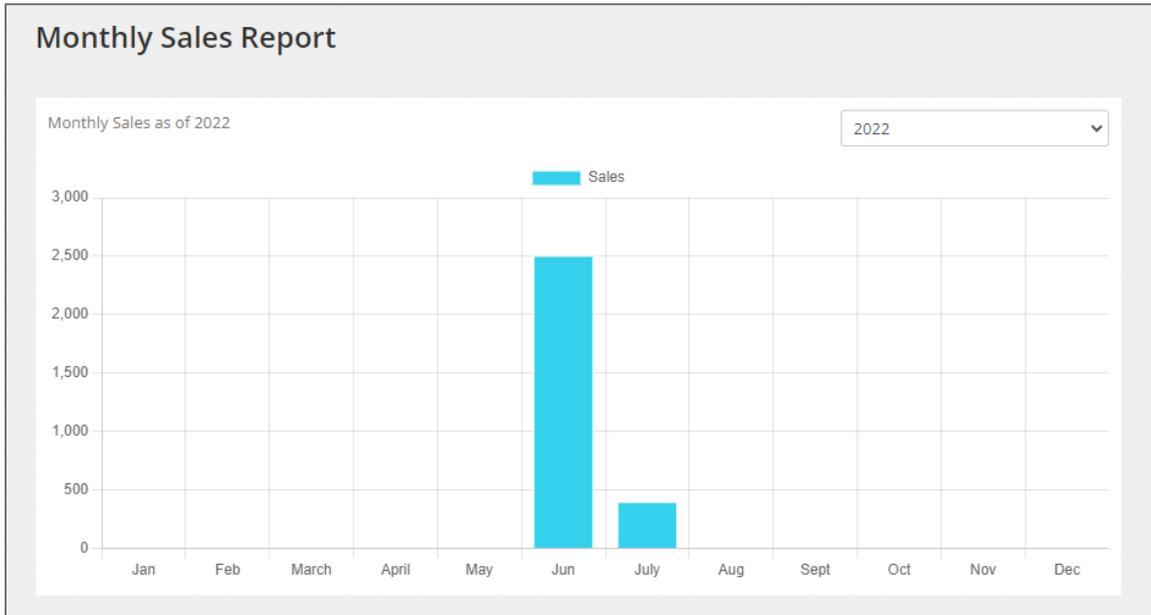
Click to filter

Filter

| Transaction Date    | Product                      | Category          | Price       | Quantity  | Total Amount |
|---------------------|------------------------------|-------------------|-------------|-----------|--------------|
| 2022-06-28 12:04:51 | Fried Chicken Platter        | Meals             | 260         | 3         | 780          |
| 2022-06-28 12:04:51 | Halo-Halo                    | Desserts & Shakes | 85          | 1         | 85           |
| 2022-06-28 12:07:25 | Chicken Cordon Bleu Platter  | Meals             | 200         | 4         | 800          |
| 2022-06-29 11:32:34 | Hawaiian Pizza 10-inch       | Pizza             | 180         | 1         | 180          |
| 2022-06-29 11:32:34 | Pepperoni Pizza 10-inch      | Pizza             | 190         | 1         | 190          |
| 2022-06-29 11:32:35 | Bacon & Cheese Pizza 10-inch | Pizza             | 210         | 1         | 210          |
| 2022-06-29 11:32:35 | Fried Chicken Platter        | Meals             | 260         | 1         | 260          |
| 2022-07-09 09:16:23 | Pepperoni Pizza 10-inch      | Pizza             | 190         | 1         | 190          |
| 2022-07-09 09:16:23 | Bacon & Cheese Pizza 10-inch | Pizza             | 210         | 1         | 210          |
| <b>Total</b>        |                              |                   | <b>1785</b> | <b>14</b> | <b>2905</b>  |

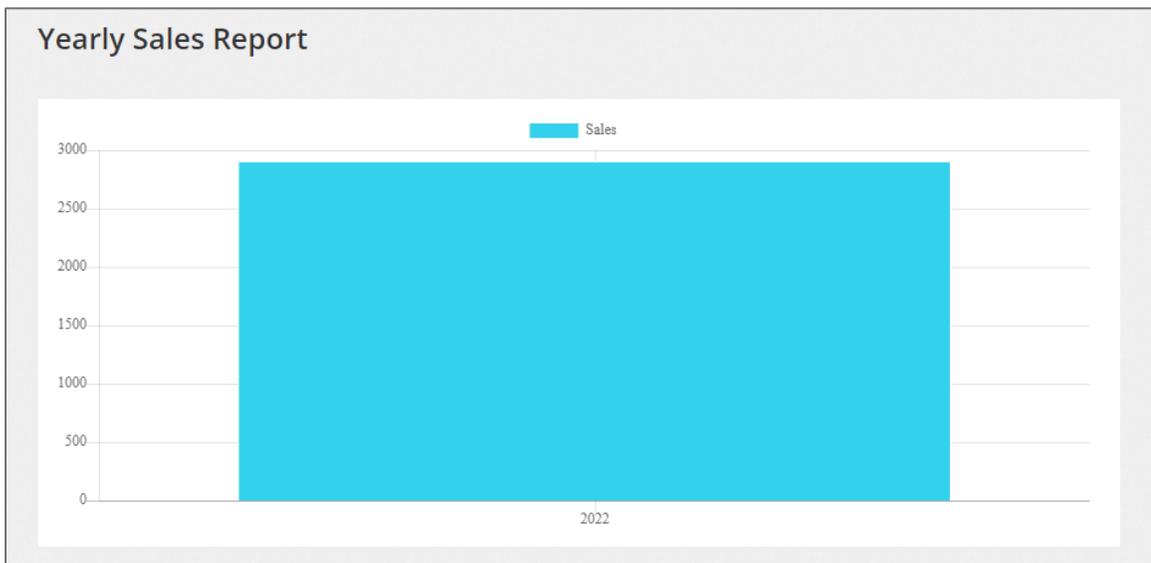
Preview 1. Daily Sales Report

Preview 2 shows the system view of the Monthly Sales Report presented in a bar chart.



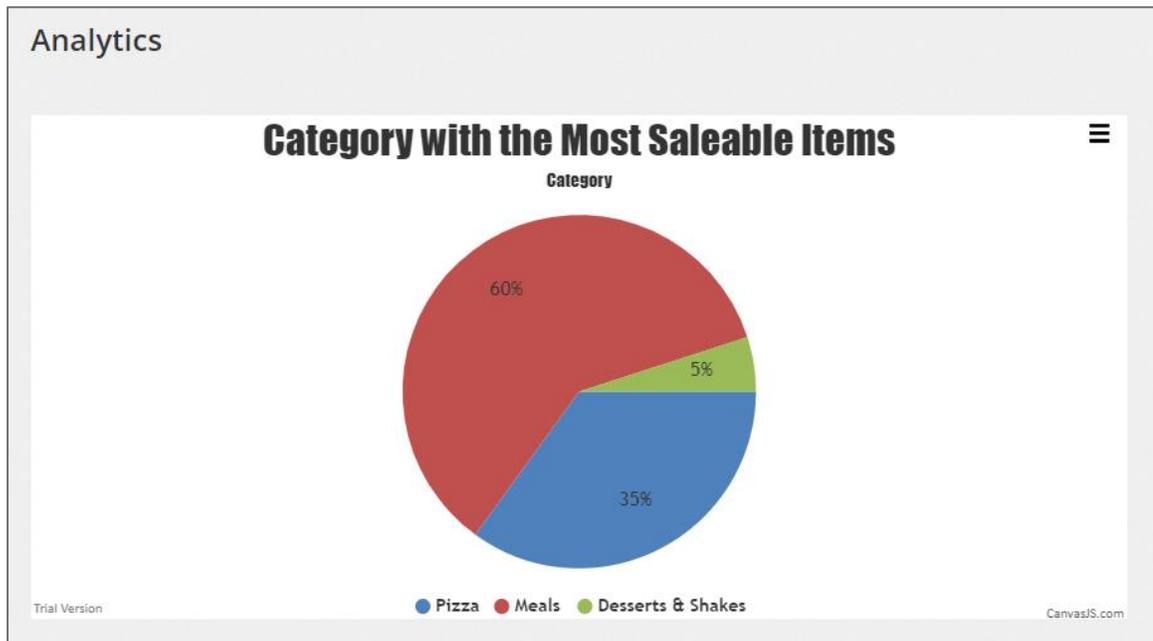
Preview 2. Monthly Sales Report

Preview 3 shows the system view of the Yearly Sales Report presented in a bar chart.



Preview 3. Yearly Sales Report

Preview 4 shows the system view of the categories with the most saleable items in pie chart format.



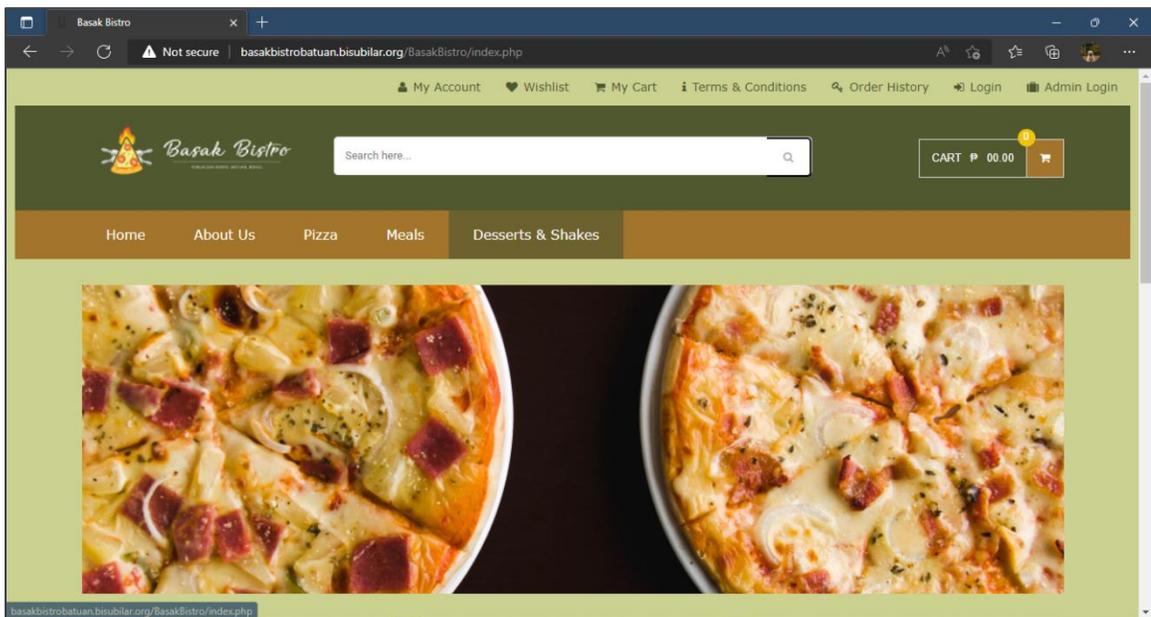
Preview 4. Category with the Most Saleable Items

## Screen Layouts

The screen layout is one of the many attributes to provide user-friendliness to the system. It serves as a guide to the users on how to operate the system, and it recognizes the users to the task needed to perform to the system. It should be designed in such a way the browsers can navigate the system quickly and easily.

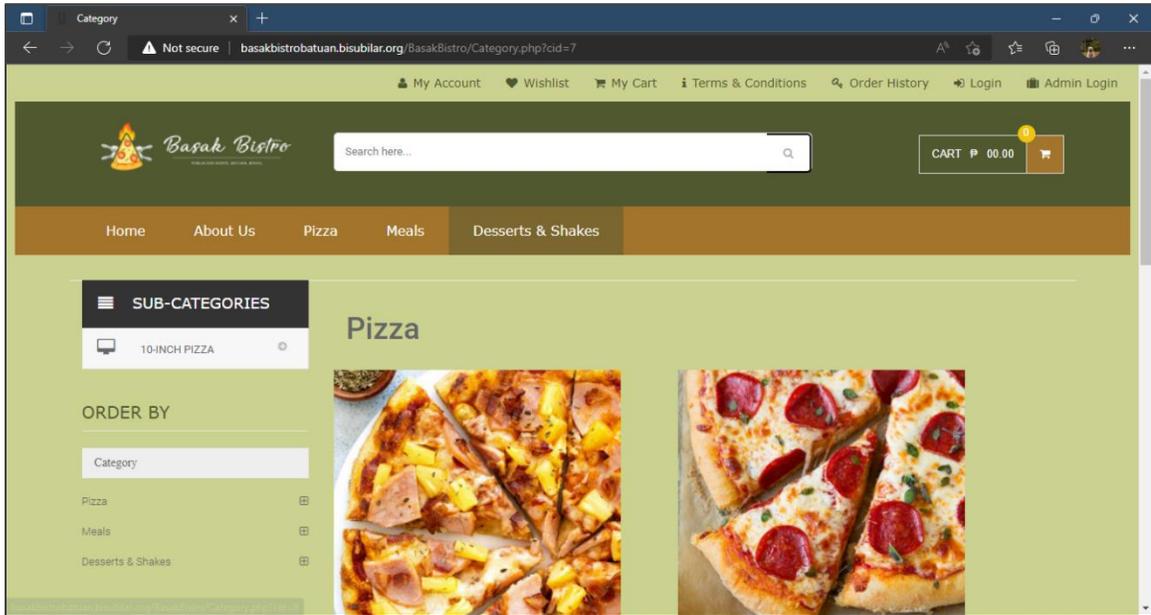
Layout is defined as the particular way elements are arranged. In the case of interface design, these elements are the informational, functional, framing, and decorative parts of the screen. Thoughtful placement of these elements helps to guide and inform your users about the relative importance of the information and functions.

Preview 5 shows the Homepage with all the customer features.



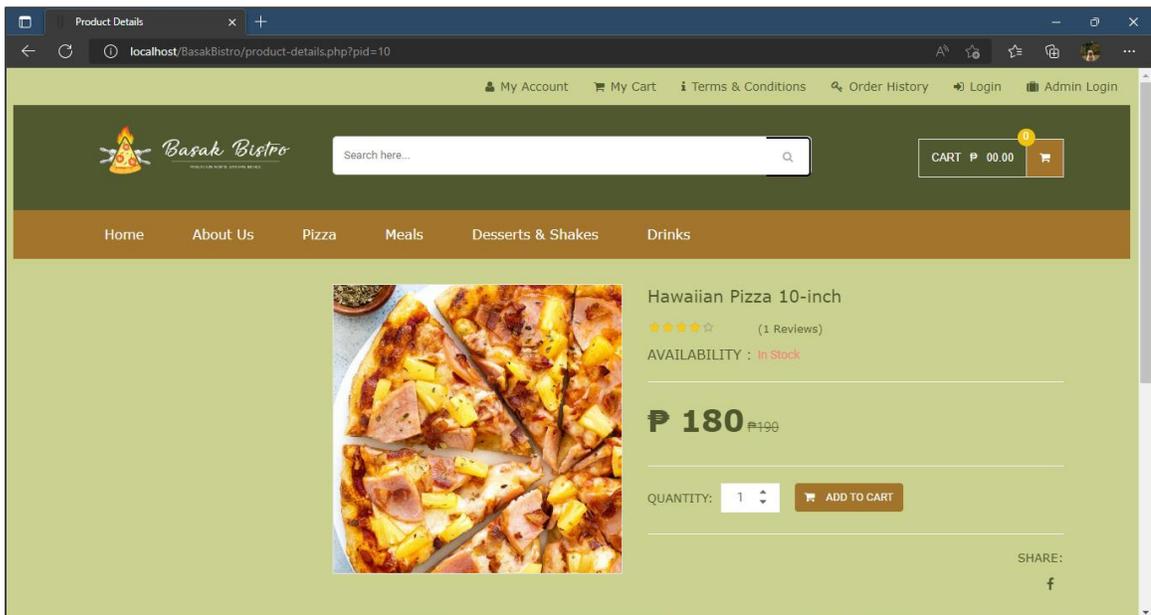
Preview 5. Homepage

Preview 6 shows the Category wherein products belonging into that category are displayed.



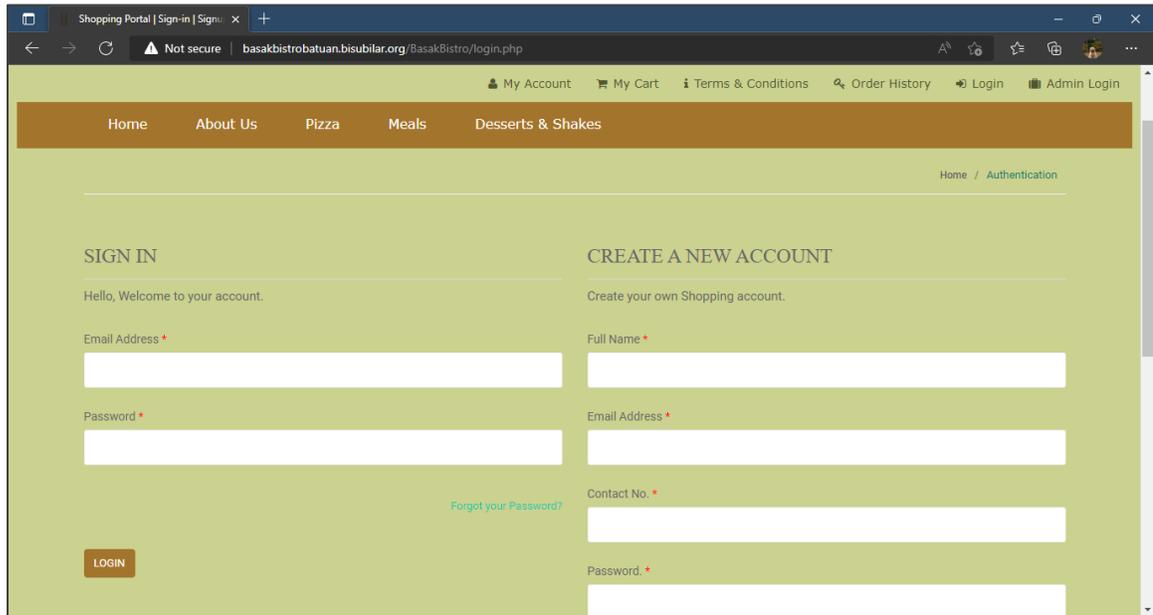
Preview 6. Category

Preview 7 shows the information of the selected item from the menu.



Preview 7. Item Details

Preview 8 shows the Customer Login and Sign-in module.



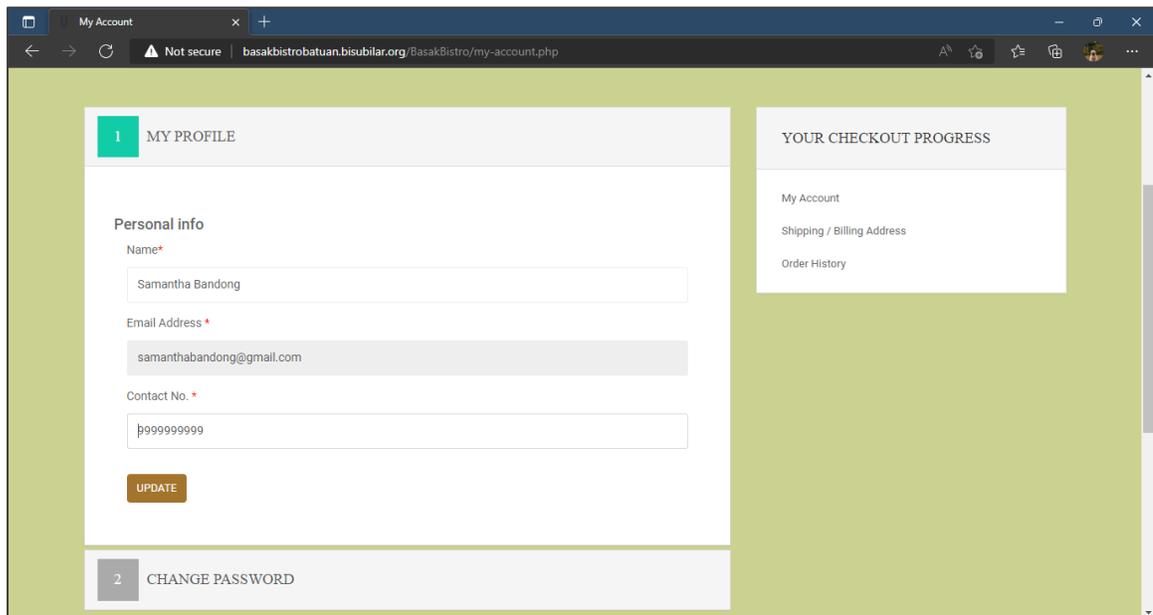
The screenshot shows a web browser window with the URL `basakbistrobatuan.bisubilar.org/BasakBistro/login.php`. The page features a navigation menu with links for Home, About Us, Pizza, Meals, and Desserts & Shakes. Below the menu, there are two main sections: "SIGN IN" and "CREATE A NEW ACCOUNT".

The "SIGN IN" section includes a welcome message, "Hello, Welcome to your account.", and two input fields: "Email Address" and "Password". A "LOGIN" button is located below these fields. A link for "Forgot your Password?" is also present.

The "CREATE A NEW ACCOUNT" section includes a message "Create your own Shopping account." and four input fields: "Full Name", "Email Address", "Contact No.", and "Password".

Preview 8. Customer Login and Sign-in Page

Preview 9 shows the User Account Management where users can edit and update their personal information and delivery address.



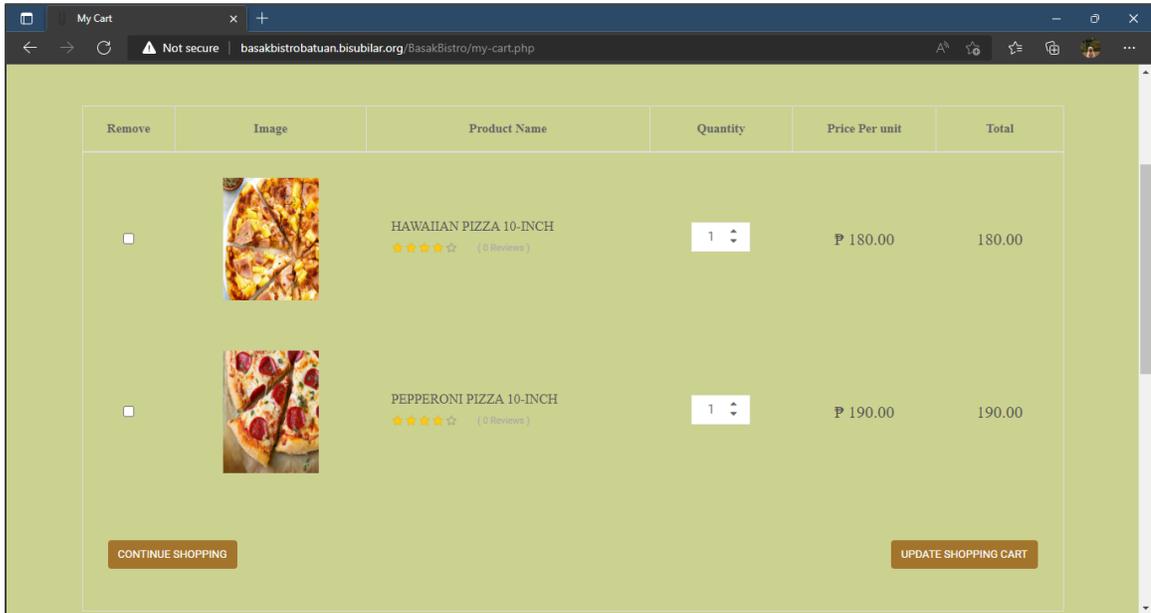
The screenshot shows a web browser window with the URL `basakbistrobatuan.bisubilar.org/BasakBistro/my-account.php`. The page is titled "My Account" and features two main sections: "MY PROFILE" and "YOUR CHECKOUT PROGRESS".

The "MY PROFILE" section is divided into two tabs: "1 MY PROFILE" (active) and "2 CHANGE PASSWORD". Under the "MY PROFILE" tab, there is a "Personal info" section with three input fields: "Name" (containing "Samantha Bandong"), "Email Address" (containing "samanthabandong@gmail.com"), and "Contact No." (containing "0999999999"). An "UPDATE" button is located below these fields.

The "YOUR CHECKOUT PROGRESS" section is located on the right side of the page and contains three links: "My Account", "Shipping / Billing Address", and "Order History".

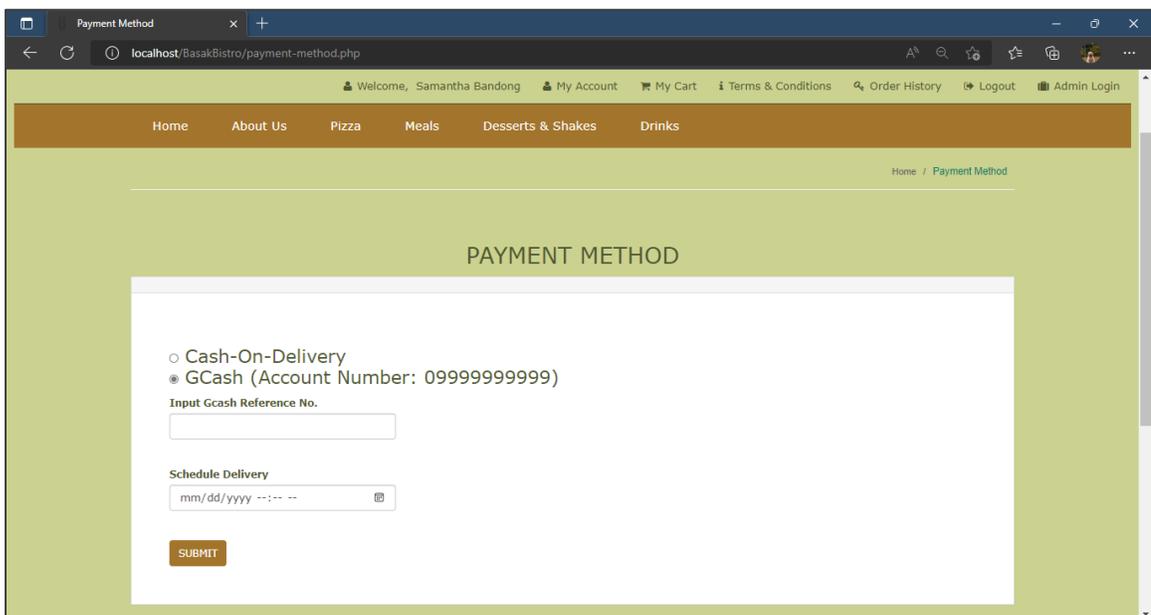
Preview 9. User Account & Delivery Address Management

Preview 10 shows the customer's Cart Management. In this module, the customer can add, delete, and update the items on their cart.



Preview 10. Cart Management

Preview 11 shows the Payment Method wherein the customer can input a reference number for GCash payments and schedule a delivery date and time.



Preview 11. Payment Method

Preview 12 shows the customer's Order History.

| Order/Tracking ID     | Image | Product Name           | Quantity | Price Per Item | Total  | Payment Method | Order Date          | Action                                       |
|-----------------------|-------|------------------------|----------|----------------|--------|----------------|---------------------|----------------------------------------------|
| 165586297973046732323 |       | Hawaiian Pizza 10-inch | 1        | 180.00         | 180.00 |                | 2022-06-22 09:56:40 | <a href="#">Track</a> <a href="#">Cancel</a> |
| Grand Total: Php      |       |                        |          |                | 180.00 |                |                     |                                              |
| 165586309358485707412 |       | Hawaiian Pizza 10-inch | 1        | 180.00         | 180.00 | GCash          | 2022-06-20 10:45:31 | <a href="#">Track</a>                        |
| Grand Total: Php      |       |                        |          |                | 180.00 |                |                     |                                              |

Preview 12. Order History

Preview 13 shows the tracking status of the order.

**Order Tracking Details**

**Order ID:** 165586297973046732323  
**Date:** 2022-06-22 09:56:40  
**Order Status:** CONFIRMED  
**Delivery Fee:** 10  
**Delivery Person:** Juan dela Cruz  
**Delivery Cont.No:** 09888888888  
**Staff-in-charge:** Cashier Maria

| Date                | Product Name           | Quantity | Price      |
|---------------------|------------------------|----------|------------|
| 2022-06-22 09:56:40 | Hawaiian Pizza 10-inch | 1        | 180.00     |
| Grand Total:        |                        |          | Php 180.00 |

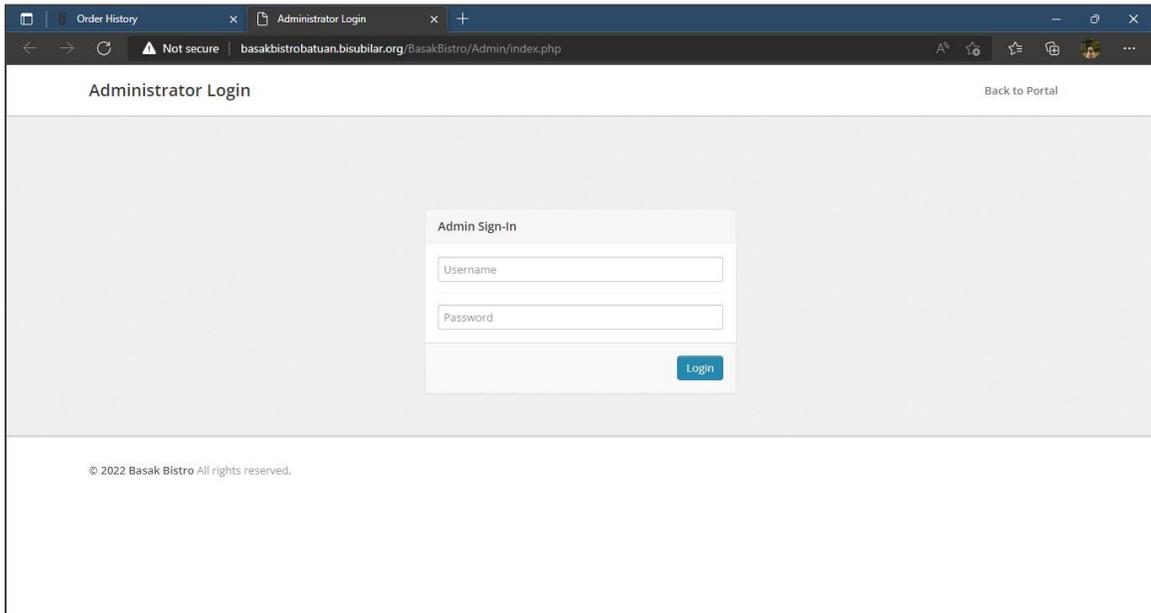
**Tracking History**

| No | Status            | Remark                | Date                |
|----|-------------------|-----------------------|---------------------|
| 1  | Confirming Orders | Prepare exact amount. | 2022-06-22 10:00:53 |

[Print Receipt](#)

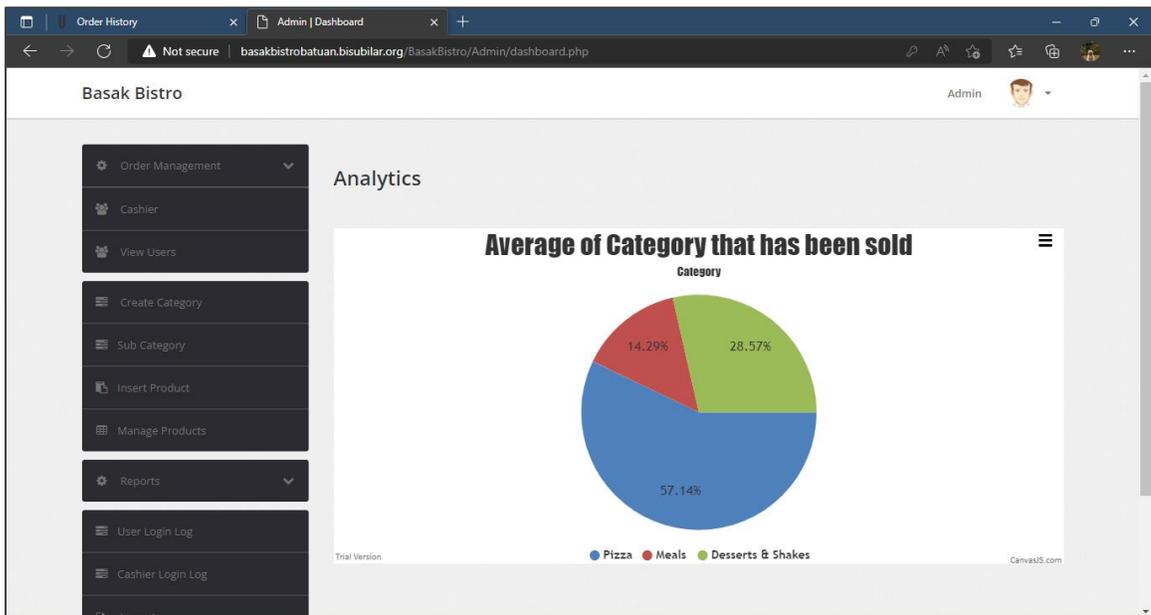
Preview 13. Order Tracking

Preview 14 shows the Admin and Cashier Login Page.



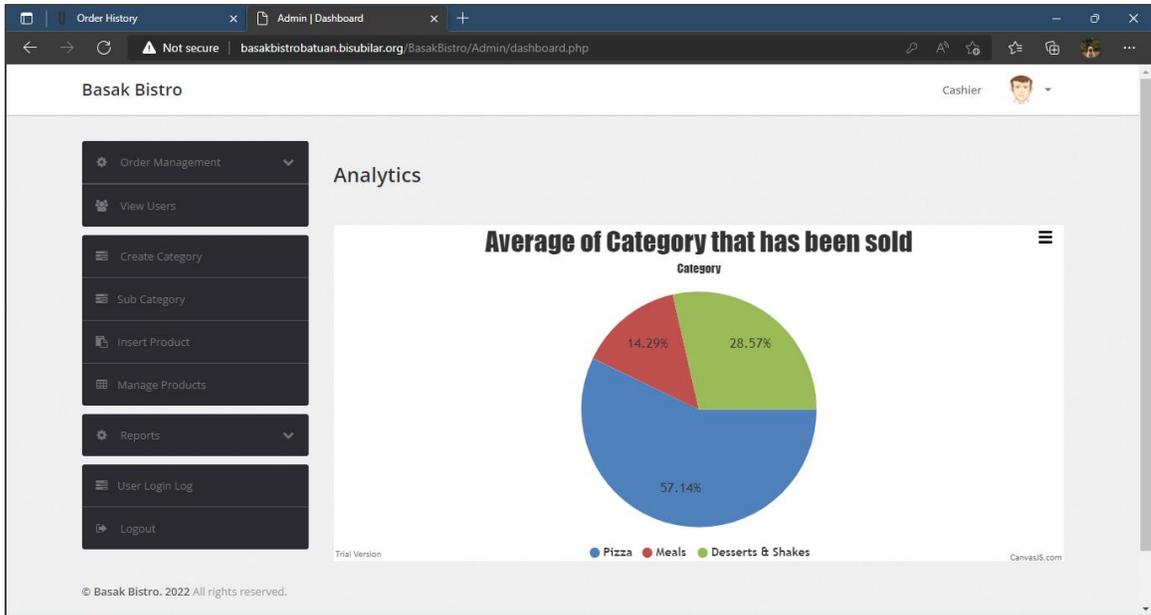
Preview 14. Admin and Cashier Login

Preview 15 shows the Admin Dashboard with the website management menu.



Preview 15. Admin Dashboard

Preview 16 shows the Cashier Dashboard with only selected menu options.



Preview 16. Cashier Dashboard

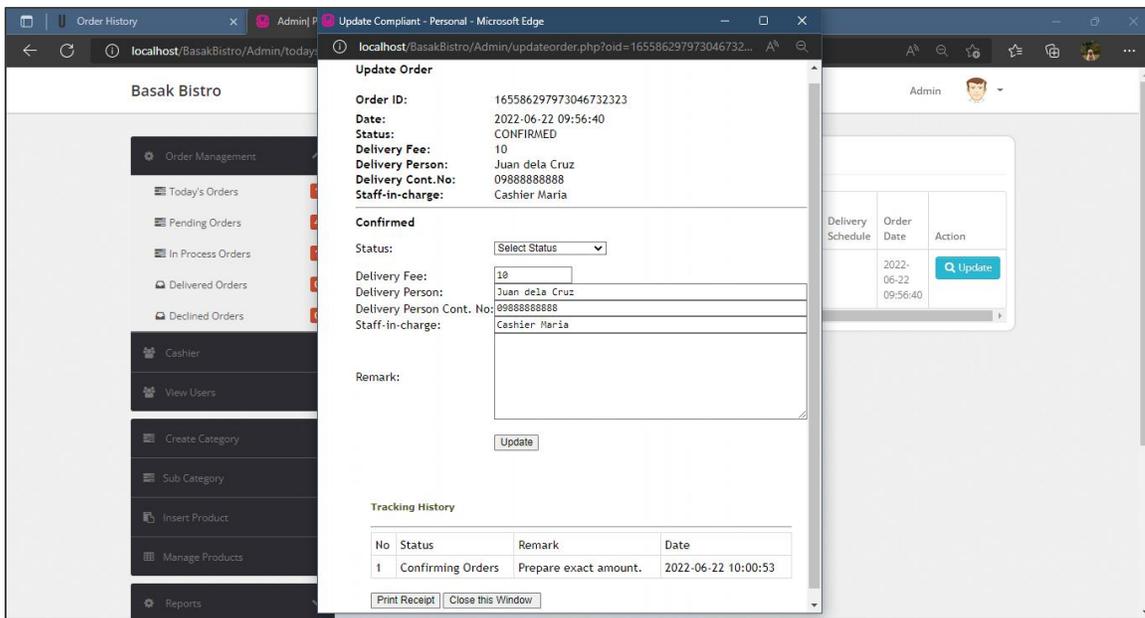
Preview 17 shows the Order Management Menu. It contains the Pending Orders, In-Process Orders, Delivered Orders, and Declined Orders.

The screenshot shows the Admin Order Management interface. It features a sidebar menu with options like Order Management, Cashier, View Users, Create Category, Sub Category, Insert Product, Manage Products, Reports, User Login Log, Cashier Login Log, and Logout. The main area displays a table titled 'Today's Order' with the following data:

| Order Id              | Name             | Email                     | Contact    | Shipping Address                              | Product Name            | Quantity | Grand Total | P | A |
|-----------------------|------------------|---------------------------|------------|-----------------------------------------------|-------------------------|----------|-------------|---|---|
| 165404654326191250727 | Samantha Bandong | samanthabandong@gmail.com | 9999999999 | Poblacion Norte, Batuan, Bohol, Batuan, BOHOL | Hawaiian Pizza 10-inch  | 1        | 370.00      | C |   |
|                       |                  |                           |            |                                               | Pepperoni Pizza 10-inch | 1        |             |   |   |
| 165404252428944483050 | Samantha Bandong | samanthabandong@gmail.com | 9999999999 | Poblacion Norte, Batuan, Bohol, Batuan, BOHOL | Hawaiian Pizza 10-inch  | 1        | 690.00      | C |   |
|                       |                  |                           |            |                                               | Pepperoni Pizza 10-inch | 1        |             |   |   |

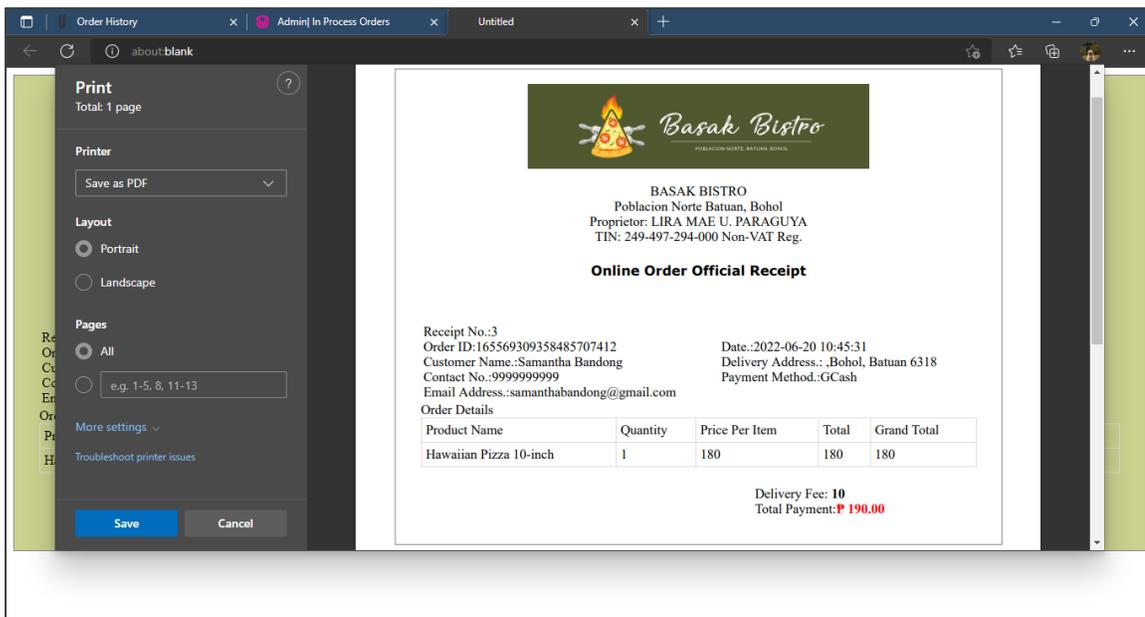
Preview 17. Order Management

Preview 18 shows the Update Order window where the admin or Cashier can update the status of the customer's order.



Preview 18. Update Order

Preview 19 shows the generated Order Receipt.



Preview 19. Order Receipt

Preview 20 shows the Cashier Management module where the admin can add, delete, and update Cashier accounts.

Basak Bistro Admin

Order Management

Cashier

View Users

Create Category

Sub Category

Insert Product

Manage Products

Reports

User Login Log

Cashier Login Log

Logout

+ Add

Show 10 entries Search:

| Id. | Name    | Email                      | Date                | Action                                      |
|-----|---------|----------------------------|---------------------|---------------------------------------------|
| 2   | halette | halettebandong97@gmail.com | 2022-05-10 05:06:48 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 3   | sam     | halettebandong97@gmail.com | 2022-05-10 05:14:12 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 4   | jess    | halettebandong97@gmail.com | 2022-05-10 05:52:13 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 5   | mama    | halettebandong97@gmail.com | 2022-05-10 06:19:44 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 6   | ruffa   | ruffamaecampos@gmail.com   | 2022-05-11 01:40:32 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 7   | nella   | halettebandong97@gmail.com | 2022-05-14 03:31:35 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 11  | test    | halettebandong97@gmail.com | 2022-05-21 08:09:05 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 12  | papa    | halettebandong97@gmail.com | 2022-05-21 12:52:06 | <a href="#">Edit</a> <a href="#">Delete</a> |

Showing 1 to 8 of 8 entries

### Preview 20. Cashier Management

Preview 21 shows the User Management module where the admin and Cashier can view and delete customer accounts.

Basak Bistro Admin

Order Management

Cashier

View Users

Create Category

Sub Category

Insert Product

Manage Products

Reports

User Login Log

Cashier Login Log

Logout

Manage Users

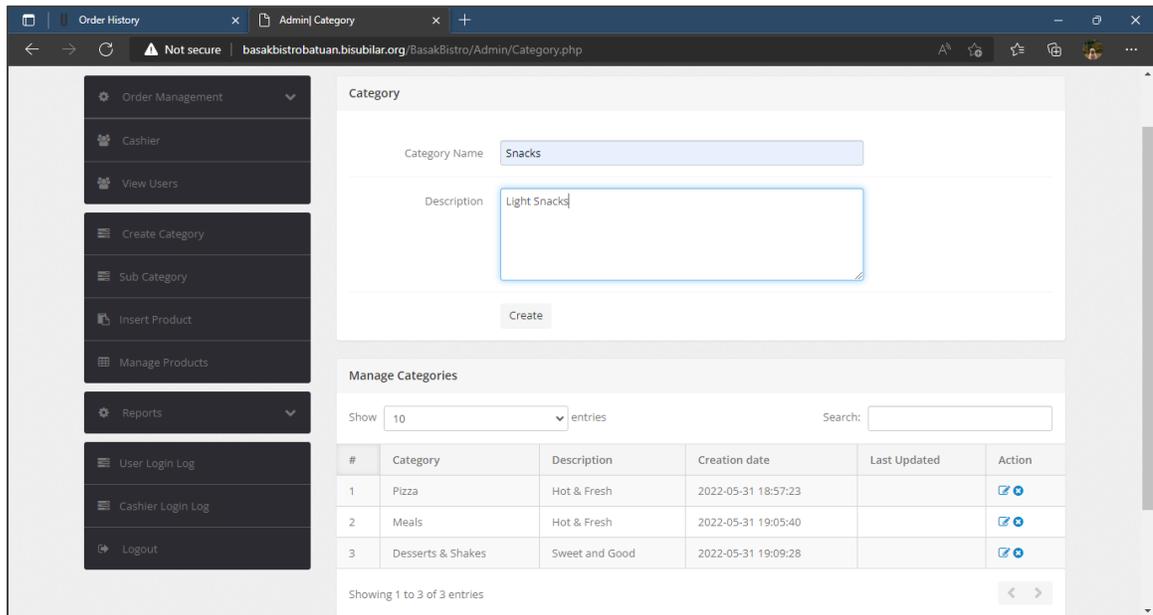
Show 10 entries Search:

| # | Name               | Email                     | Contact no | Shipping Address                                   | Billing Address                                      | Reg. Date           | Action                 |
|---|--------------------|---------------------------|------------|----------------------------------------------------|------------------------------------------------------|---------------------|------------------------|
| 1 | Samantha Bandong   | samanthabandong@gmail.com | 9999999999 | Poblacion Norte, Batuan, Bohol, Batuan, BOHOL-6318 | Poblacion Norte, Batuan, Bohol, Batuan, Purok 4-6318 | 2022-05-14 04:53:25 | <a href="#">Delete</a> |
| 2 | Josephine Morica   | Josephinemorica@gmail.com | 9999999999 | ..                                                 | ..                                                   | 2022-05-30 01:03:24 | <a href="#">Delete</a> |
| 3 | Leonida P. Revilla | lccilpritz@gmail.com      | 9092947054 | ..                                                 | ..                                                   | 2022-05-31 04:21:13 | <a href="#">Delete</a> |

Showing 1 to 3 of 3 entries

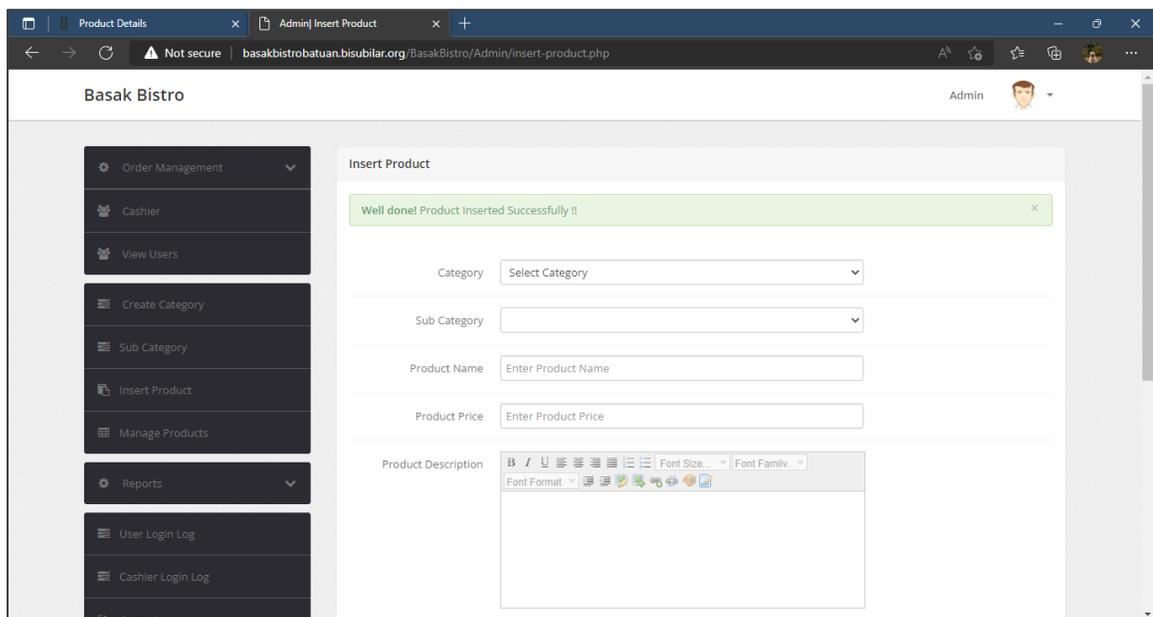
### Preview 21. User Management

Preview 22 shows the Adding and Managing of menu Categories and Sub-categories wherein the admin or cashier can add new categories and sub-categories and add or delete existing ones.



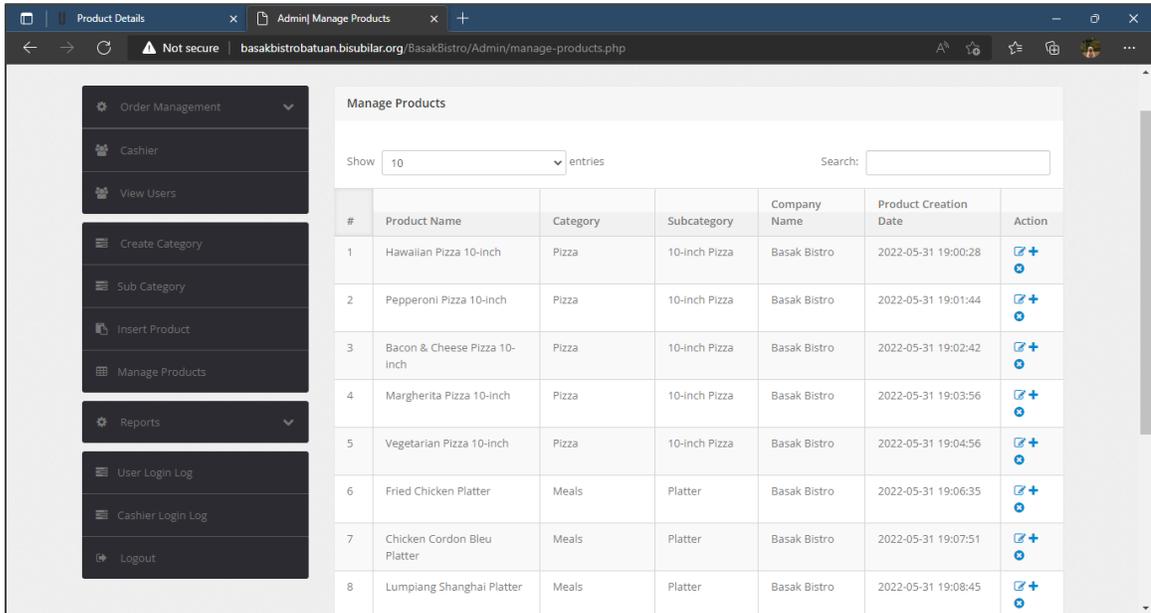
### Preview 22. Category & Sub-category Management

Preview 23 shows the Adding of New Products in the menu.



### Preview 23. Inserting New Products

Preview 24 shows the Product Management module wherein the admin or the Cashier can manage existing product from the menu.

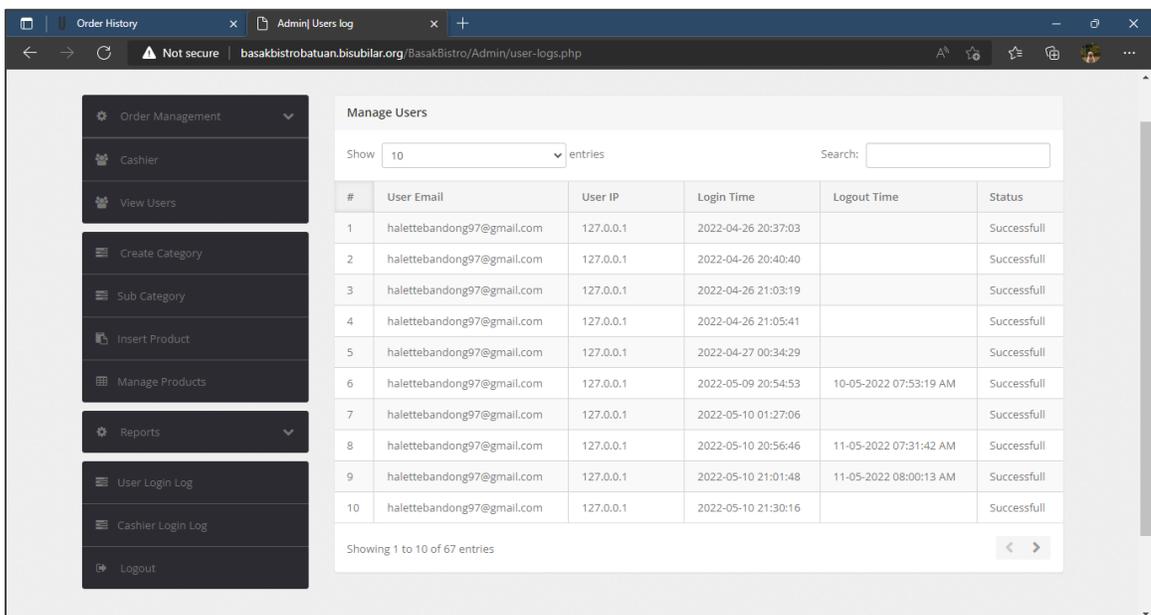


The screenshot displays the 'Manage Products' interface. On the left is a sidebar with navigation options: Order Management, Cashier, View Users, Create Category, Sub Category, Insert Product, Manage Products, Reports, User Login Log, Cashier Login Log, and Logout. The main content area shows a table of products with the following data:

| # | Product Name                 | Category | Subcategory   | Company Name | Product Creation Date | Action       |
|---|------------------------------|----------|---------------|--------------|-----------------------|--------------|
| 1 | Hawaiian Pizza 10-inch       | Pizza    | 10-inch Pizza | Basak Bistro | 2022-05-31 19:00:28   | [Edit] [Add] |
| 2 | Pepperoni Pizza 10-Inch      | Pizza    | 10-inch Pizza | Basak Bistro | 2022-05-31 19:01:44   | [Edit] [Add] |
| 3 | Bacon & Cheese Pizza 10-inch | Pizza    | 10-inch Pizza | Basak Bistro | 2022-05-31 19:02:42   | [Edit] [Add] |
| 4 | Margherita Pizza 10-inch     | Pizza    | 10-inch Pizza | Basak Bistro | 2022-05-31 19:03:56   | [Edit] [Add] |
| 5 | Vegetarian Pizza 10-inch     | Pizza    | 10-inch Pizza | Basak Bistro | 2022-05-31 19:04:56   | [Edit] [Add] |
| 6 | Fried Chicken Platter        | Meals    | Platter       | Basak Bistro | 2022-05-31 19:06:35   | [Edit] [Add] |
| 7 | Chicken Cordon Bleu Platter  | Meals    | Platter       | Basak Bistro | 2022-05-31 19:07:51   | [Edit] [Add] |
| 8 | Lumpliang Shanghai Platter   | Meals    | Platter       | Basak Bistro | 2022-05-31 19:08:45   | [Edit] [Add] |

Preview 24. Product Management

Preview 25 shows the User Login Log where the admin and the Cashier can view the customer's login information.



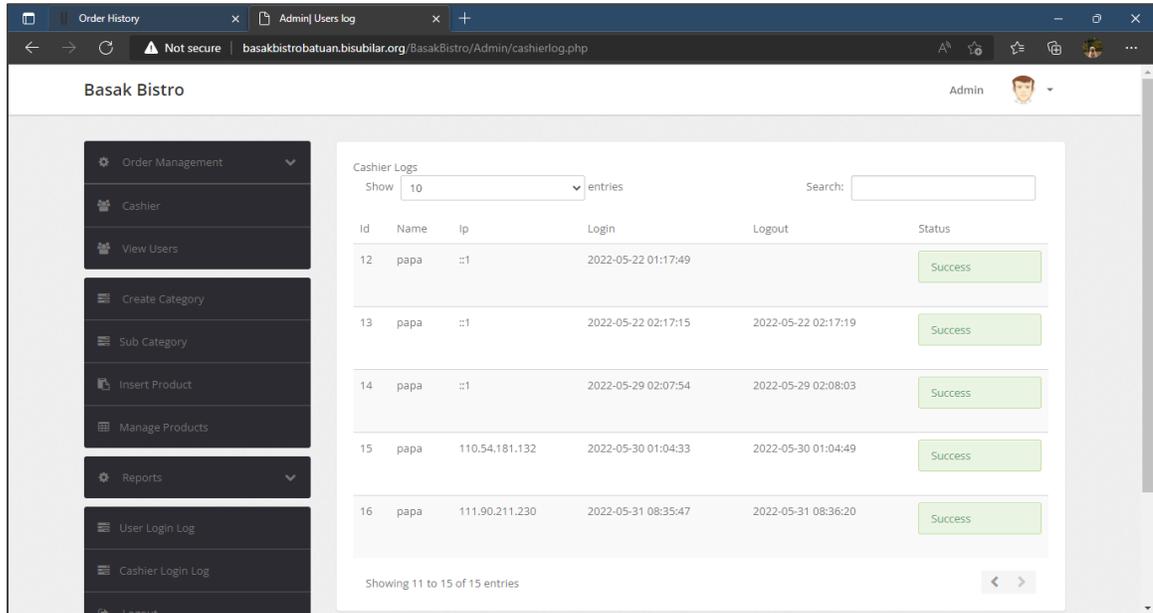
The screenshot displays the 'Manage Users' interface. On the left is a sidebar with navigation options: Order Management, Cashier, View Users, Create Category, Sub Category, Insert Product, Manage Products, Reports, User Login Log, Cashier Login Log, and Logout. The main content area shows a table of login logs with the following data:

| #  | User Email                 | User IP   | Login Time          | Logout Time            | Status      |
|----|----------------------------|-----------|---------------------|------------------------|-------------|
| 1  | halettebandong97@gmail.com | 127.0.0.1 | 2022-04-26 20:37:03 |                        | Successfull |
| 2  | halettebandong97@gmail.com | 127.0.0.1 | 2022-04-26 20:40:40 |                        | Successfull |
| 3  | halettebandong97@gmail.com | 127.0.0.1 | 2022-04-26 21:03:19 |                        | Successfull |
| 4  | halettebandong97@gmail.com | 127.0.0.1 | 2022-04-26 21:05:41 |                        | Successfull |
| 5  | halettebandong97@gmail.com | 127.0.0.1 | 2022-04-27 00:34:29 |                        | Successfull |
| 6  | halettebandong97@gmail.com | 127.0.0.1 | 2022-05-09 20:54:53 | 10-05-2022 07:53:19 AM | Successfull |
| 7  | halettebandong97@gmail.com | 127.0.0.1 | 2022-05-10 01:27:06 |                        | Successfull |
| 8  | halettebandong97@gmail.com | 127.0.0.1 | 2022-05-10 20:56:46 | 11-05-2022 07:31:42 AM | Successfull |
| 9  | halettebandong97@gmail.com | 127.0.0.1 | 2022-05-10 21:01:48 | 11-05-2022 08:00:13 AM | Successfull |
| 10 | halettebandong97@gmail.com | 127.0.0.1 | 2022-05-10 21:30:16 |                        | Successfull |

Showing 1 to 10 of 67 entries

Preview 25. User Login Log

Preview 26 shows the Cashier Login Log where the admin can monitor the Cashier's login information.



| Id | Name | Ip             | Login               | Logout              | Status  |
|----|------|----------------|---------------------|---------------------|---------|
| 12 | papa | ::1            | 2022-05-22 01:17:49 |                     | Success |
| 13 | papa | ::1            | 2022-05-22 02:17:15 | 2022-05-22 02:17:19 | Success |
| 14 | papa | ::1            | 2022-05-29 02:07:54 | 2022-05-29 02:08:03 | Success |
| 15 | papa | 110.54.181.132 | 2022-05-30 01:04:33 | 2022-05-30 01:04:49 | Success |
| 16 | papa | 111.90.211.230 | 2022-05-31 08:35:47 | 2022-05-31 08:36:20 | Success |

Preview 26. Cashier Login Log

## Economic Performance Evaluation

In any project analysis is one of the most important parts of any system and design project. This includes the calculation of the expected cost that the developed system will need as well as the benefits that it gives. This section determines the proposed budget of resources that will be used.

In the presentation of the economic performance evaluation, the length of time. It takes for the new system to generate the cost-saving to cover its development and expenses is determined thus, it will give them the idea of whether they will proceed with the computerization or not.

Table 20  
Initial Investment and Annual Operating Cost

| Items                         | Quantity | Unit     | Unit Price  | Total       |
|-------------------------------|----------|----------|-------------|-------------|
| <b>A. Software</b>            |          |          |             |             |
| Software Development          | 1        | Lot      | ₱ 15,000.00 | ₱ 12,000.00 |
| Software Licensing            | 1        | Lot      | ₱ 12,000.00 | ₱ 10,000.00 |
| Software Training             | 2        | Man-days | ₱ 5,000.00  | ₱ 10,000.00 |
| Software Hosting              | 1        | Piece    | ₱ 1,200.00  | ₱ 1,200.00  |
| Subtotal Initial Cost         |          |          |             | ₱ 33,200.00 |
| Total Initial Investment Cost |          |          |             | ₱ 33,200.00 |
| <b>B. Hardware</b>            |          |          |             |             |
| Desktop Computer              | 1        | Set      | ₱ 38,000.00 | ₱ 30,000.00 |
| Printer                       | 1        | Unit     | ₱ 12,000.00 | ₱ 12,000.00 |
| Router                        | 1        | Unit     | ₱ 1,000.00  | ₱ 1,000.00  |
| Total Annual Operating Cost   |          |          |             | ₱ 43,000.00 |
| <b>C. Office Supplies</b>     |          |          |             |             |
| Bond Paper                    | 2        | Ream     | ₱ 160.00    | ₱ 320.00    |
| Ballpen                       | 10       | Pieces   | ₱ 7.00      | ₱ 70.00     |
| Staple                        | 3        | Pieces   | ₱ 50.00     | ₱ 240.00    |
| Staple Wire                   | 4        | Boxes    | ₱ 12.00     | ₱ 48.00     |
| Clip                          | 1        | Box      | ₱ 35.00     | ₱ 35.00     |
| Printer Ink:                  |          |          |             |             |
| Magenta                       | 1        | Pieces   | ₱ 250.00    | ₱ 250.00    |
| Cyan                          | 1        | Pieces   | ₱ 250.00    | ₱ 250.00    |
| Yellow                        | 1        | Pieces   | ₱ 250.00    | ₱ 250.00    |
| Black                         | 1        | Pieces   | ₱ 250.00    | ₱ 250.00    |
| Fastener                      | 1        | Box      | ₱ 25.00     | ₱ 25.00     |
| Folder                        | 15       | Pieces   | ₱ 7.00      | ₱ 105.00    |
| Electricity                   | 12       | Kw/h     | ₱ 300.00    | ₱ 3,600.00  |
| System Maintenance            | 1        |          | ₱ 1,000.00  | ₱ 1,000.00  |
| Total Annual Operating Cost:  |          |          |             | ₱ 6,443.00  |

### Testing and Evaluation

Testing and evaluation were performed to determine the functionality of the system. This is also the process of judging the performance of the system in general. In this study, web usability was evaluated to determine its technical performance as perceived by the target users. The researchers conducted their web usability test on May 30, 2022 and May 31, 2022 with each session starting

from 1PM and ending at 4PM, at Basak Bistro, Poblacion Norte, Batuan, Bohol, Plaza Rizal, Poblacion Sur, Batuan, Bohol, and Zamora, Bilar, Bohol. The respondents were the owner, the cashiers, and a number of potential customers. The testing and rating were done smoothly, and the entire process was discussed very well. Most of them rated our system 4.5 or “Excellent”.

### **Web Usability**

Web usability of a website are broad goals of usability and presentation of information and choices in a clear and concise way.

To assess the acceptability of the online system, a web usability survey was performed. Based on the results of the survey, the respondents gave an excellent rating with a mean value of 4.5. which indicates that the application is very well relative to the web usability standard. This further means the application has control, good language and comprehensive content with provision for online help and user guides, consistent in the use of terminologies, good communication relative to errors, and has good architecture visual clarity.

Table 21  
Web Usability Assessment Result

| <b>Web Usability Criteria</b> |                                                                              | <b>Weighted Mean</b> | <b>Interpretation</b> |
|-------------------------------|------------------------------------------------------------------------------|----------------------|-----------------------|
| <b>I. Navigation</b>          |                                                                              |                      |                       |
| 1.1                           | Current location within site in shown clearly                                | 4.6                  | Excellent             |
| 1.2                           | Link to the site’s main page is clearly identified                           | 4.4                  | Excellent             |
| 1.3                           | Major/important parts of the site are directly accessible from the main page | 4.4                  | Excellent             |
| 1.4                           | Easy to use Search function is provided as needed                            | 4.6                  | Excellent             |
| 1.5                           | Site accommodates novice to expert users                                     | 4.3                  | Excellent             |
| <b>Average</b>                |                                                                              | <b>4.5</b>           | <b>Excellent</b>      |

## II. Functionality

|                |                                                            |            |                  |
|----------------|------------------------------------------------------------|------------|------------------|
| 2.1            | Functions are clearly labelled                             | 4.8        | Excellent        |
| 2.2            | Essential functions are available without leaving the site | 4.5        | Excellent        |
| 2.3            | Plugins are used if they add value only                    | 4.3        | Excellent        |
| <b>Average</b> |                                                            | <b>4.5</b> | <b>Excellent</b> |

## III. User Control

|                |                                                          |            |                  |
|----------------|----------------------------------------------------------|------------|------------------|
| 3.1            | Site reflects the user's work flow                       | 4.5        | Excellent        |
| 3.2            | User can cancel any operation                            | 4.5        | Excellent        |
| 3.3            | Clear exit point is provided on every page               | 4.3        | Excellent        |
| 3.4            | Per page loads moderately to accommodate slow connection | 4.5        | Excellent        |
| 3.5            | Currently used browser is supported                      | 4.6        | Excellent        |
| <b>Average</b> |                                                          | <b>4.5</b> | <b>Excellent</b> |

## IV. Language and Content

|                |                                                                                                    |            |                  |
|----------------|----------------------------------------------------------------------------------------------------|------------|------------------|
| 4.1            | Important information and task are given prominence                                                | 4.8        | Excellent        |
| 4.2            | Information for low relevance is rarely used<br>Information is not included                        | 4.3        | Excellent        |
| 4.3            | Related information or tasks are grouped on the same page or menu in the same area within the page | 4.3        | Excellent        |
| 4.4            | Language is simple without jargon                                                                  | 4.6        | Excellent        |
| 4.5            | Paragraph are briefs                                                                               | 4.5        | Excellent        |
| 4.6            | Links are concise, expressive and visible not buried in the fed.                                   | 4.4        | Excellent        |
| 4.7            | Terms are defined.                                                                                 | 4.5        | Excellent        |
| <b>Average</b> |                                                                                                    | <b>4.5</b> | <b>Excellent</b> |

## V. Online Help and User Guides

|                |                                                                       |            |                  |
|----------------|-----------------------------------------------------------------------|------------|------------------|
| 5.1            | It is always clear what is happening on the site – visual hints, etc. | 4.7        | Excellent        |
| 5.2            | User can receive email feedback if necessary                          | 4.5        | Excellent        |
| 5.3            | Confirmation screen is provided for form submittal                    | 4.2        | Very Good        |
| 5.4            | All system feedback us timely                                         | 4.5        | Excellent        |
| 5.5            | Users are informed if a plugin or browser version is required         | 4.5        | Excellent        |
| 5.6            | Each page includes a "last updated" date                              | 4.4        | Excellent        |
| <b>Average</b> |                                                                       | <b>4.5</b> | <b>Excellent</b> |

## VI. Consistency

|     |                                                                  |     |           |
|-----|------------------------------------------------------------------|-----|-----------|
| 6.1 | The same word or phrase is used consistently to describe an item | 4.7 | Excellent |
| 6.2 | The link reflects the title of the page to which it refers       | 4.6 | Excellent |

|                                               |                                                                                    |            |                  |
|-----------------------------------------------|------------------------------------------------------------------------------------|------------|------------------|
| 6.3                                           | A browser page title is meaningful and reflects main page heading                  | 4.3        | Excellent        |
| <b>Average</b>                                |                                                                                    | <b>4.5</b> | <b>Excellent</b> |
| <b>VII. Error Prevention and Correction</b>   |                                                                                    |            |                  |
| 7.1                                           | User can rely on the recognition, not memory, for successful use of the site       | 4.6        | Excellent        |
| 7.2                                           | Site tolerates a reasonable variety of user actions                                | 4.4        | Excellent        |
| 7.3                                           | Site provides concise instructions for the user actions.<br>Including entry formal | 4.6        | Excellent        |
| 7.4                                           | Error message is visible, not hidden                                               | 4.6        | Excellent        |
| 7.5                                           | Error message is in plain language                                                 | 4.6        | Excellent        |
| 7.6                                           | Error message describe the action to remedy a Problems                             | 4.4        | Excellent        |
| 7.7                                           | Error message provides a clear exit point                                          | 4.4        | Excellent        |
| <b>Average</b>                                |                                                                                    | <b>4.5</b> | <b>Excellent</b> |
| <b>VIII. Architectural and Visual Clarity</b> |                                                                                    |            |                  |
| 8.1                                           | Site is organized from the user's perspective                                      | 4.8        | Excellent        |
| 8.2                                           | Site is easily scanned able for organization and meanings                          | 4.6        | Excellent        |
| 8.3                                           | Site design and layout is redundant only when required for user productivity       | 4.4        | Excellent        |
| 8.4                                           | While space is sufficient; the page is not too dense                               | 4.7        | Excellent        |
| 8.5                                           | Unnecessary animation is avoided                                                   | 4.7        | Excellent        |
| 8.6                                           | Colors used for visited and unvisited links are easily seen                        | 4.4        | Excellent        |
| 8.7                                           | Bold and italic text is used sparingly                                             | 4.2        | Very Good        |
| <b>Average</b>                                |                                                                                    | <b>4.5</b> | <b>Excellent</b> |
| <b>AVERAGE WEIGHTED MEAN</b>                  |                                                                                    | <b>4.5</b> | <b>Excellent</b> |

Adopted from [Massachusetts Institute of Technology \(1995\)](#).

### System Usability

The system usability test was carried out to ascertain the level of system acceptance perceived by the target users. According to the survey result, respondents gave an overall grade 5.82 with the interpretation "Strongly Agree". The outcome typically implies that the system can be used to handle customer's order. Specifically, the technology met the respondents' expectations in terms of

function and capability. Furthermore, the material is organized in the system, the content is extensive, with a nice user interface and convenience of use.

Table 22  
System Usability Assessment Result

| System Usability Criteria |                                                                                                                        | Weighted Mean | Interpretation        |
|---------------------------|------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------|
| 1                         | Overall, I am satisfied with how easy it is to use this system.                                                        | 6.47          | Strongly Agree        |
| 2                         | It was simple to use this system.                                                                                      | 6.37          | Agree                 |
| 3                         | I can effectively complete my work using this system.                                                                  | 6.53          | Strongly Agree        |
| 4                         | I am able to complete my work quickly using this system.                                                               | 6.63          | Strongly Agree        |
| 5                         | I am able to efficiently complete my work using this system.                                                           | 6.6           | Strongly Agree        |
| 6                         | I feel comfortable using this system.                                                                                  | 6.4           | Strongly Agree        |
| 7                         | It was easy to learn to use this system.                                                                               | 6.53          | Strongly Agree        |
| 8                         | I believe I became productive quickly using this system.                                                               | 6.47          | Strongly Agree        |
| 9                         | The system gives error messages that clearly tell me how to fix problems.                                              | 6.4           | Strongly Agree        |
| 10                        | Whenever I make a mistake using the system, I recover easily and quickly.                                              | 6.3           | Agree                 |
| 11                        | The information (such as on-line help, on-screen messages and other documentation) provided with this system is clear. | 6.4           | Strongly Agree        |
| 12                        | It is easy to find the information I need.                                                                             | 6.6           | Strongly Agree        |
| 13                        | The information provided with the system is easy to understand.                                                        | 6.57          | Strongly Agree        |
| 14                        | The information is effective in helping me complete my work.                                                           | 6.5           | Strongly Agree        |
| 15                        | The organization of information on the system screens is clear.                                                        | 6.53          | Strongly Agree        |
| 16                        | The organization of information on the system screens is clear.                                                        | 6.53          | Strongly Agree        |
| 17                        | I like using the interface of this system.                                                                             | 6.43          | Strongly Agree        |
| 18                        | This system has all the functions and capabilities I expect it to have.                                                | 6.57          | Strongly Agree        |
| 19                        | Overall, I am satisfied with this system.                                                                              | 6.5           | Strongly Agree        |
| <b>Total Average</b>      |                                                                                                                        | <b>5.82</b>   | <b>Strongly Agree</b> |

Adopted from System Questionnaire by Lewis, J.R (1995)

## **Chapter 3**

### **SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS**

#### **Summary of Findings**

Based on the study of the present system, the researchers found out that the establishment uses manual operations in accepting online orders and generating daily sales reports. The scenario provides certain problem encountered such as redundancy of entry, time-consuming on receiving and fulfilling orders, and generating daily sales report. The identified problems and issues in the management of online orders has led the researchers to come up with a solution which secures the management of online orders and timely generation of tabular reports. As such, there is a need for online ordering for effective business strategy and to prevent conflicts in ordering as well as the availability of tabular reports.

Based on the problem encountered, the manager/owner needs a new strategy to improve their manual processes in a form of online-based method that will provide an accurate, fast and easy way of accommodating orders, secure storing of data and information in the database to be utilized for effective and efficient data management. To solve the identified problem, the researchers designed and developed the Basak Bistro Online Food Ordering System.

The developed Online Food Ordering System fits the management's needs for the institution. Based on the needs identified, the Basak Bistro Online Food Ordering System, Poblacion Norte, Batuan, Bohol was developed with the following modules: administration, online mechanism, online ordering, acquisition, cataloguing, and reports. The developed system was tested and evaluated using

the web usability questionnaire adopted from MIT information services and technology to the target respondents. To rate the developed system according to its usability, the web usability questionnaire was used. Based from the results of the evaluation, the respondents or the users had the rate of 4.5 or an “Excellent” rating to the system indicating the achievements of individuals’ expectations particularly on the features such as ease of use, visual clarity, language and its application, in general.

### **Conclusions**

Based on the gathered information on the operations of the Basak Bistro Online Food Ordering System, Poblacion Norte, Batuan, Bohol, the establishment adopts the manual processes that may result to related problems which can be resolved through computerization. The evaluation of the existing operation, particularly on order management, computerization is possible and achievable.

Based on the evaluation in Basak Bistro Online Food Ordering System, Poblacion Norte, Batuan, Bohol, the usability and features of the developed system met the needs of the client. In addition, putting into consideration the economic performance evaluation, adoption of the developed system is reasonable and justifiable.

## **Recommendations**

After reviewing the findings and conclusion of the study, the following are recommended:

1. The management should implement the developed Basak Bistro Online Food Ordering System, Poblacion Norte, Batuan, Bohol is highly recommended and should be implemented for the individual's expectations on the features.
2. The management should do an official launching should be done on the developed Basak Bistro Online Food Ordering System for the awareness of its availability; conduct a system training to the primary users for them to be familiarized and be oriented with the new system.
3. The management should purchase a domain and web hosting server, to increase the dynamic features that may incorporate in the system especially the amount of data storage; regular system maintenance must be performed to ensure the security of records and the reliability of the system.

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# APPENDICES

## APPENDIX A

### Interview Guide Questions

#### Owner

1. What are the current processes involved in the ordering in Basak Bistro?
2. What are the problems encountered by the owner of Basak Bistro?
3. What is the level of system acceptability as perceived by the target users?
4. How are the transactions being completed?
5. In what ways a customer can order?
6. Who are the persons responsible for processing the order?
7. Who are the persons involved in the processes and transactions of the restaurant?
8. What can be offered to improve the performance of Basak Bistro's services?

#### Staff

1. What are the records involved in the restaurant?
2. Which towns are covered in the door-to-door delivery and how do they determine the appropriate delivery charge?
3. What is the daily average of customers who order online?
4. How long does it usually take to deliver the customers' orders and are they able to track their orders?
5. What is the commonly used payment method?
6. What is their opening and closing time?

## Letter of Intent



Republic of the Philippines  
Bohol Island State University  
Bilar Campus  
Zamora, Bilar, Bohol



March 29, 2022

**LIRA MAE PARAGUYA**

Owner  
Basak Bistro  
Poblacion Norte, Batuan, Bohol

Ma'am:

Good day!

We, the Senior Students of Bachelor of Science in Computer Science of Bohol Island State University – Bilar Campus, are to conduct a system development project (thesis) as a requirement for graduation.

In this regard, we would like to ask your good office to grant us permission to conduct a system study (thesis) based on the Online Ordering System of your establishment as basis for our proposed automation. This study would include an interview, observation of transactions and review of documents significant for the study and development of the system. We anticipate having an implementation testing (bench marking) of the system developed as part of the usability testing.

We assure you that we shall honor secrecy and privacy to all data and information we shall be handling as we go along with our study. Your approval will be a great help to the success of our study.

We anticipate your favorable response regarding this matter.

Thank you very much and more power!

Respectfully yours,

  
**HALETTE J. BANDONG**

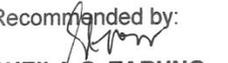
  
**SHELA MAE P. POLINAR**

  
**JONEBELLE L. ESPINA**  
Researchers

Noted:

  
**SHEILA G. TABUNO**  
Subject Instructor

Recommended by:

  
**SHEILA G. TABUNO**  
Chairperson, DCoS

  
**LEONIDA P. REVILLA**  
Thesis Adviser

Endorsed by:

  
**ARLEN B. GUDMALIN, PhD**  
Dean, CTAS

Approved by:

  
**LIRA MAE PARAGUYA**  
Owner, Basak Bistro

## Letter of Implementation



Republic of the Philippines  
Bohol Island State University  
Bilar Campus  
Zamora, Bilar, Bohol



May 30, 2022

**LIRA MAE PARAGUYA**

Owner  
Basak Bistro  
Poblacion Norte, Batuan, Bohol

Ma'am:

Good day!

It is our pleasure to inform you that the system "Basak Bistro Online Food Ordering System, Poblacion Norte, Batuan, Bohol" is now in its final phase. With this, we would like to conduct benchmarking activities as part of the implementation.

It will be conducted on May 30, 2022 at exactly 1:00 PM to 4:00 PM at Basak Bistro, Poblacion Norte, Batuan, Bohol. This activity will allow you to assess our developed system and give feedback, as well.

But this time, we would like to express our gratitude for allowing us to conduct our thesis study. We are hoping for future collaborations with you, our dear client.

May the good Lord continually bless you and your business.

Thank you very much and more power!

Respectfully yours,

  
**HALETTE J. BANDONG**

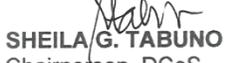
  
**SHEILA MAE P. POLINAR**

  
**JONEBELLE L. ESPINA**  
Researchers

Noted:

  
**SHEILA G. TABUNO**  
Subject Instructor

Recommended by:

  
**SHEILA G. TABUNO**  
Chairperson, DCoS

  
**LEONIDA P. REVILLA**  
Thesis Adviser

Endorsed by:

  
**ARLEN B. GUDMALIN, PhD**  
Dean, CTAS

Approved by:

  
**LIRA MAE PARAGUYA**  
Owner, Basak Bistro

## Letter of Questionnaire Distribution and Implementation

Republic of the Philippines  
Bohol Island State University  
Bilar Campus  
Zamora, Bilar, Bohol

May 30, 2022

Dear Respondents,

Greetings!

We, the system researchers of the new automated system, wherein we integrated computer applications in the basic processes of the business/establishment, had come up with the final phase of our project development which is the testing and implementation. We have put into operation the developed system and we want you to take part in the testing process.

We would like to get your views and opinion on the developed system; thus, this survey will be conducted. We wish to know your feedback as we work for the improvement of the system. It is rightfully needed to hear your side since it is you who's going to be using the developed system. Your input would be very valuable.

We really would appreciate it if you would take the time and complete the questionnaire. The data that will be gathered shall be used for rating statistics in our developed system. If there are items you are confused with, feel free to ask and we would gladly assist you.

As we end this project, we wish to convey our heartfelt gratitude to your good establishment for allowing us to conduct the study; to all the people who helped us throughout this journey; and of course, to you, our dear clients/end users/customers, who had inspired us to dream greater than what was conceivable by the mind. Thank you so much!

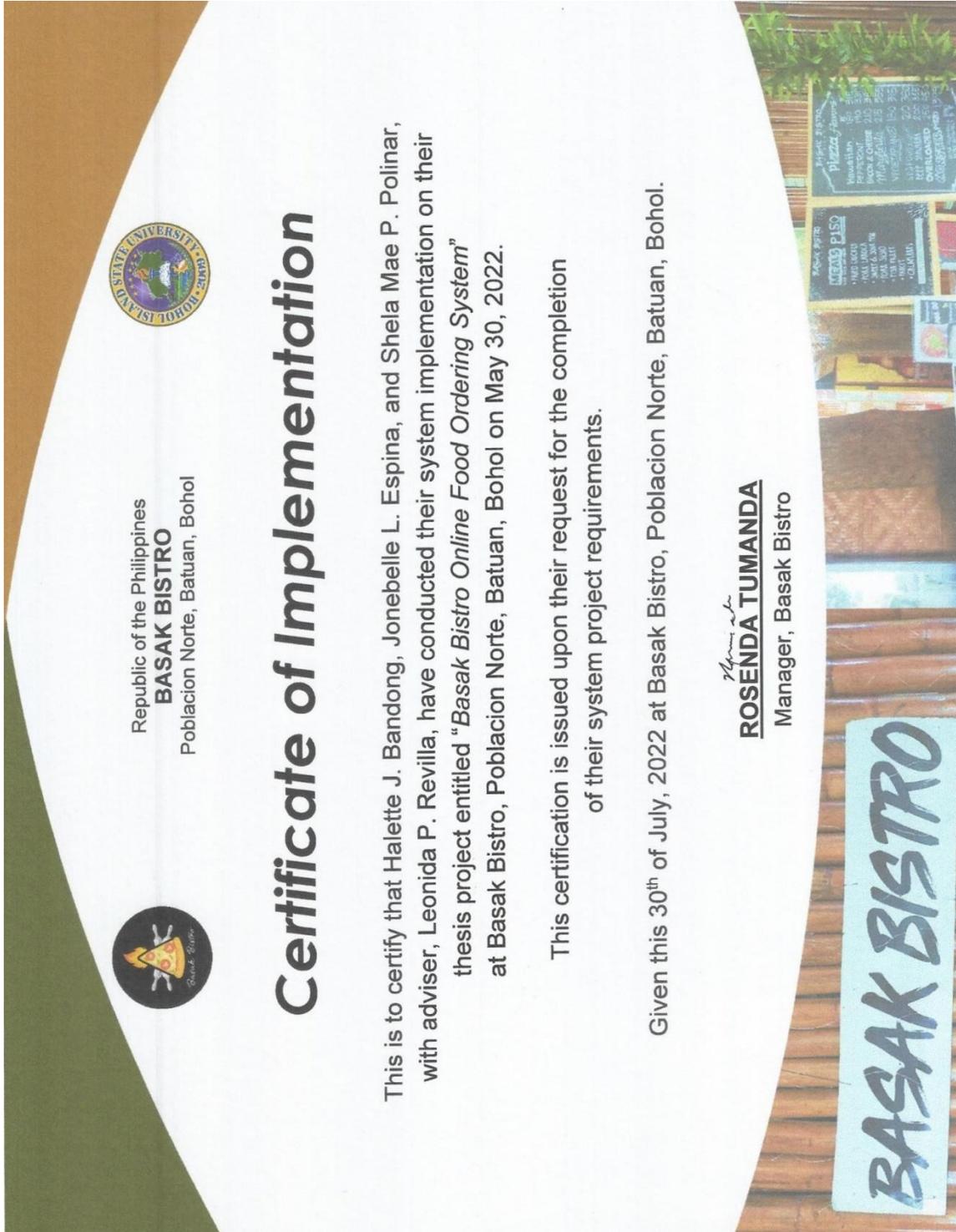
Together let us build a better world for everyone.

Good day!

Researchers

## Certificate of Implementation

(July 30, 2022 at Basak Bistro, Poblacion Norte, Batuan, Bohol.  
Handed over by Mrs. Rosenda Tumanda, Basak Bistro Manager)



### Certificate of Recognition

(During the Student Research Congress 2022 at Farmer's Training Center, BISU-Bilar Campus)



Republic of the Philippines  
**BOHOL ISLAND STATE UNIVERSITY - BILAR**  
 Zamora, Bilar, Bohol, Philippines

RESEARCH AND EXTENSION DEVELOPMENT OFFICE (RDE)

## CERTIFICATE OF RECOGNITION

is awarded to

**Halette J. BAndong, Jonebelle L. Espina, Shela Mae P. Polinar and Leonida Revilla**

for having presented a paper entitled "*Basak Bistrot Online Food Ordering System Pobocation Norte, Batuan Bohol*" under the Computer Science Strand during the Student Research Congress 2022 field last July 20-21, 2022 at Farmers Training Center, BISU-Bilar Campus, Zamora, Bilar, Bohol

Given this 21<sup>st</sup> day of July 2022 at Farmers Training Center, BISU-Bilar Campus, Zamora, Bilar, Bohol, Philippines.

*Leah*  
**LEAH WILFREDA E. PILONGO, PHD**  
 Chairwoman, Panel of Evaluators

*Alma*  
**ALMA VILMA S. PAELMAO, MAEd**  
 Director, RDE

*Marietta*  
**MARIETTA C. MACALOLOT, PHD**  
 Campus Director

## APPENDIX B

### Web Usability Questionnaire

#### Rating Scale

5 - Excellent (no problem)

4 - Very Good (minor inconsistencies, aesthetic issues)

3 - Good (non-critical, cause moderate confusion or irritation)

2 - Fair (a serious problem that needs high priority fix, user can make a significant error)

1 - Poor (with a severe problem)

| Web Usability Criteria          |                                                                                                    | 5 | 4 | 3 | 2 | 1 | N/A |
|---------------------------------|----------------------------------------------------------------------------------------------------|---|---|---|---|---|-----|
| <b>I. Navigation</b>            |                                                                                                    |   |   |   |   |   |     |
| 1.1                             | Current location within site is shown clearly                                                      |   |   |   |   |   |     |
| 1.2                             | Link to the site's main page is clearly identified                                                 |   |   |   |   |   |     |
| 1.3                             | Major/important parts of the site are directly accessible from the main page                       |   |   |   |   |   |     |
| 1.4                             | Easy to use Search function is provided as needed                                                  |   |   |   |   |   |     |
| 1.5                             | Site accommodates novice to expert users                                                           |   |   |   |   |   |     |
| <b>II. Functionality</b>        |                                                                                                    |   |   |   |   |   |     |
| 2.1                             | Functions are clearly labelled                                                                     |   |   |   |   |   |     |
| 2.2                             | Essential functions are available without leaving the site                                         |   |   |   |   |   |     |
| 2.3                             | Plugins are used if they add value only                                                            |   |   |   |   |   |     |
| <b>III. User Control</b>        |                                                                                                    |   |   |   |   |   |     |
| 3.1                             | Site reflects the user's work flow                                                                 |   |   |   |   |   |     |
| 3.2                             | User can cancel any operation                                                                      |   |   |   |   |   |     |
| 3.3                             | Clear exit point is provided on every page                                                         |   |   |   |   |   |     |
| 3.4                             | Per page loads moderately to accommodate slow connection                                           |   |   |   |   |   |     |
| 3.5                             | Currently used browser is supported                                                                |   |   |   |   |   |     |
| <b>IV. Language and Content</b> |                                                                                                    |   |   |   |   |   |     |
| 4.1                             | Important information and task are given prominence                                                |   |   |   |   |   |     |
| 4.2                             | Information for low relevance is rarely used<br>Information is not included                        |   |   |   |   |   |     |
| 4.3                             | Related information or tasks are grouped on the same page or menu in the same area within the page |   |   |   |   |   |     |
| 4.4                             | Language is simple without jargon                                                                  |   |   |   |   |   |     |
| 4.5                             | Paragraph are briefs                                                                               |   |   |   |   |   |     |
| 4.6                             | Links are concise, expressive and visible not buried in the fed.                                   |   |   |   |   |   |     |
| 4.7                             | Terms are defined.                                                                                 |   |   |   |   |   |     |

### V. Online Help and User Guides

|     |                                                                       |  |  |  |  |  |  |
|-----|-----------------------------------------------------------------------|--|--|--|--|--|--|
| 5.1 | It is always clear what is happening on the site – visual hints, etc. |  |  |  |  |  |  |
| 5.2 | User can receive email feedback if necessary                          |  |  |  |  |  |  |
| 5.3 | Confirmation screen is provided for form submittal                    |  |  |  |  |  |  |
| 5.4 | All system feedback us timely                                         |  |  |  |  |  |  |
| 5.5 | Users are informed if a plugin or browser version is required         |  |  |  |  |  |  |
| 5.6 | Each page includes a “last updated” date                              |  |  |  |  |  |  |

### VI. Consistency

|     |                                                                   |  |  |  |  |  |  |
|-----|-------------------------------------------------------------------|--|--|--|--|--|--|
| 6.1 | The same word or phrase is used consistently to describe an item  |  |  |  |  |  |  |
| 6.2 | The link reflects the title of the page tow which it refers       |  |  |  |  |  |  |
| 6.3 | A browser page title is meaningful and reflects main page heading |  |  |  |  |  |  |

### VII. Error Prevention and Correction

|     |                                                                                 |  |  |  |  |  |  |
|-----|---------------------------------------------------------------------------------|--|--|--|--|--|--|
| 7.1 | User can rely on the recognition, not memory, for successful use of the site    |  |  |  |  |  |  |
| 7.2 | Site tolerates a reasonable variety of user actions                             |  |  |  |  |  |  |
| 7.3 | Site provides concise instructions for the user actions. Including entry formal |  |  |  |  |  |  |
| 7.4 | Error message is visible, not hidden                                            |  |  |  |  |  |  |
| 7.5 | Error message is in plain language                                              |  |  |  |  |  |  |
| 7.6 | Error message describe the action to remedy a Problems                          |  |  |  |  |  |  |
| 7.7 | Error message provides a clear exit point                                       |  |  |  |  |  |  |

### VIII. Architectural and Visual Clarity

|     |                                                                              |  |  |  |  |  |  |
|-----|------------------------------------------------------------------------------|--|--|--|--|--|--|
| 8.1 | Site is organized from the user’s perspective                                |  |  |  |  |  |  |
| 8.2 | Site is easily scanned able for organization and meanings                    |  |  |  |  |  |  |
| 8.3 | Site design and layout is redundant only when required for user productivity |  |  |  |  |  |  |
| 8.4 | While space is sufficient; the page is not too dense                         |  |  |  |  |  |  |
| 8.5 | Unnecessary animation is avoided                                             |  |  |  |  |  |  |
| 8.6 | Colors used for visited and unvisited links are easily seen                  |  |  |  |  |  |  |
| 8.7 | Bold and italic text is used sparingly                                       |  |  |  |  |  |  |

## SYSTEM USABILITY QUESTIONNAIRE

Direction:

- Please rate the usability questionnaire
- Try to respond to all of the items
- For items that are not applicable, use N/A
- Make sure these fields are filled in

Rating Scale:

- 7 - Strongly Agree
- 6 - Agree
- 5 - Tend to Agree
- 4 - Neither Agree or Disagree
- 3 - Tend to disagree
- 2 - Disagree
- 1 - Strongly Disagree

|    | <b>System Usability Criteria</b>                                                                                       | <b>Weighted Mean</b> | <b>Interpretation</b> |
|----|------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------|
| 1  | Overall, I am satisfied with how easy it is to use this system.                                                        |                      |                       |
| 2  | It was simple to use this system.                                                                                      |                      |                       |
| 3  | I can effectively complete my work using this system.                                                                  |                      |                       |
| 4  | I am able to complete my work quickly using this system.                                                               |                      |                       |
| 5  | I am able to efficiently complete my work using this system.                                                           |                      |                       |
| 6  | I feel comfortable using this system.                                                                                  |                      |                       |
| 7  | It was easy to learn to use this system.                                                                               |                      |                       |
| 8  | I believe I became productive quickly using this system.                                                               |                      |                       |
| 9  | The system gives error messages that clearly tell me how to fix problems.                                              |                      |                       |
| 10 | Whenever I make a mistake using the system, I recover easily and quickly.                                              |                      |                       |
| 11 | The information (such as on-line help, on-screen messages and other documentation) provided with this system is clear. |                      |                       |
| 12 | It is easy to find the information I need.                                                                             |                      |                       |
| 13 | The information provided with the system is easy to understand.                                                        |                      |                       |
| 14 | The information is effective in helping me complete my work.                                                           |                      |                       |

|               |                                                                         |  |  |
|---------------|-------------------------------------------------------------------------|--|--|
| 15            | The organization of information on the system screens is clear.         |  |  |
| 16            | The organization of information on the system screens is clear.         |  |  |
| 17            | I like using the interface of this system.                              |  |  |
| 18            | This system has all the functions and capabilities I expect it to have. |  |  |
| 19            | Overall, I am satisfied with this system.                               |  |  |
| Total Average |                                                                         |  |  |

Based on Lewis J. R. (1995) IBM Computer Usability Satisfaction Questionnaires: Psychometric Evaluation and Instructions for Use

## **APPENDIX C**

### **User's Manual**

#### **Main Page**

Accessing the Website

Steps: Type URL "BasakBistro"

#### **Customer Side**

Customer Login

Steps:

1. Click "Login" tab.
2. Find "Create New Account" section and fill in required fields for registration.
3. Click "Sign Up".
4. Confirmation "Successfully Registered" will appear.
5. At the left side, if you already have an account, input email address and password.
6. Click "Login"
7. Confirmation "Successfully Logged In" will appear.

Edit Customer Account

Steps:

1. Click "My Account" tab.
2. Fill in Personal Info section to update account.
3. Fill in Change Password section to change password.
4. Fill in Shipping and Billing Address section to be able to check out items from your cart.
5. Confirmation "Successfully Updated" will appear.

Browsing the Menu and Placing an Order

Steps:

1. Browse the Homepage/Categories and input keyword in the search bar to find desired food items.

2. Click on the product image to view product information.
3. Click “Add to Cart” button.
4. You will be redirected to the cart module.
5. Make changes to the items on your cart.
6. Update or Remove items from your cart by clicking the Quantity.
7. Click “Proceed to Checkout” button.
8. Choose desired payment method.
9. Click “Submit” button.
10. Confirmation “Order Placed” will appear.

### Tracking Orders

#### Steps:

1. Click “Order History” tab.
2. Click “Track” button on the far-right corner of the table.
3. View order status.

### Other Tabs on the Website

#### Steps:

1. Click “About Us” tab to get to know Basak Bistro.
2. Click “Terms & Conditions” tab to know ordering agreements.

### **Administrator Side**

#### Login

#### Steps:

1. Type URL “BasakBistro/Admin”.
2. Input Username and Password.
3. Click “Login”.
4. Confirmation “Administrator Successfully Logged In”

#### Cashiers

#### Adding Cashiers

#### Steps:

1. Click "Cashier" tab.
2. Click "Add" button.
3. Input the information needed in the Cashier's information form.
4. Click "Add" button.
5. Confirmation "Cashier Successfully Registered" will appear.

#### Updating of Cashier Accounts

##### Steps:

1. Click "Cashier" tab.
2. Click the "Delete" button.
3. Update the information needed in the Cashier's form.
4. Click "Update" button.
5. Confirmation "Employee Successfully Updated" will appear.

#### Deleting Cashier Accounts

##### Steps:

1. Click "Cashier" tab.
2. Click the "Delete" button.
3. Confirmation "Cashier Successfully Deleted" will appear.

#### Management

##### Adding New Items in the Menu

##### Steps:

1. Click "Create Category" tab.
2. Input information needed in the Category form.
3. Click "Subcategory" tab.
4. Click "Insert Product" tab.
5. Input information needed in the Insert Product form.
6. Input the information needed in the Employee's information form.
7. Click "Insert".
8. Confirmation "Product Successfully Added".

## Manage Products

### Update Products

#### Steps:

1. Click “Manage Products” tab.
2. Click the pencil icon.
3. Update the information needed in the Product’s information form.
4. Click “Update”.
5. Confirmation “Product Successfully Updated” will appear.

### Delete Products

#### Steps:

1. Click “Manage Products” tab.
2. Click “X” icon.
3. Confirmation “Product Successfully Deleted” will appear.

## Category

### Add Category/Subcategory

#### Steps:

1. Click “Category” tab.
2. Input the information needed in the Category form.
3. Click “Add Category”.
4. Confirmation “Category Successfully Registered” will appear.
5. Input the information needed in the Subcategory form.
6. Confirmation “Subcategory Successfully Registered” will appear.

### Update Category/Subcategory

#### Steps:

1. Click “Category” or “Subcategory” tab.
2. Click the pencil icon.
3. Update the information needed in the Category/Subcategory form.
4. Click “Update Category/Subcategory”.

5. Confirmation “Category/Subcategory Successfully Updated” will appear.

#### Delete Category/Subcategory

##### Steps:

1. Click “Category” or “Subcategory” tab.
2. Click the “X” icon.
3. Confirmation “Category/Subcategory Successfully Deleted” will appear.

#### Delete Customer Account

##### Steps:

1. Click “View Users” tab.
2. Click the trash icon.
3. Confirmation “User Successfully Deleted” will appear.

#### Orders

##### Pending/In Process/Delivered Orders

##### Steps:

1. Click “Order Management” tab.
2. Click “Pending Orders/In Process/Delivered” tab.
3. Click the pencil icon.
4. Update order status and tracking status.
5. Click “Update” button.
6. Confirmation “Status Successfully Updated” will appear.

##### Declined Orders

##### Steps:

1. Click “Order Management” tab.
2. Click “Pending Orders” tab.
3. Click the pencil icon.
4. Click “Decline Order” on the dropdown Status bar.
5. Click “Update” button.
6. Confirmation “Order Successfully Declined” will appear.

## Cashier Side

Login

Steps:

1. Type URL "BasakBistro/Admin"
2. Input Username and Password.
3. Click "Login".
4. Confirmation "Cashier Successfully Logged In".

Management

Adding New Items in the Menu

Steps:

1. Click "Create Category" tab.
2. Input information needed in the Category form.
3. Click "Subcategory" tab.
4. Input information needed in the Subcategory form.
5. Click "Insert Product" tab.
6. Input information needed in the Insert Product form.
7. Input the information needed in the Employee's information form.
8. Click "Insert".
9. Confirmation "Product Successfully Added".

Manage Products

Update Products

Steps:

1. Click "Manage Products" tab.
2. Click the pencil icon.
3. Update the information needed in the Product's information form.
4. Click "Update".
5. Confirmation "Product Successfully Updated" will appear.

Delete Products

Steps:

1. Click “Manage Products” tab.
2. Click “X” icon.
3. Confirmation “Product Successfully Deleted” will appear.

## Category

### Add Category/Subcategory

#### Steps:

1. Click “Category” tab.
2. Input the information needed in the Category form.
3. Click “Add Category”.
4. Confirmation “Category Successfully Registered” will appear.
5. Click “Subcategory” tab.
6. Input the information needed in the Subcategory form.
7. Click “Add Subcategory”.
8. Confirmation “Subcategory Successfully Registered” will appear.

### Update Category/Subcategory

#### Steps:

1. Click “Category” or “Subcategory” tab.
2. Click the pencil icon.
3. Update the information needed in the Category/Subcategory form.
4. Click “Update Category/Subcategory”.
5. Confirmation “Category/Subcategory Successfully Updated” will appear.

### Delete Category/Subcategory

#### Steps:

1. Click “Category” or “Subcategory” tab.
2. Click the “X” icon.
3. Confirmation “Category/Subcategory Successfully Deleted” will appear.

### Delete Customer Account

#### Steps:

1. Click "View Users" tab.
2. Click the trash icon.
3. Confirmation "User Successfully Deleted" will appear.

## Orders

### Pending/In Process/Delivered Orders

#### Steps:

1. Click "Order Management" tab.
2. Click "Pending Orders/In Process/Delivered" tab.
3. Click the pencil icon.
4. Update order status and tracking status.
5. Click "Update" button.
6. Confirmation "Status Successfully Updated" will appear.

### Declined Orders

#### Steps:

1. Click "Order Management" tab.
2. Click "Pending Orders" tab.
3. Click the pencil icon.
4. Click "Decline Order" on the dropdown Status bar.
5. Click "Update" button.
6. Confirmation "Order Successfully Declined" will appear.

## APPENDIX D

### Source Code

#### Customer Side

##### config.php

```
<?php
$mysqli_hostname = "localhost";
$mysqli_user = "root";
$mysqli_password = "";
$mysqli_database = "db_shopping";
$conn = mysqli_connect($mysqli_hostname, $mysqli_user, $mysqli_password) or die("Could not connect
database");
mysqli_select_db($conn, $mysqli_database) or die("Could not select database");
?>
```

##### index.php

```
<?php
session_start();
error_reporting(0);
include('includes/config.php');
if(isset($_GET['action']) && $_GET['action']=="add"){
$id=intval($_GET['id']);
if(isset($_SESSION['cart'][$id])){
$_SESSION['cart'][$id]['quantity']++;
}else{
$sql_p="SELECT * FROM products WHERE id={$id}";
$query_p=mysqli_query($conn,$sql_p);
if(mysqli_num_rows($query_p)!=0){
$row_p=mysqli_fetch_array($query_p);
if (isset($_SESSION['cart_code'])) {
if (empty($_SESSION['cart_code'])) {
$_SESSION['cart_code'] = time() . mt_rand(1000, 100000).mt_rand(1000, 999999);
}
} else {
$_SESSION['cart_code'] = time() . mt_rand(1000, 100000).mt_rand(1000, 999999);
}
$_SESSION['cart'][$row_p['id']]=array("quantity" => 1, "price" => $row_p['productPrice']);
header('location:index.php');
}else{
$message="Product ID is invalid";
}}}
?>
```

##### login.php

```
<?php
session_start();
error_reporting(0);
include('includes/config.php');
// Code user Registration
if(isset($_POST['submit']))
{
$name=$_POST['fullname'];
$email=$_POST['emailid'];
$contactno=$_POST['contactno'];
$password=md5($_POST['password']);
```

```

$query=mysqli_query($conn,"insert into users(name,email,contactno,password)
values('$name','$email','$contactno','$password');
if($query)
{
echo "<script>alert('You have successfully registered.');

```

### category.php

```

<?php
session_start();
error_reporting(0);
include('includes/config.php');
$cid=intval($_GET['cid']);
if(isset($_GET['action']) && $_GET['action']=="add"){
$id=intval($_GET['id']);
if (isset($_SESSION['cart_code'])) {
if (empty($_SESSION['cart_code'])) {
$_SESSION['cart_code'] = time() . mt_rand(1000, 100000).mt_rand(1000, 999999);
}
} else {
$_SESSION['cart_code'] = time() . mt_rand(1000, 100000).mt_rand(1000, 999999);
}
}

```

```

if(isset($_SESSION['cart'][$id])){
$_SESSION['cart'][$id]['quantity']++;
}else{
$sql_p="SELECT * FROM products WHERE id={$id}";
$query_p=mysqli_query($conn,$sql_p);
if(mysqli_num_rows($query_p)!=0){
$row_p=mysqli_fetch_array($query_p);
$_SESSION['cart'][$row_p['id']]=array("quantity" => 1, "price" => $row_p['productPrice']);
header('location:my-cart.php');
}else{
$message="Product ID is invalid";
}
}
}
// COde for Wishlist
if(isset($_GET['pid']) && $_GET['action']=="wishlist" ){
if(strlen($_SESSION['login'])==0)
{
header('location:login.php');
}
else
{
mysqli_query($conn,"insert into wishlist(userId,productId) values('".$_SESSION['id']."','".$_GET['pid']."')");
echo "<script>alert('Product aaded in wishlist');</script>";
header('location:my-wishlist.php');
}
}
?>

```

### **my-cart.php**

```

<?php
session_start();
error_reporting(0);
include('includes/config.php');
if(isset($_POST['submit'])){
if(!empty($_SESSION['cart'])){
foreach($_POST['quantity'] as $key => $val){
if($val==0){
unset($_SESSION['cart'][$key]);
}else{
$_SESSION['cart'][$key]['quantity']=$val;
$sql ="SELECT * FROM `tblinventory` WHERE `PRODUCTID` = $key";
$res = mysqli_query($conn,$sql);
$row = mysqli_fetch_assoc($res);
if ($row['REMAINING'] < $_SESSION['cart'][$key]['quantity']) {
# code...
echo '<script>alert("Product is out of stock. The remaining item is '.$row['REMAINING'].' and it will be added
in the cart.")</script>';
$_SESSION['cart'][$key]['quantity']=$row['REMAINING'];
echo '<script>>window.location="my-cart.php"</script>';
}}
echo "<script>alert('Your Cart hasbeen Updated');</script>";
}}
if(isset($_POST['remove_code']))
{
if(!empty($_SESSION['cart'])){
foreach($_POST['remove_code'] as $key){
unset($_SESSION['cart'][$key]);
}
}
echo "<script>alert('Your Cart has been Updated');</script>";
}
}
}

```

```

if(isset($_POST['ordersubmit']))
{
if(strlen($_SESSION['login'])==0)
{
header('location:login.php');
}
else{
$quantity=$_POST['quantity'];
$pdd=$_SESSION['pid'];
$shippingAddress = $_POST['shippingAddress'];
$billingAddress = $_POST['billingAddress'];
$value=array_combine($pdd,$quantity);
$sql = "UPDATE `users` SET `shippingAddress`='{ $shippingAddress}', `billingAddress`='{ $billingAddress}'
WHERE `id`=" .$_SESSION['id'];
mysqli_query($conn,$sql);
foreach($value as $qty=> $val34){
mysqli_query($conn,"insert into orders(cart_code, userId,productId,quantity,orderStatus)
values('".$_SESSION['cart_code']."', '".$_SESSION['id']."', '$qty', '$val34', 'Pending')");
}}}
?>

```

### my-account.php

```

<?php
session_start();
error_reporting(0);
include('includes/config.php');
if(strlen($_SESSION['login'])==0)
{
header('location:index.php');
}
else{
if(isset($_POST['update']))
{
$name=$_POST['name'];
$contactno=$_POST['contactno'];
$query=mysqli_query($conn,"update users set name='$name',contactno='$contactno' where
id='".$_SESSION['id']."'");
if($query)
{
echo "<script>alert('Your info has been updated');</script>";
}
}
date_default_timezone_set('Asia/Kolkata');// change according timezone
$currentTime = date( 'd-m-Y h:i:s A', time ( ) );
if(isset($_POST['submit']))
{
$sql=mysqli_query($conn,"SELECT password FROM users where password='".$_md5($_POST['cpass'])."'
&& id='".$_SESSION['id']."'");
$num=mysqli_fetch_array($sql);
if($num>0)
{
$con=mysqli_query($conn,"update students set password='".$_md5($_POST['newpass'])."',
upadationDate=$currentTime where id='".$_SESSION['id']."'");
echo "<script>alert('Password Changed Successfully !!');</script>";
}
}
else
{
echo "<script>alert('Current Password not match !!');</script>";
}
}
}

```

?>

### order-details.php

```
<?php
session_start();
include('includes/config.php');
$data = [];
if (isset($_POST['submit'])) {
    $oid = mysqli_real_escape_string($conn, $_POST['orderid']);
    $q = mysqli_query($conn, 'select o.cart_code as orderId,o.orderDate, o.paymentMethod, p.productImage1,
    p.productName, sum(o.quantity) as qt, o.productId, p.productPrice from orders as o inner join products as
    p on p.id = o.productId where o.cart_code = "'.$oid.'" group by o.productId');
    print mysqli_error($conn);
    while ($row = mysqli_fetch_assoc($q)) $data[] = $row;
}
?>
```

### order-history.php

```
<?php
session_start();
//error_reporting(0);
include('includes/config.php');
if(strlen($_SESSION['login'])==0)
    {
    header('location:login.php');
    }
else{
// SET GLOBAL sql_mode=(SELECT REPLACE(@@sql_mode,'ONLY_FULL_GROUP_BY','')); use this if
there is an error in joining
$order_q = mysqli_query($conn, "select o.cart_code, o.productId, count(o.productId) as grandTotalItem,
p.productName, p.productPrice from orders as o inner join products as p on p.id = o.productId where
o.userId = '".$_SESSION['id']."' group by o.cart_code order by o.cart_code desc");
$order_list = [];
print mysqli_error($conn);
while ($row1 = mysqli_fetch_assoc($order_q)) {
$order_list[] = $row1;
}
date_default_timezone_set('asia/manila');
if (isset($_GET['cancel'])) {
    $oid = mysqli_real_escape_string($conn, $_GET['cancel']);
    //mysqli_query($conn, 'update orders set orderStatus = "declined" where cart_code = "'.$oid.'" ');
    mysqli_query($conn, 'delete from orders where cart_code = "'.$oid.'"');
    header('location:order-history.php');
    exit;
}
?>
```

### payment-method.php

```
<?php
session_start();
error_reporting(0);
include('includes/config.php');
if(strlen($_SESSION['login'])==0)
    {
    header('location:login.php');
    }
else{
if (isset($_POST['submit'])) {
    $gref = mysqli_real_escape_string($conn, $_POST["gref"]);
```



```

{
mysql_query($conn,"insert into wishlist(userId,productId) values('".$_SESSION['id']."','".$pid)");
echo "<script>alert('Product added in wishlist');</script>";
header('location:my-wishlist.php');
}
}
if(isset($_POST['submit']))
{
$qty=$_POST['quantity'];
$price=$_POST['price'];
$value=$_POST['value'];
$name=$_POST['name'];
$summary=$_POST['summary'];
$review=$_POST['review'];
mysql_query($conn,"insert into productreviews(productId,quality,price,value,name,summary,review)
values('$pid','$qty','$price','$value','$name','$summary','$review)");
}
?>

```

### receipt.php

```

<?php
require_once 'includes/config.php';
$oid = isset($_POST['oid']) ? mysqli_real_escape_string($conn,$_POST['oid']) : "";
$q = mysqli_query($conn, 'select delivery_fee as fee,p.productPrice as
price,p.productName,sum(p.productPrice * o.quantity) as total, sum(o.quantity) as
qt,o.paymentMethod,concat(u.shippingAddress," ", u.shippingState,"", "", u.shippingCity, " ",
u.shippingPincode) as ad,u.contactno,u.email,o.orderDate,u.name,o.receipt_no, o.quantity from orders as o
inner join products as p on p.id = o.productId inner join users as u on u.id = o.userId where o.cart_code =
".$_SESSION['cart_code']."' group by o.productId');
$data = [];
print mysqli_error($conn);
while ($row = mysqli_fetch_assoc($q)) {$data[] = $row;}
if (count($data) == 0) {
print 'No Data!';
exit;
}
$len = count($data);
$grandTotal = 0;
for ($i = 0; $i < $len;$i++) {
$grandTotal += $data[$i]['total'];
}
$isDisplay = true;
?>

```

### search-result.php

```

<?php
session_start();
error_reporting(0);
include('includes/config.php');
$find="%".$_POST['product']."%";
if(isset($_GET['action']) && $_GET['action']=="add"){
if (isset($_SESSION['cart_code'])) {
if (empty($_SESSION['cart_code'])) {
$_SESSION['cart_code'] = time() . mt_rand(1000, 100000).mt_rand(1000, 999999);
}
} else {
$_SESSION['cart_code'] = time() . mt_rand(1000, 100000).mt_rand(1000, 999999);
}
}
$id=intval($_GET['id']);
if(isset($_SESSION['cart'][$id])){

```

```

$_SESSION['cart'][$id]['quantity']++;
}else{
$sql_p="SELECT * FROM products WHERE id={$id}";
$query_p=mysqli_query($conn,$sql_p);
if(mysqli_num_rows($query_p)!=0){
$row_p=mysqli_fetch_array($query_p);
$_SESSION['cart'][$row_p['id']]=array("quantity" => 1, "price" => $row_p['productPrice']);
header('location:my-cart.php');
}else{
$message="Product ID is invalid";
}
}
}
// COde for Wishlist
if(isset($_GET['pid']) && $_GET['action']=="wishlist"){
if(strlen($_SESSION['login'])==0)
{
header('location:login.php');
}
else
{
mysqli_query($conn,"insert into wishlist(userId,productId) values('".$_SESSION['id']."','".$_GET['pid']."')");
echo "<script>alert('Product aaded in wishlist');</script>";
header('location:my-wishlist.php');
}
}
?>

```

### track-order.php

```

<?php
session_start();
include_once 'includes/config.php';
$g_status = [
'Confirmed' => 'Confirming Orders',
'Prepared' => 'Preparing the Orders',
'Dispatched' => 'Dispatching Orders',
'OnTheWay' => 'On The way',
'delivered' => 'Delivered Orders',
'declined' => 'Declined Orders'
];
$oid=$_GET['oid'];
$data = [];
$q = mysqli_query($conn, 'select o.delivery_person, o.delivery_contact, o.incharge,o.delivery_fee as fee,
o.orderStatus, o.orderStatus as stat,o.receipt_no, sum(o.quantity) as qt, p.productName, p.productPrice,
o.orderStatus, o.orderDate from orders as o inner join products as p on p.id = o.productId where
o.cart_code = "'.$oid.'" group by o.productId');
print mysqli_error($conn);
while ($row = mysqli_fetch_assoc($q)) {
$data[] = $row;
}
$data_len = count($data);
$order_status = "";
$order_date = "";
$fee = "";
$delivery_person = "";
$delivery_contact = "";
$incharge = "";
if ($data_len > 0) {
$orderStatus = $data[0]['orderStatus'];
$order_date = $data[0]['orderDate'];
$fee = $data[0]['fee'];
}

```

```

$delivery_person = $data[0]["delivery_person"];
$delivery_contact = $data[0]["delivery_contact"];
$incharge = $data[0]["incharge"];
}
$grandTotal = 0.0;
$order_history = [];
$order_history_q = mysqli_query($conn, 'select * from ordertrackhistory where orderId = "'.$oid.'"');
while ($r = mysqli_fetch_assoc($order_history_q)) {$order_history[] = $r;}
print mysqli_error($conn);
?>

```

## Admin Side

### login.php

```

<?php
session_start();
$_SESSION['errmsg']="";
//error_reporting(0);
if (isset($_SESSION['alogin'])) {
# code...
header("location:dashboard.php");
}
include("include/config.php");
if(isset($_POST['submit']))
{
$username=$_POST['username'];
$password=$_POST['password'];
$ret=mysqli_query($conn,"SELECT * FROM admin WHERE username='$username' and
password='$password'");
$num = mysqli_num_rows($ret);
if($num > 0) {
$data = mysqli_fetch_assoc($r);
$extra="dashboard.php";//
$_SESSION['alogin']=$_POST['username'];
$_SESSION['id']=$data['id'];
$host=$_SERVER['HTTP_HOST'];
$uri=rtrim(dirname($_SERVER['PHP_SELF']),'/\');
$_SESSION['type'] = 'Admin';
header("location:http://$host$uri/$extra");
exit();
} else {
$r = mysqli_query($conn, 'select * from cashier where username = "'.$username.'" and
password="'.$md5($password).'"');
$num = mysqli_num_rows($r);
if ($num > 0) {
$data = mysqli_fetch_assoc($r);
$_SESSION['alogin']=$_POST['username'];
$_SESSION['id']=$data['id'];
$host=$_SERVER['HTTP_HOST'];
$uri=rtrim(dirname($_SERVER['PHP_SELF']),'/\');
$t = [
'user' => $data['username'],
'ip' => $_SERVER['REMOTE_ADDR'],
'browser' => $_SERVER['HTTP_USER_AGENT']
];
$ct = base64_encode(json_encode($t));
mysqli_query($conn, 'INSERT INTO `cashierlog` (`c_id`, `txt`, `login`, `logout`, `status`) VALUES
("'.$data['id'].'", "'.$ct."', "date("Y-m-d h:i:s)")."', "", "Success");');
print_r(mysqli_error($conn));
$_SESSION['type'] = 'Cashier';
$lid = mysqli_insert_id($conn);

```

```

$_SESSION['log_id'] = $lid;
header("location:http://$host$uri/$extra");
exit;
} else {
$extra="index.php";
$host = $_SERVER['HTTP_HOST'];
$uri = rtrim(dirname($_SERVER['PHP_SELF']),'/\');
$_SESSION['errmsg']="Invalid username or password";
header("location:http://$host$uri/$extra");
}
exit();
}
}
?>

```

### dashboard.php

```

<?php
// SET GLOBAL sql_mode=(SELECT REPLACE(@@sql_mode,'ONLY_FULL_GROUP_BY',''));
session_start();
include('include/config.php');
if(strlen($_SESSION['alogin'])==0) {
header('location:index.php');
}
else{
$sql ="SELECT SUM(`quantity`) as 'QTY' FROM `orders` GROUP BY `productId`";
$sql ="SELECT *,SUM(quantity) as 'qty' FROM category c, `products` p, `orders` o WHERE
c.id=p.category AND p.`id`=o.`productId` GROUP BY p.category";
$result = mysqli_query($conn,$sql);
$chart_data="";
print mysqli_error($conn);
while ($row = mysqli_fetch_array($result)) {

    $point = array("label" => $row['categoryName'] , "y" => $row['qty']);
    // array_push($data_points, $point);
    $productname[] = $row['categoryName'] ;
    $orders[] = $row['qty'];
    $dataPoints[] = array("label"=> $row['categoryName'], "y"=> $row['qty']);
}
// echo json_encode($data_points, JSON_NUMERIC_CHECK);
?>

```

### todays-orders.php

```

<?php
session_start();
include('include/config.php');
if(strlen($_SESSION['alogin'])==0)
{
header('location:index.php');
}
else{
date_default_timezone_set('Asia/Kolkata');// change according timezone
$currentTime = date( 'd-m-Y h:i:s A', time () );
?>
<?php
$order_q = mysqli_query($conn, "select sum(p.productPrice * o.quantity) as grandTotal, u.name as fname,
u.email, u.contactno as phone,concat(u.shippingAddress, ', ', u.shippingCity, ', ', u.shippingState) as ship,
o.cart_code, o.productId, count(o.productId) as grandTotalItem, p.productName, p.productPrice from orders
as o inner join products as p on p.id = o.productId inner join users as u on u.id = o.userId where
date(o.orderDate) = current_date group by o.cart_code order by o.cart_code desc");
$order_list = [];

```

```

while ($row1 = mysqli_fetch_assoc($order_q)) {
$order_list[] = $row1;
}
?>

```

### pending-orders.php

```

<?php
session_start();
include('include/config.php');
if(strlen($_SESSION['alogin'])==0)
{
header('location:index.php');
}
else{
date_default_timezone_set('Asia/Kolkata');// change according timezone
$currentTime = date( 'd-m-Y h:i:s A', time () );

?>
<?php
$order_q = mysqli_query($conn, "select sum(p.productPrice * o.quantity) as grandTotal, u.name as fname,
u.email, u.contactno as phone,concat(u.shippingAddress, ', ', u.shippingCity, ', ', u.shippingState) as ship,
o.cart_code, o.productId, count(o.productId) as grandTotalItem, p.productName, p.productPrice from orders
as o inner join products as p on p.id = o.productId inner join users as u on u.id = o.userId where
o.orderStatus = 'Pending' group by o.cart_code order by o.cart_code desc");
$order_list = [];
while ($row1 = mysqli_fetch_assoc($order_q)) {
$order_list[] = $row1;
}
?>

```

### inProcessOrders.php

```

<?php
session_start();
include('include/config.php');
if(strlen($_SESSION['alogin'])==0)
{
header('location:index.php');
}
else{
date_default_timezone_set('Asia/Kolkata');// change according timezone
$currentTime = date( 'd-m-Y h:i:s A', time () );

?>
<?php
$order_q = mysqli_query($conn, "select sum(p.productPrice * o.quantity) as grandTotal, u.name as fname,
u.email, u.contactno as phone,concat(u.shippingAddress, ', ', u.shippingCity, ', ', u.shippingState) as ship,
o.cart_code, o.productId, count(o.productId) as grandTotalItem, p.productName, p.productPrice from orders
as o inner join products as p on p.id = o.productId inner join users as u on u.id = o.userId where
o.orderStatus in('Confirmed', 'Prepared', 'Dispatched', 'OnTheWay') group by o.cart_code order by
o.cart_code desc");
$order_list = [];
while ($row1 = mysqli_fetch_assoc($order_q)) {
$order_list[] = $row1;
}
?>

```

### delivered-orders.php

```

<?php
session_start();
include('include/config.php');

```

```

if(strlen($_SESSION['alogin'])==0)    {
header('location:index.php');
}
else{
date_default_timezone_set('Asia/Kolkata');// change according timezone
$currentTime = date( 'd-m-Y h:i:s A', time ( ) );
?>
<?php
$order_q = mysqli_query($conn, "select sum(p.productPrice * o.quantity) as grandTotal, u.name as fname,
u.email, u.contactno as phone,concat(u.shippingAddress, ', ', u.shippingCity, ', ', u.shippingState) as ship,
o.cart_code, o.productId, count(o.productId) as grandTotalItem, p.productName, p.productPrice from orders
as o inner join products as p on p.id = o.productId inner join users as u on u.id = o.userId where
o.orderStatus in('delivered') group by o.cart_code order by o.cart_code desc");
$order_list = [];
while ($row1 = mysqli_fetch_assoc($order_q)) {
$order_list[] = $row1;
}
?>

```

### declined-order.php

```

<?php
session_start();
include('include/config.php');
if(strlen($_SESSION['alogin'])==0)    {
header('location:index.php');
}
else{
date_default_timezone_set('Asia/Kolkata');// change according timezone
$currentTime = date( 'd-m-Y h:i:s A', time ( ) );
?>
<?php
$order_q = mysqli_query($conn, "select sum(p.productPrice * o.quantity) as grandTotal, u.name as fname,
u.email, u.contactno as phone,concat(u.shippingAddress, ', ', u.shippingCity, ', ', u.shippingState) as ship,
o.cart_code, o.productId, count(o.productId) as grandTotalItem, p.productName, p.productPrice from orders
as o inner join products as p on p.id = o.productId inner join users as u on u.id = o.userId where
o.orderStatus in('declined') group by o.cart_code order by o.cart_code desc");
$order_list = [];
while ($row1 = mysqli_fetch_assoc($order_q)) {
$order_list[] = $row1;
}
?>

```

### addcashier.php

```

<?php
require('include/config2.php');
// When form submitted, insert values into the database.
if (isset($_REQUEST['username'])) {
// removes backslashes
$username = stripslashes($_REQUEST['username']);
//escapes special characters in a string
$username = mysqli_real_escape_string($con, $username);
$email = stripslashes($_REQUEST['email']);
$email = mysqli_real_escape_string($con, $email);
$password = stripslashes($_REQUEST['password']);
$password = mysqli_real_escape_string($con, $password);
$create_datetime = date("Y-m-d H:i:s");
$query = "INSERT into `cashier` (username, password, email, create_datetime)
VALUES ('$username', '' . md5($password) . '', '$email', '$create_datetime')";
$result = mysqli_query($con, $query);
if ($result) {

```

```

        echo "<div class='form'>
            <h3>You are registered successfully.</h3><br/>
            <p class='link'>Click here to <a href='login.php'>Login</a></p>
        </div>";
    } else {
        echo "<div class='form'>
            <h3>Required fields are missing.</h3><br/>
            <p class='link'>Click here to <a href='addcashier.php'>registration</a> again.</p>
        </div>";
    }
} else {
?>
<form class="form" action="" method="post">
    <h1 class="login-title">Registration</h1>
    <input type="text" class="login-input" name="username" placeholder="Username" required />
    <input type="text" class="login-input" name="email" placeholder="Email Adress">
    <input type="password" class="login-input" name="password" placeholder="Password">
    <input type="submit" name="submit" value="Register" class="login-button">
    <p class="link"><a href="login.php">Click to Login</a></p>
</form>
<?php
}
?>

```

### category.php

```

<?php
session_start();
include('include/config.php');
if(strlen($_SESSION['alogin'])==0)    {
header('location:index.php');
}
else{
date_default_timezone_set('Asia/Kolkata');// change according timezone
$currentTime = date( 'd-m-Y h:i:s A', time ( ) );
if(isset($_POST['submit']))
{
$category=$_POST['category'];
$description=$_POST['description'];
$sql=mysqli_query($conn,"insert into category(categoryName,categoryDescription)
values('$category','$description)");
$_SESSION['msg']="Category Created !!";
}
if(isset($_GET['del']))
{
mysqli_query($conn,"delete from category where id = '".$_GET['id']."'");
$_SESSION['delmsg']="Category deleted !!";
}
?>

```

### insert-product.php

```

<?php
session_start();
include('include/config.php');
if(strlen($_SESSION['alogin'])==0)    {
header('location:index.php');
}
else{
if(isset($_POST['submit']))
{
$category=$_POST['category'];

```

```

$subcat=$_POST['subcategory'];
$productname=$_POST['productName'];
$productprice=$_POST['productprice'];
$productpricebd=$_POST['productpricebd'];
$productdescription=$_POST['productDescription'];
$productavailability=$_POST['productAvailability'];
$qty=$_POST['qty'];
$productimage1=$_FILES["productimage1"]["name"];
$productimage2=$_FILES["productimage2"]["name"];
$productimage3=$_FILES["productimage3"]["name"];
$dir="productimages/$productname";
@mkdir($dir);// directory creation for product images
move_uploaded_file($_FILES["productimage1"]["tmp_name"],"productimages/$productname/".$_FILES["productimage1"]["name"]);
move_uploaded_file($_FILES["productimage2"]["tmp_name"],"productimages/$productname/".$_FILES["productimage2"]["name"]);
move_uploaded_file($_FILES["productimage3"]["tmp_name"],"productimages/$productname/".$_FILES["productimage3"]["name"]);
$sql="insert into
products(category,subCategory,productName,productPrice,productDescription,productAvailability,productImage1,productImage2,productImage3,productPriceBeforeDiscount)
values('{ $category}','{ $subcat}','{ $productname}','{ $productprice}','{ $productdescription}','{ $productavailability}','{ $productimage1}','{ $productimage2}','{ $productimage3}','{ $productpricebd}');";
mysqli_query($conn,$sql);
$myid = mysqli_insert_id($conn);
$sql="INSERT INTO `tblinventory` (`PRODUCTID`, `IN_DATE`, `STOCKIN`,REMAINING) VALUES
('$myid',NOW(),'$qty','$qty)";
mysqli_query($conn,$sql);
$_SESSION['msg']="Product Inserted Successfully !!!";
}
?>

```

### sales-report.php

```

<?php
session_start();
include('include/config.php');
if(strlen($_SESSION['alogin'])==0)    {
header('location:index.php');
}
else{
// $sql="SELECT SUM(` quantity` ) as `QTY` FROM `orders` GROUP BY `productId`";
$sql="SELECT *,SUM(quantity) as `qty` FROM category c, `products` p, `orders` o WHERE
c.id=p.category AND p.`id`=o.`productId` GROUP BY p.category";
$result = mysqli_query($conn,$sql);
$chart_data="";
print mysqli_error($conn);
while ($row = mysqli_fetch_array($result)) {
# code...
$productname[] = $row['categoryName'];
$orders[] = $row['qty'];
}
// $chart_data=substr($chart_data, 0,-2);
$todate = isset($_GET['todate']) ? $_GET['todate'] : "";
$fromdate = isset($_GET['fromdate']) ? $_GET['fromdate'] : "";
class SaleReport {
private $conn = null;
public function __construct($conn) {
$this->conn = $conn;
}
public function get($type) {
$data = [];

```

```

        $q = mysqli_query($this->conn, 'select count(o.cart_code) as total from orders as o where
o.orderStatus = "'.$type.'" group by o.cart_code');
        while ($row = mysqli_fetch_assoc($q)) $data[] = $row;
        return isset($data[0]['total']) ? $data[0]['total'] : 0;
    }
}
$saleReport = new SaleReport($conn);
?>

```

### month-sales-report.php

```

<?php
session_start();
include('include/config.php');
if(strlen($_SESSION['alogin'])==0)
{
header('location:index.php');
exit;
}
class Reports {
    public $year = null;
    private $conn = null;
    public function __construct($conn, $year) {
        $this->year = $year;
        $this->conn = $conn;
    }
    public function sale($month) {
        $data = [];
        $q = mysqli_query($this->conn, 'select sum(p.productPrice * o.quantity) as sale from orders as o inner
join products as p on p.id = o.productId where o.orderStatus = "delivered" AND MONTH(o.orderDate) =
'.$month.' and YEAR(o.orderDate) = '.$this->year.' ');
        while ($row = mysqli_fetch_assoc($q)) {$data[] = $row;}
        if (count($data) > 0)
            return $data[0]['sale'];
        return 0.0;
    }
}
$year = (isset($_GET['y']) && !empty($_GET['y'])) ? $_GET['y'] : date("Y");
$report = new Reports($conn, $year);
$report->sale(6);
?>

```

### yearly-sales-report.php

```

<?php
session_start();
include('include/config.php');
if(strlen($_SESSION['alogin'])==0)
{
header('location:index.php');
exit;
}
$q = mysqli_query($conn, 'select orderDate as dt from orders order by orderDate asc limit 1');
$date = date("Y", time());
if ($row = mysqli_fetch_assoc($q)) {
    $date = $row['dt'];
}
$date = date("Y", strtotime($date));
$now = date("Y", time());
$yrlabel = [];
$yrvalue = [];

```

```

class Reports {
    private $conn = null;
    public function __construct($conn) {
        $this->conn = $conn;
    }
    public function sale($year) {
        $data = [];
        $q = mysqli_query($this->conn, 'select sum(p.productPrice * o.quantity) as sale from orders as o inner
join products as p on p.id = o.productId where o.orderStatus = "delivered" AND YEAR(o.orderDate) =
' . $year . ');
        while ($row = mysqli_fetch_assoc($q)) {$data[] = $row;}
        if (count($data) > 0)
            return $data[0]['sale'];
        return 0.0;
    }
}
$year = (isset($_GET['y']) && !empty($_GET['y'])) ? $_GET['y'] : date("Y");
$report = new Reports($conn);

for ($i = $date; $i <= $now; $i++) {
    $ylabel[] = $i;
    $yrvalue[] = $report->sale($year);;
}
?>

```

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In Partial Fulfillment  
Of the Requirements for the Degree  
Bachelor of Science in Computer Science

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