BUSOG-LUSOG FEEDING PROGRAM MANAGEMENT SYSTEM IN BARANGAY EASTERN POBLACION, ALBURQUERQUE, BOHOL

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

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BUSOG-LUSOG FEEDING PROGRAM MANAGEMENT SYSTEM IN BARANGAY EASTERN POBLACION, ALBURQUERQUE, BOHOL

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Computer Science

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APPROVAL SHEET

This thesis entitled **"BUSOG-LUSOG: Feeding Program Management System in Eastern Poblacion, Alburquerque, Bohol"** prepared and submitted by *Benjie G. Estal, Jovelle S. Baguhin, Ar-jay Lagunsad, Rizalie Solis*, 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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Developers

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ABSTRACT

The purpose of the study was to develop a Busog-Lusog Feeding Program Management System in Barangay Eastern Poblacion, Alburquerque Bohol. Specifically, it sought to find out the computerization in recording and monitoring of the beneficiaries' nutritional information in Barangay Eastern Poblacion Alburquerque Bohol. The respondents of the study were the Barangay Nutrition Scholar, and the Barangay Health/Daycare Worker of Alburquerque Bohol. The Data were gathered through conducting a nutritional survey of children aged 4-5 years old. Findings revealed that there was a manual operation of updating records as well as the recording of nutritional status. The process involved in the proposed system. Ensured that the system was user friendly to clients and was able to generate report within a short period of time and to prevent unauthorized person from accessing the data. Specifically, it focused on the computerization of recording and monitoring of the information of the beneficiaries in Barangay Eastern Poblacion, Alburquerque Bohol. Based on the findings of the study, 60% the respondents "Agree" that the system indicated achievement of individual's expectation, particularly on the quality attributes and features such as user-friendly, visual clarity and its application. The proposed system would hasten the process of the present system, would give efficient and accurate computation and would update the data and information for every transaction made. Thus, it was highly recommended to implement the developed system.

Chapter 1

THE PROBLEM AND ITS SCOPE

Rationale

Digital advancements in technology appears to change our lives for the better. It either improves our performance by working more simply and at a faster rate, It creates possibilities and options that did not previously exist. Aside from developing technology that helps maintain the planting, growing, harvesting, and transporting of food commodities, remote areas are struggling monitoring their children's health. In Local Barangays, feeding programs are held due to the fact that some children have nutrient Deficiency. Operating this programs are scheduled manually and planned. According to the World Health Organization (2021), Severe malnutrition affects 45 million children across the globe each year.

In Barangay Eastern Poblacion, Alburquerque, Bohol, feeding programs are held due to the fact that some children have nutrient deficiency. At present, barangay's current scheduling process is through manual process with the use of pen and paper that relies on a lot of manpower to handle the process of scheduling, analyzing nutritional status, and planning for nutritious food during the day.

Referring on the situation the barangay workers who process the paper works, food scheduling, and budget recording is in a situation of manual process. It compensates their time management especially when there is another load of work that should be done not just this specific program.

By Developing an Automated System for this so called Feeding Program Management System, it lessens the working time consumed during the day. It aims to lessen the burden in the conducting feeding programs among specific barangays which helps the children with nutrient deficiency to improve their health status, which gather them in the program to manage their data easily. The system adds and update data information including name, birthdate, age, weight, height, body mass index (BMI), nutritional status, height-for-age etc. The system displays events and scheduled foods and vitamins, View records, display the budget record, monitors the health of the children whether improving or not, and it shows/prints the tabular and graphical reports for the feeding program.

Literature Background

Republic Act. No. 11037 on Child Nutrition is an act Institutionalizing a National Feeding Program for Undernourished Children in Public Day Care, Kindergarten and Elementary Schools to Combat Hunger and Undernutrition among Filipino Children and Appropriating Funds Therefore.

This Child Nutrition Act, consists of 16 sections that aims at institutionalizing a National Feeding Programme for undernourished children in public day care, kindergarten and elementary schools to combat hunger and undernutrition in the Philippines.

This article supports providing immediate and adequate benefits. The researchers developed an application system for the head and staff of the office. An ideal beneficiaries' database information system must control the storage, retrieval, deletion, security, and integrity of data within the database. Thus,

database management theory was highly needed to accomplish the goals. Hence, the following theories stated below were used as a foundation in making the study:

The first theory is Edgar F. Codd's Rule 7 for Relational Database Management System, which is the higher-level insert, to edit and delete rule. This rule explains that a system must support set-at-time insert, edit and delete operators. It means that data could be retrieved from multiple rows and or various tables. This rule states that insert, edit and delete operations should be supported for any retrievable set rather than just for a single row in a single table (Codd, 1985).

The second theory is the Normalization theory of Edgar F. Codd. It is the process of simplifying the design of a database so that it achieves the optimum structures. This gives the concept of standard forms to assist in achieving the optimum structure. The normal forms are a linear progression of rules that was used to apply in the database, which each higher standard achieving a better, more efficient design. These normal forms are based on the relation rather than the table. Codd's term of the table is a relation. A relation is a simple type of table in which it has the following attribute, its attributes to describe one entity, and it has no duplicate rows; hence there is always a primary key, the rows and columns are in-ordered (Codd, 1985).

The third theory is the First Normal Form of Edgar F. Codd. It requires tables to be flat and have no repeating or potentially repeating fields or groups of fields. A flat table is one in which every record has the same number of fields. In addition,

a single field cannot contain multiple data values. Repeating fields must be moved to a related table. The first normal form is the most important of the normalization steps. If all your tables don't meet the rules of first normal form, you are in big trouble.

The fourth theory is Maintaining Data Integrity and Accuracy of Edgar F. Codd. When you add, modify, or delete table data. It's important that the additions and changes you make to the data don't conflict with the normalization rules that you used to create the database. One of the most vexing problems facing users of large Relational Database Management System is "unclean data". Over time, data entry errors and stray records accumulate to the point.

To provide accurate and dependable monitoring and recording system, these are numbers of related techniques that were used as references which was implemented in different organization and institutions. Among these that are significant in the study are the following:

1. "School Feeding Monitoring and Evaluation Toolkit" The M&E toolkit is intended for use by programme managers within national government, administrators, schools and other stakeholders. It was developed in response to a need for new technical guidance and knowledge management tools for programme design and includes four main components: a data dictionary, example data collection forms and survey tools, M&E system assessment tools and M&E guidelines (The Partnership for Child Development, PCD, 2011)

2. “PLUS School Menus software” is the first digital solution that optimizes school meals by making them simultaneously more nutritious, cost efficient and locally-sourced, PLUS uses a set of databases (food prices and food composition tables) and, through an advanced mathematical algorithm, calculates a “menu” of meals, ensuring nutritional requirements are met using locally-sourced food and seasonal ingredients (World Food Programme, 2021).
3. “ServTracker” A Nutrition Services Module and the accompanying Mobile Meals Apps remove this complexity and provide a simple, more efficient and accurate process to serve clients and complete agency operational functions. This software for meals on wheel programs and congregate dining rooms is cloud-based and easy to use, from meal planning, food prep, and dietary concerns to tracking meal preferences, service changes, delivery schedules, assessments and staff management, comprehensive software solution that centralizes information concerning clients, staff, volunteers and funding sources (Accessible Solutions, Since 1993).

The existence of these systems would serve as the basis of the developers to improve the present system. It would help and guide the researchers on how to improve the current BUSOG-LUSOG Feeding Program Management System in Barangay Eastern Poblacion in Alburquerque, Bohol.

THE PROBLEM

Statement of the Problem

The main purpose of the study was to develop a BUSOG-LUSOG: Feeding Program Management System in Barangay Eastern Poblacion, Alburquerque Bohol.

Specifically, the research sought to answer the following questions:

1. What are the current processes involved in implementing the feeding program?
2. What are the needs in the management of records in the feeding program?
3. What can be offered to improve the current process?
4. What is the level of system usability as perceived by the target users?

The proposed system was to be called the Feeding Program Management System and it would integrate the processes involved in the Barangay Eastern Poblacion, Alburquerque, Bohol. The Feeding Program Management System was developed with the following features:

1. Integrate a networking mechanism to use one centralized server for all the personal computer in the barangay office;
2. Design and implement the following modules:
    a. recording,
    b. monitoring,

c. data management,

d. administration,

e. reporting; and

3. Implement business intelligence technique for decision-support to the office of the barangay.

Scope and Delimitation of the Study

This study focused on the computerization of the processes of BUSOG-LUSOG Feeding Program Management System in Barangay Eastern Poblacion in Alburquerque, Bohol. The system developed was limited only to the Barangay Nutrition Scholar(BNS), and Barangay Health/Daycare Workers who would have the full access of the system. Specifically, the system included the following features:

1. **Offline Mechanism.** Not controlled by or directly connected to a computer or external network. It shares a central database for the storage and retrieval of information among the Barangay Nutrition Scholar, DayCare Worker, Barangay Health Worker in Barangay Eastern Poblacion.
2. **Recording**: This module provides recording of activities, including the information of the beneficiaries, schedule, admin information and Budget recording.
3. **Monitoring.** This feature is a systematic process of collecting, analyzing and using information to track the nutritional status of the beneficiaries toward reaching its objectives and to guide management decisions.

4. **Data Management**. This feature updates the information of the beneficiaries and monitors the health status that will be displayed in the System, including the schedules which will be monitored easily.
5. **Administration**: This function provides administrative tools for system maintenance and system configuration. A database system that requires user login privileges and security to avoid unauthorized personnel and avoid data manipulation. This system must have limited access: it must depend on the user's account.
6. **Reporting**: It provides printable data in the System such as graphical reports, tabular reports of program of activities and schedules, budget reports, beneficiaries' information, beneficiaries' health status report.

This study was limited only to the standard operations and procedures in the BUSOG-LUSOG: A Feeding Program Management System in Barangay Eastern Poblacion. The users of the system were limited to the Barangay Nutritional Scholar, and the Health/Daycare Worker of the Barangay Eastern Poblacion.

Significance of the Study

The overall objective of this study was to improve and monitor the nutritional status of the children. Implementing the automated program will also ensure that all the records will be intact and updated and ensures that the file will be protected and safe for it will require authorization before someone can access the system. The findings of this study will be very beneficial to the following:

The Children. This study would help organize the children's data. Names would be viewed with their recorded information. The system would help improve the management by monitoring their nutritional health status automatically.

Barangay Health Workers. BHW were one of the users who were directly involved in this feeding monitoring program. This is why their opinions are relevant for they are the ones who would experience it first-handedly. Their outlook on this program could be an approach for the enhancement of the said program.

Barangay Nutrition Scholar. BNS were directly involved in this feeding program. This is why their opinions are relevant for they are the ones who will experience it first-handedly. Their outlook on this program could be an approach for the enhancement of the said program.

Daycare Worker. Facilitates feeding, monitor the nutritional status of the children throughout the year. Responsible for getting children's information including height and weight.

Future Researchers. This program could be an instrument for the future researchers in which it could help them add the ideas presented in the study and may be used as a reference data in conducting new research and solving one of the societies major problems that are evident in today's generation.

Researchers. This study would improve the researcher's interpersonal relationships and help them become better communicators, through interviews. It also improves their reasoning and analytical ability, as well as their programming and design knowledge. It also functioned as a stepping stone in their future job application of such abilities.

RESEARCH METHODOLOGY

Development Framework

Figure 1 below shows the conceptual diagram of the study. It represents the model of the study that follows the principle of input-process-output. These inputs were coming from the administration of the system. The process included recording, monitoring, data management, administration, and report. The output would provide decision support to the administration.

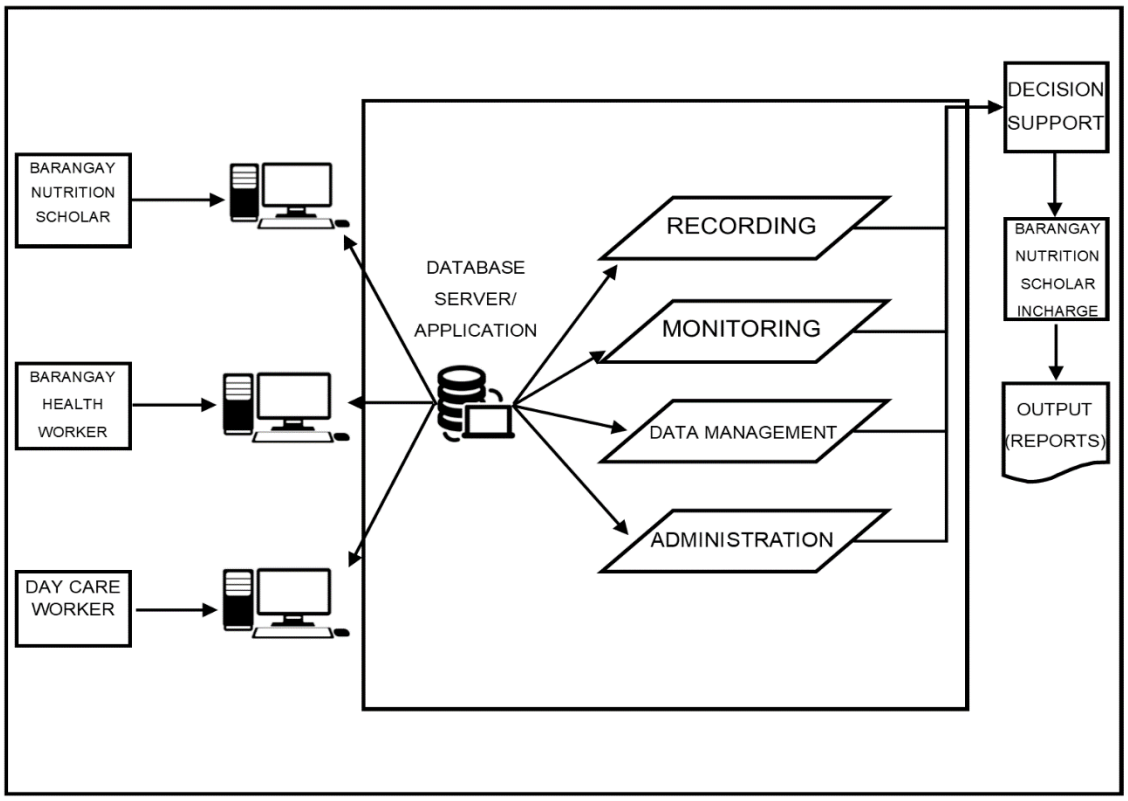


Figure 1. Conceptual Diagram of the Study

Block Diagram

Figure 2 shows the block diagram of the studied BUSOG-LUSOG: A Feeding Program Management System in Barangay Eastern Poblacion Alburquerque, Bohol. It shows the systems output, which demonstrated how the data was being processed to gain better result. It covers the specification of the basic functionality of the system that represents the work of the Barangay Health/ DayCare Workers and Barangay Nutrition Scholar. The other function of the system was generating reports.

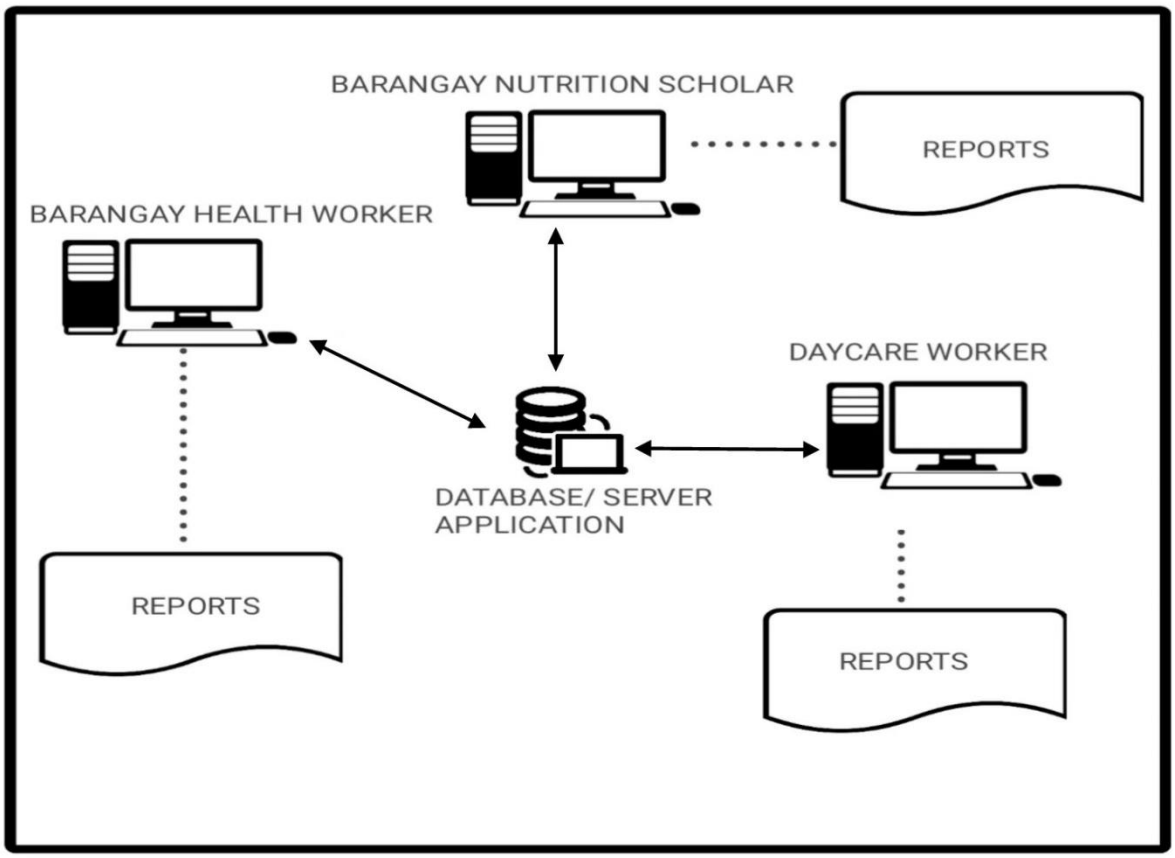


Figure 2. Block Diagram of the Study

Development Model and Approaches

The study used Rapid Application Development (RAD) which has four phases to be followed. During the stage of analysis and design, the researchers, clients, and team members cooperated to identify the development's goals and aspirations, as well as the current and potential problems that must be addressed during construction. The researchers also looked for any existing system to be central point of the study. Gathering data by asking questions of the study's respondents the Barangay Health/ DayCare Workers and Barangay Nutritional Scholar. To gather sufficient information for designing the system, document review and observation of procedures were done specifically in the recording, monitoring and generation of reports.

The prototype cycle was covered in the second stage. Through several prototype iterations, the developer fully worked out the user design. Clientele collaborated with the developer as well as presented the system to the officials to ensure that the needs were met at every stage of the design process, including reviewing the system's usability and functionality to see if it follows the procedures, and suggesting additional add-ins and recommendations that were tweaked until the expectations and satisfaction were met.

The testing phase follows extensive prototyping and cutting-edged design in the third stage. The beta system was presented to the officials to ensure that everything was running smoothly and that the clientele's expectation and goals were met. For the system's usability, the developers provide guide questions.

The final stage was the implementation, in which the completed program would launched. Data conversion, final tests, and user training were all done by the developers. While the developer and clients would continue to look for bugs and potential problems that need to be addressed right away. The finalization was then completed.

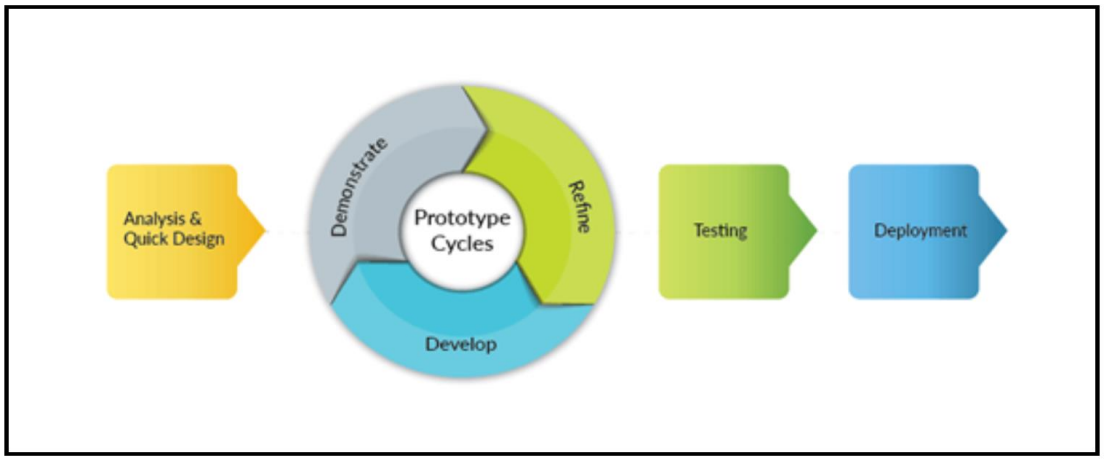


Figure 3: Rapid Application Development Model Diagram

The following models were the basis during the analysis and design phase of the study:

1. Client - Server Architecture

The network mechanism used in the centralization of the Feeding Program Management System in Barangay Eastern Poblacion was the Client/Server Architecture. This Server is a computer that supplies services or data to other machines on a local area network (LAN) or a wide area network (WAN) such as the Internet. Some servers run administrative software that controls access to all or part of the network

and its resources (such as disk drives or printers). Others provide files, applications, or World Wide Web pages. Computers that request services or data from a server are known as clients. Its arrangement used on local area networks that makes use of “distributed intelligence” to treat both the server and the individual workstations as intelligent, programmable devices, thus exploiting the full computing power of each. This was done by splitting the processing of an application between two distinct components: a “front-end” client and a “back-end” server.

2. The Client –Server model of computing is a distributed application structure that partitions tasks or workloads between the providers of a resource or service, called servers, and service requesters, called clients. Often, clients and servers communicate over a computer network on separate hardware, but both client and server may reside in the system. A server machine is a host that was running one or more server programs which share their resources with clients. A client does not share any of its resources, but requests a server’s content or service function. Clients, therefore, initiate communication sessions with servers which await incoming requests.

The following were the tools used in the development and analysis phase of BUSOG-LUSOG: A Feeding Program Management System in Barangay Eastern Poblacion Alburquerque, Bohol:

1. **Microsoft Visual Studio 2012** – it is an integrated development environment (IDE) from Microsoft. It is used to develop the proposed system.
2. **WAMP Server.** WAMP is sometimes used as an abbreviated name for the software stack Windows, Apache, MySQL, PHP. It is derived from LAMP which stands for Linux, Apache, MySQL, and PHP. As the name implies, while LAMP is used on Linux servers, WAMP is used on Windows servers. Because WordPress isn't usually installed on Windows Servers, It's used to create an application for saving data into database in the proposed system.
3. **Crystal Report.** It is used in the system to make, generate and view reports of feeding program's management system.

Environment and Participants

The study was conducted at the Eastern Poblacion Barangay Hall located in Alburquerque, Bohol. The study's participants were the Barangay Health/DayCare Workers and Barangay Nutrition Scholar who have full access to the system and could use it to perform tasks such as recording children information, updating information that has been typed incorrectly, and generating transaction reports. The officials were personally interviewed by the researchers to gather the exact data needed in the study. The researchers asked some questions such as, the current operations and processes in recording and monitoring the feeding programme, its problems and needs and the possible solutions to the problems encountered. This will serve as a guide in designing and customizing the system.

Data Collection

The researchers asked permission from the Barangay Workers to conduct the study through a letter request. Data were gathered through personal interviews using the interview guide question. The researchers asked some questions to the feeding program head such as, how many transactions are made per day, what are the drawbacks of using the manual process to record information, and lastly how they manage with the lot of information provided by beneficiaries or children? Actual participation, as well as an observation on the flow of the activity, was done to gather more data and information needed in the study. Different documents and reports were reviewed to come up with the design for the required forms of the developed system including the possible input and output of data for the features to be added.

Functionality evaluation was conducted through a system usability testing survey with the target client. It was done to quantify the effectiveness of the developed system. There were six respondents in the system usability. It included the Barangay Nutrition Scholar, Barangay Health Workers, DayCare Worker, and IT Experts.

Table 1

Distribution of respondents in the System Usability Assessment

Respondents	**Frequency**
Barangay Nutrition Scholar	1
Barangay Health Worker	2
Daycare Worker	1
IT Experts	2
Total	6

Table 2 shows the interpretation of the results used for system usability. In the system usability, rating was done based on the System Usability Guidelines developed by MIT Information Services Technology.

Table 2

Interpretation Guide of the System Usability

Weight	Range	Description	Interpretation
7	6.4 – 7.0	Strongly Agree	The respondents strongly believe and are confident that the system is very usable.
6	5.5 – 6.3	Agree	The respondents strongly believe and are confident that the system and is very useful
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 are neutral in trusting that the system is usable.
3	2.8 – 3.6	Tend to Agree	The respondents tend not to trust the system and app 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.

To determine the general acceptability of the system, the average weighted mean or the weighted mean score was computed to evaluate/assess the system acceptability level using the following formula:

$$WMS = \frac{1f1 + 2f2 + 3f3 + 4f4 + 5f5}{n}$$

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)

The range of the interpretative guide for usability was computed by getting the interval value. The table at previous page shows the interpretative guide that was used to describe the usability of the system.

OPERATIONAL DEFINITION OF TERMS

The following terms were the defined conceptually in the conduct of this study:

Beneficiaries. The person or someone who receives something like the children who are the beneficiary of the feeding program.

BHW. Barangay Health Worker, their outlook on this program could be an approach for the enhancement of the said program.

BMI. Body Mass Index is a measure that uses height and weight of the beneficiaries to work out if the weight is healthy.

BNS. Barangay Nutritional Scholar**,** their outlook on this program could be an approach for the enhancement of the said program.

BUSOG-LUSOG Feeding Program Management System in Barangay Eastern Poblacion Alburquerque, Bohol. The title of the study that researchers intend to develop. This system helps the user record the data of children such as the main feature to monitor their health status depending on the scheduled date of the feeding program.

BUSOG-LUSOG. It stands for “Healthy Full” the word that aims to the beneficiaries or the children.

Database. It is a computer program that stores the collection of data, generally stored and accessed electronically from a computer system. Where databases are more complex, they are often developed using formal design and modelling techniques.

HFA. Height-for-Age is an index used to assess how a child's height compares to the expected height of a healthy child of the same age and sex.

Records. It refers to documents kept that would cover recipient information, admin information, activity schedule, budget record, and other pertinent records use as a reference upon monitoring and managing.

Server. It is a computer device that provides a service to another computer program and its user also known as the client.

Chapter 2

PRESENTATION OF FINDINGS, ANALYSIS AND INTERPRETATION OF DATA

Existing Operation and Processes

The Feeding Program which is Globally implemented already aims to aid the hunger and malnutrition of children. Locally speaking in the Barangay Eastern Poblacion. The office is composed of barangay nutritional scholar and barangay health/daycare workers which accountable for recording and monitoring the beneficiaries' information. The barangay is still using the manual process of recording and monitoring the beneficiaries' nutritional status. These are the following present processes that take place.

A. Recording Process

Before Pandemic - The parents were given a blank sheet to be filled out with the personal information of their children. Children should be enrolled in Day-Care Center in order to be eligible for the program. The filled-out application form was stored in a file folder. All data gathered were encoded to the M. S. Word for record-keeping and updated every 120 days annually. Distribution and consuming of foods were held in the venue physically present.

Amidst Pandemic - The parents were be given a blank sheet to be filled out with the personal information of their children. All enrolled Children in Day-Care Center was eligible for the program. The filled-out application form was stored in a file folder. All data gathered were encoded to the M. S. Word for record-keeping

and updated every 120 days annually. Parents are only responsible for claiming the foods in barangay for safety purposes and let them signed the list of beneficiaries indicating the name of their child that the goods are claimed.

B. Monitoring Process

The parents were given a blank sheet to be filled out with the personal information of their children including height and weight which will be analyze to monitor its nutritional status.

C. Generation of Reports

All hard copies of the transaction reports received were stored in the transmittal documents folder before submitting them to the municipal office. The field office also secured a soft copy of all transmitted documents and was also stored in the computer using MS Word. Due to the DATA PRIVACY ACT of 2012 (DPA), this office should see to it that the information will be kept with security and only be used and accessed by the office staff and barangay nutritional scholar. Targets for submission of the transaction report depends on scheduled date of the feeding program

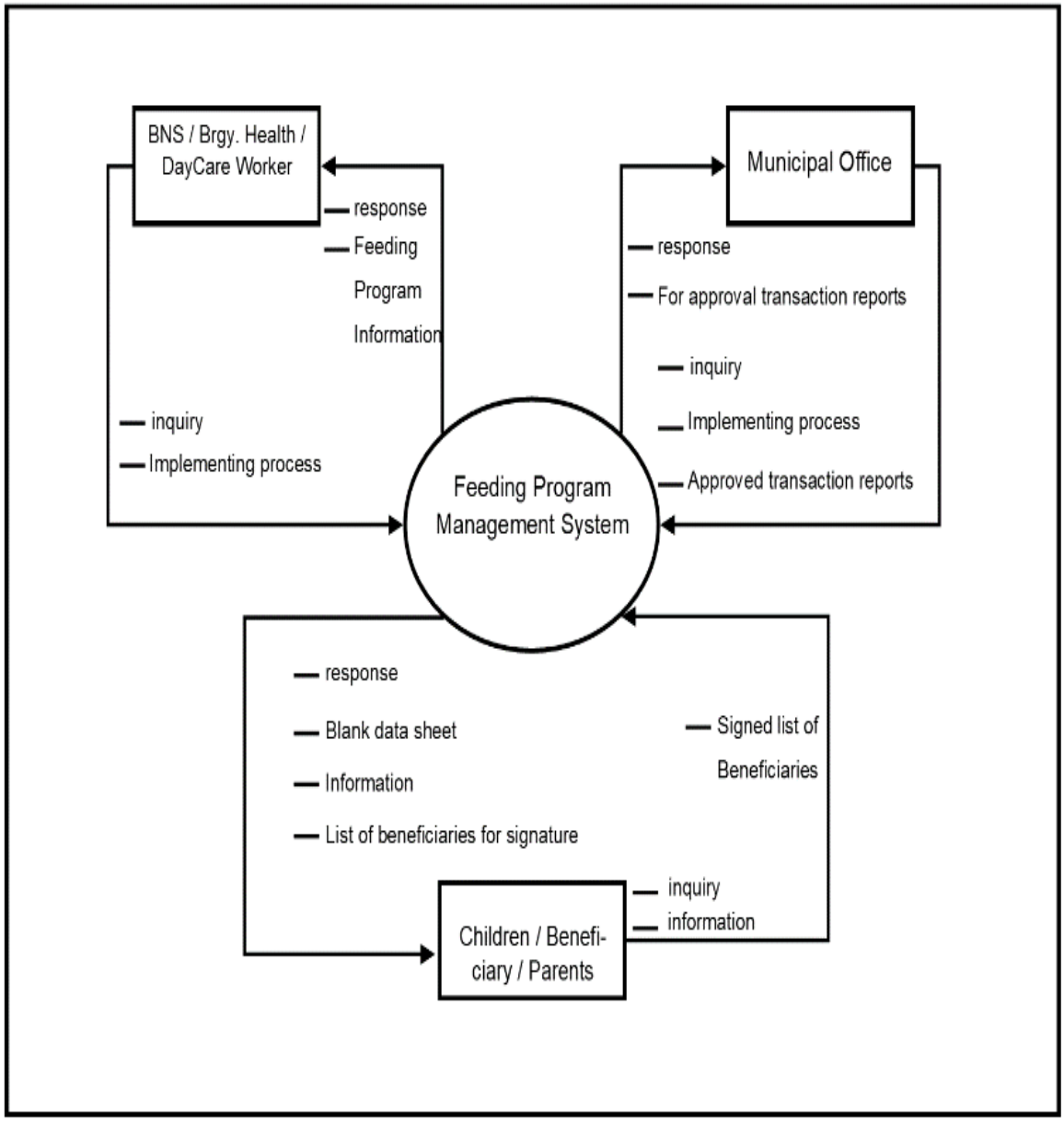


Figure 4. Context Diagram of the Present System

EVENT SPECIFICATIONS

Event List

1. Recording Process
    a) Before Pandemic
    b) During Pandemic

2. Monitoring Process
3. Generation of Reports

Event List Diagrams

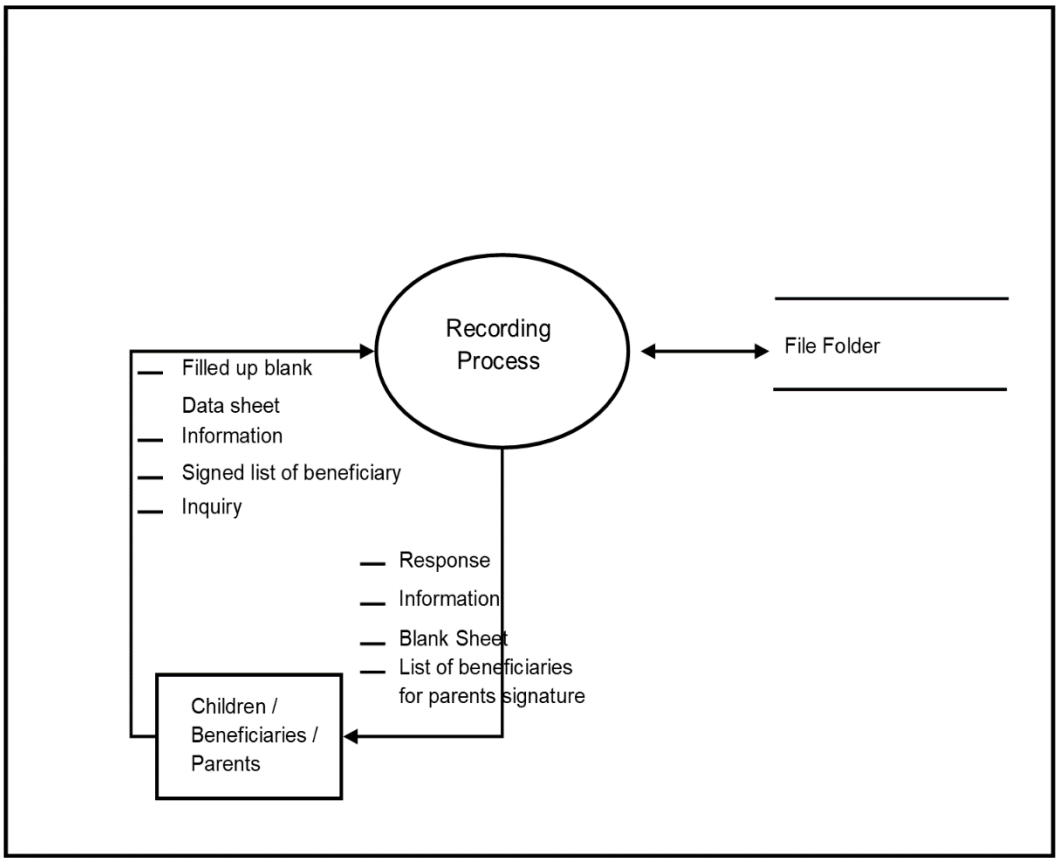


Figure 5. Recording Process (Event 1)

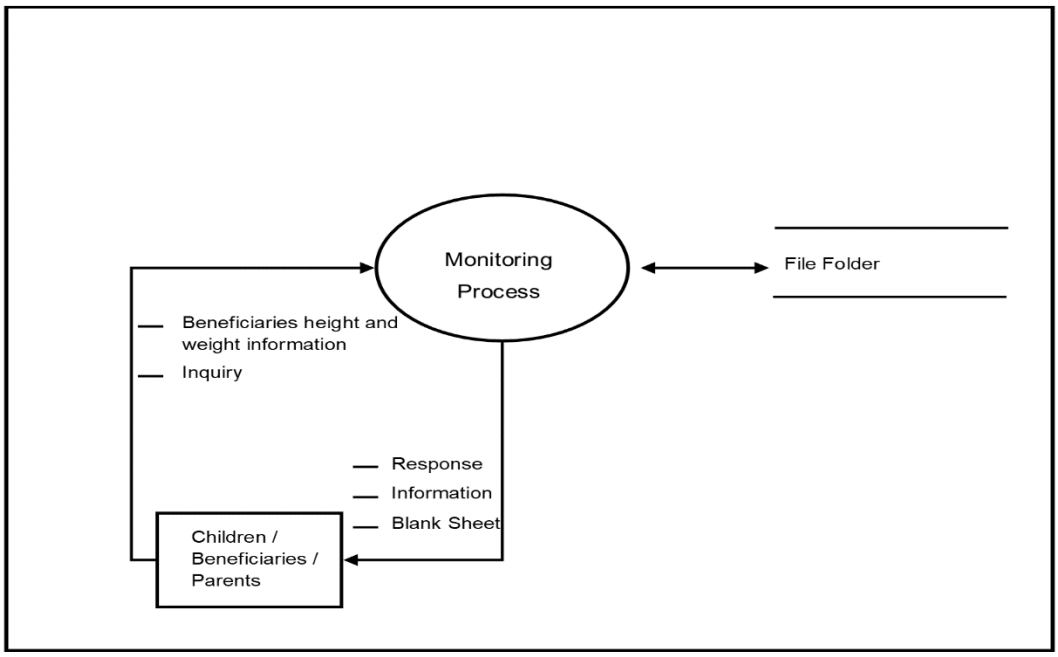


Figure 6. Monitoring Process (Event 2)

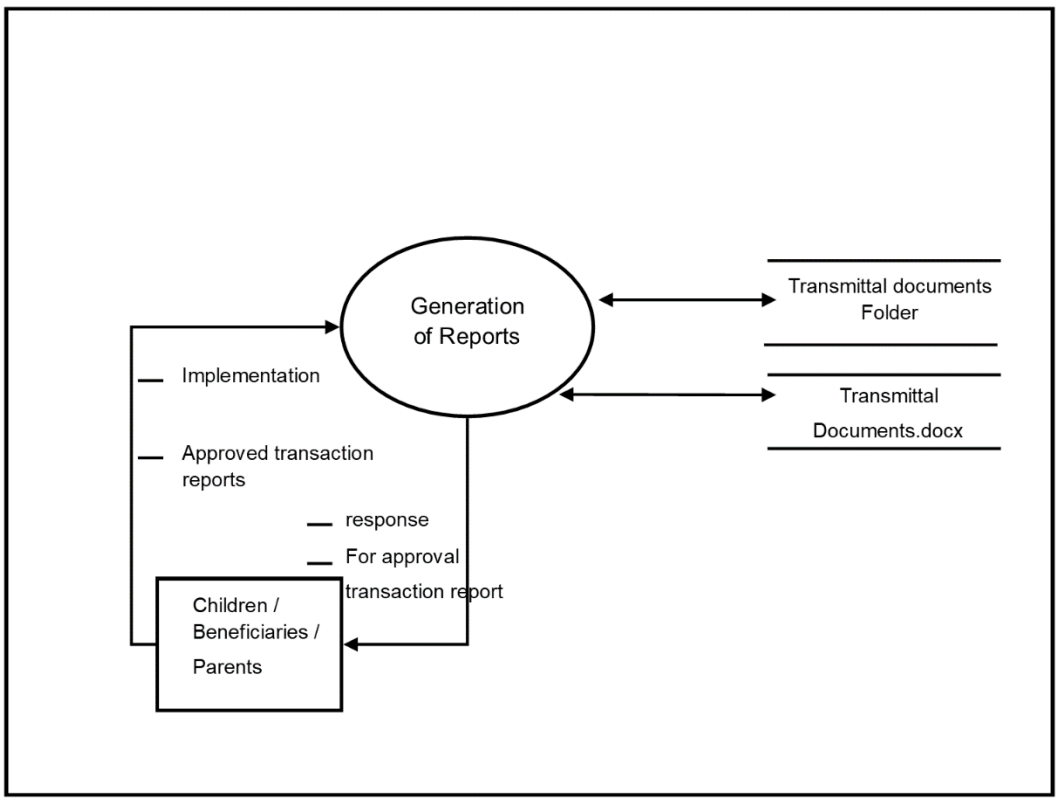


Figure 7. Generation of Reports (Event 3)

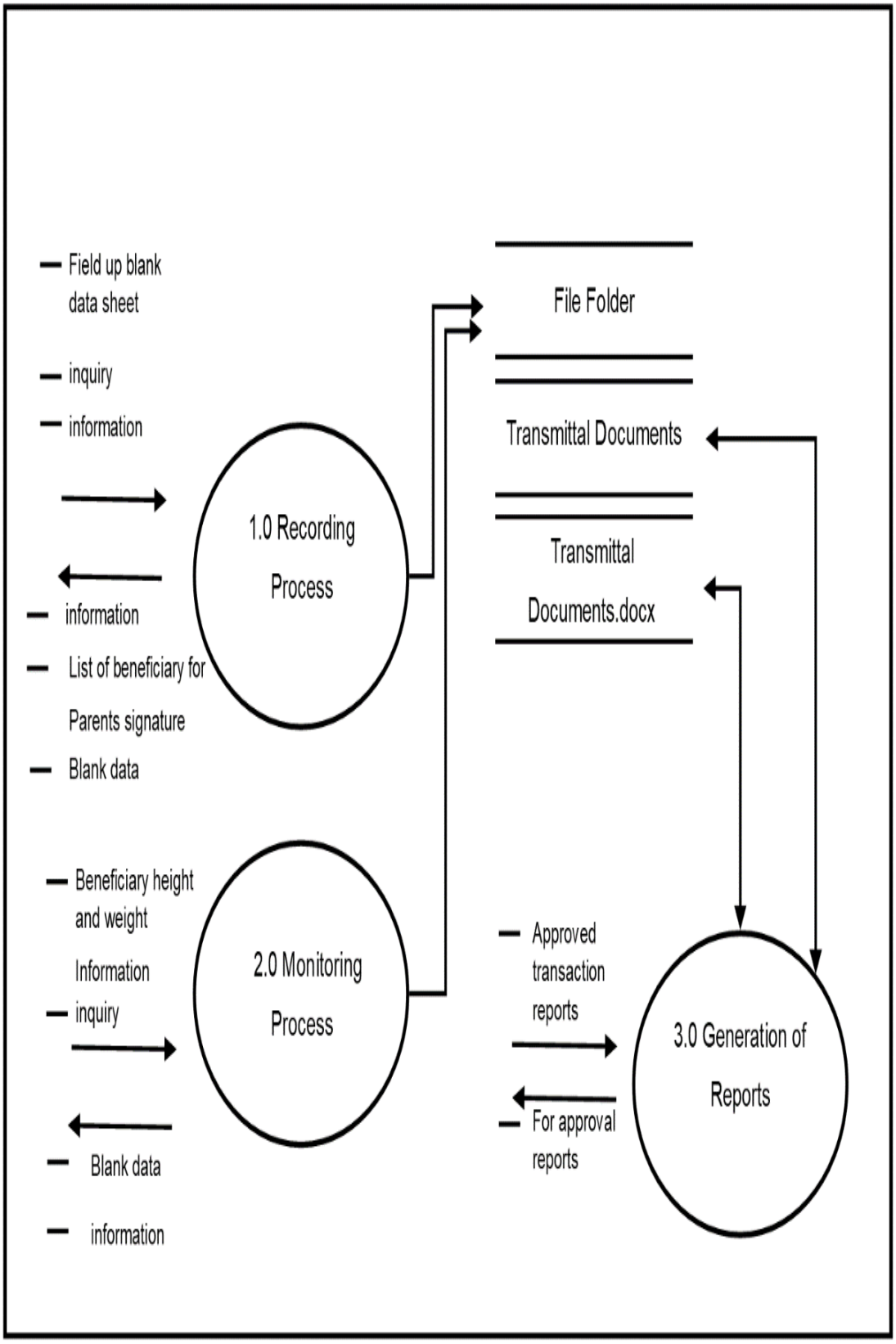


Figure 8. Top Level of the Present System

Needs of the Existing Operation

The following were the needs of the BUSOG-LUSOG: A Feeding Program Management System in Barangay Eastern Poblacion Alburquerque, Bohol:

1. Secured system to prevent leaks of important information, as well as to avoid unauthorized person, because there is a chance that someone will get access to the system without authorization.
2. Computerized and organized system to manage records, and provide faster transactions, monitoring and reduce processing time when retrieving records, as well as to avoid confusion and make it easier to generate reports in a timely and efficient manner.
3. Proper filing of the files and documents should be adopted, by using the database instead of the files and folders.

BUSOG-LUSOG: Feeding Program Management System in Barangay Eastern Poblacion Alburquerque, Bohol.

The researchers gathered all of the data and information about the current system and developed BUSOG-LUSOG: A Feeding Program Management System in Barangay Eastern Poblacion, Alburquerque, Bohol a computerized system that manages event schedule etc., records, monitor health status and generates the required reports.

A. Recording Process

The staff was responsible for inputting all the necessary information about the children/beneficiaries' information in the system. All the information about

children/beneficiaries were stored at beneficiaries_info. The administrators who had full access to the system can edit all the information regarding to the children/beneficiaries, and all the information will be stored in the beneficiaries_info.

B. Monitoring Process

The staff is responsible for inputting all the necessary information about the children/beneficiaries' information specifically their weight and height in the system, which will then be analyze to be monitored automatically showing their nutritional status and time series of individual weight improvement report.

C. Generation of Reports

The system's whole program transaction reports will be generated to make sure that the implementation process has been successfully done. For children/beneficiaries module, it will generate a tabular reports consisting by name, birthdate, weight, height, sex, age, body mass index, nutritional status, height-for-age including the tabular list of all beneficiaries to be signed by parents upon claiming the goods. Generating reports of the beneficiaries' health status will be taken from the information stored in beneficiaries_info. Another presentation of the reports is financial plan and action plan/schedule that will be generated taken from the information stored in budget_info and schedule_info.

Use Case Diagram

UML Use case diagrams is usually referred to as behavior diagrams used to describe a set of actions (use cases) that some system or systems (subject) should or can perform in collaboration with one or more external users of the system (actors). A use case represents a functionality of the system from the viewpoint of the user and describes the goals of their use. Each use case should provide some visible and valuable result to the actors or other stakeholders of the system. As shown in the diagram, the Barangay Nutrition Scholar, Barangay Health/DayCare Worker has full access to the system and can add users, view user's information, update user's information, and delete user's information.

Feeding Program Management System

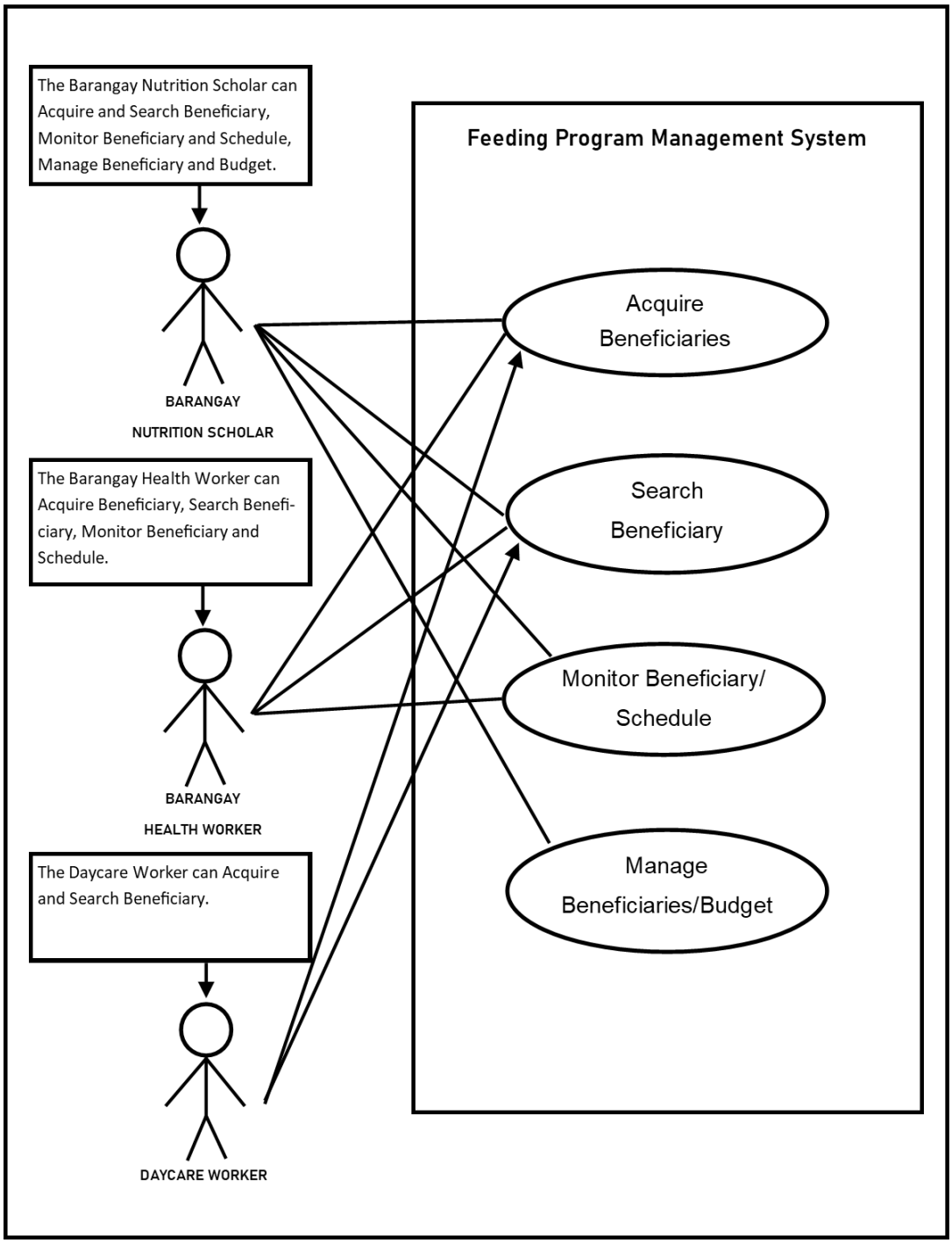


Figure 9. Use Case Diagram

Use Case Narrative

Use case narrative describing a use case that requires both frame context of the use case and represents the dialog between the user (actor or use case) and the use case. In every use case narrative, there are pre-conditions, process, and post-conditions.

Table 3. Use Case Narrative – Acquire Beneficiaries

Acquire Beneficiaries (UC1)	
Scope	Feeding Program Management System
Level	User Goal
Goal in Context	Presents a menu from which one can acquire information of beneficiaries.
Primary Actors	BNS, BHW, and DayCare Worker
Stakeholders	BNS, BHW, and DayCare Worker: Wants to get the information of the beneficiaries through the system.
Preconditions	Enter the required information
Triggers	BNS, BHW, and DayCare Worker: Adds beneficiaries' information.
Success Guarantee	Feeding Program Management System: Waits for user input
Main Success Scenario:	
BNS, BHW, and DayCare Worker: Adds beneficiaries' information for the monitoring, recording and management. The system displays the information they needed.	

Table 4. Use Case Narrative – Search Beneficiary

Search Beneficiary (UC2)	
Scope	Feeding Program Management System
Level	User Goal
Goal in Context	Presents a menu from which one can search information the information of beneficiaries.
Primary Actors	BNS, BHW, and DayCare Worker
Stakeholders	BNS, BHW, and DayCare Worker: Wants to search the information of the beneficiaries through the system.

Preconditions	Enter the required information
Triggers	BNS, BHW, and DayCare Worker: search beneficiaries' information.
Success Guarantee	Feeding Program Management System: Displays the information of the beneficiary
Main Success Scenario:	
BNS, BHW, and DayCare Worker: Search beneficiaries' information. The system displays the information they needed.	

Table 5. Use Case Narrative – Monitor Beneficiary/ Schedule

Monitor Beneficiary/ Schedule (UC3)	
Scope	Feeding Program Management System
Level	User Goal
Goal in Context	Presents a menu from which one can monitor the information of beneficiaries and schedule.
Primary Actors	BNS and BHW
Stakeholders	BNS and BHW: Wants to monitor the information of the beneficiaries and feeding program's schedule through the system.
Preconditions	Enter the required information
Triggers	BNS and BHW: Monitors the beneficiaries' information and feeding program's schedule
Success Guarantee	Feeding Program Management System: Displays the information they want to monitor.
Main Success Scenario:	
BNS and BHW: Monitor's beneficiaries' information and feeding program schedule for the monitoring. The system displays the information they needed.	

Table 6. Use Case Narrative – Manage Beneficiaries/ Budget

Manage Beneficiaries/ Budget (UC4)	
Scope	Feeding Program Management System
Level	User Goal
Goal in Context	The Barangay Nutrition Scholar can manage the beneficiaries and feeding program's budget.
Primary Actors	BNS

Stakeholders	BNS: Wants to manage the beneficiaries and feeding program's budget through the system.
Preconditions	Enter the required information
Triggers	BNS: Manages the beneficiaries and feeding program's budget.
Success Guarantee	Feeding Program Management System: Displays the information they want to manage.
Main Success Scenario:	
BNS: Manages beneficiaries and feeding program's budget for the recording, monitoring, and reporting. The system displays the information they needed.	

Database Design

Database design is the process of producing a data model of the database. This data model contains all the needed logical and physical design choices and physical storage parameters needed to generate a design in a data definition language, which can then be to create a database.

System design is an aspect of system progress that serves as building for the system enhances the BUSOG-LUSOG: FEEDING PROGRAM MANAGEMENT SYSTEM IN BARANGAY EASTERN POBLACION, ALBURQUERQUE, BOHOL, and the researchers aimed a new system which would be used in the Barangay Office.

Class Diagram

A class diagram is an illustration of the relationships and source code dependencies among classes of the system, their relationships (including inheritance, aggregation, and association), and the operations and attributes of the classes (Margaret, 2007).

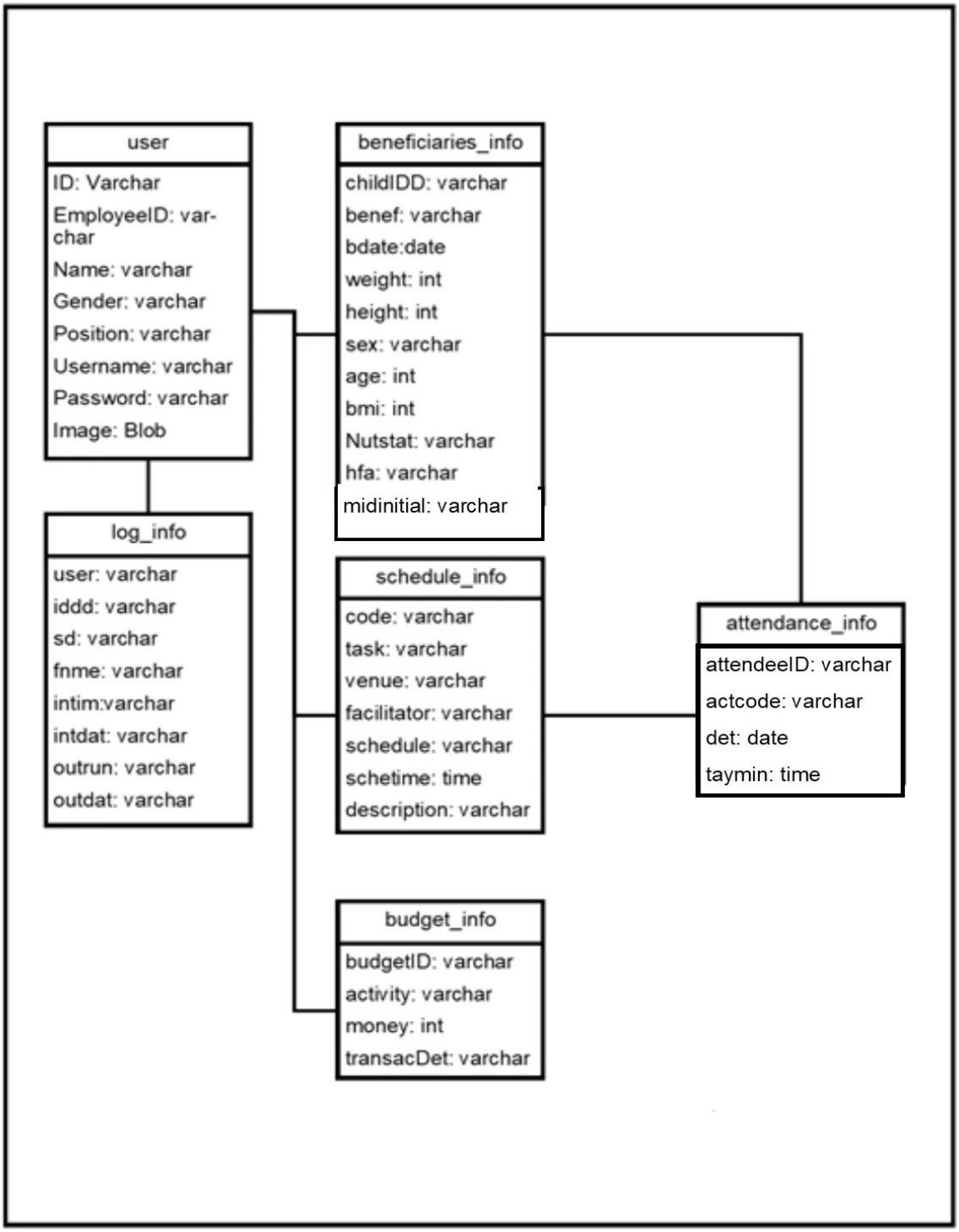


Figure 10. Class Diagram of the System

Database Structure

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

Table 7

Data structure for the system user

Field No.	Field Name	Type	Width	Description
1	ID	Int	11	identification
2	EmployeeID	varchar	20	number id
3	Name	varchar	30	user's full name
4	Gender	varchar	20	user's Gender
5	Position	varchar	30	user's position
6	Username	varchar	20	user's username
7	Password	varchar	20	user's password
8	Image	blob		

Table 8

Data structure for the schedule information

Field No.	Field Name	Type	Width	Description
1	code	varchar	30	Schedule's code
2	task	varchar	100	Task
3	venue	varchar	100	venue
4	facilitator	varchar	20	facilitator's full name
5	schedate	varchar	30	scheduled date
6	schetime	time		scheduled time
7	description	varchar	100	description

Table 9

Data structure for the beneficiaries' information

Field No.	Field Name	Type	Width	Description
1	childIDD	varchar	30	Beneficiaries ID
2	benef	varchar	20	Beneficiaries last name
3	benefname	varchar	30	Beneficiaries first name
4	midinitial	varchar	30	Beneficiaries mid initial
5	bdate	varchar	30	Beneficiaries birthday
6	weight	int	10	Beneficiaries weight
7	height	int	10	Beneficiaries height
8	sex	varchar	10	Beneficiaries gender
	age	int	10	Beneficiaries age
9	bmi	int	10	Beneficiaries body mass index
10	nutstat	varchar	40	Beneficiaries nutritional status
11	hfa	varchar	40	Beneficiaries height for age
12				
13	datescaled	varchar	30	Beneficiaries date of weighing

Table 10

Data structure for the budget's Information

Field No.	Field Name	Type	Width	Description
1	budgetID	varchar	11	identification
2	activity	varchar	30	budget's activity
3	money	varchar	30	amount budget
4	expense	varchar	30	amount expense
5	sum	int	30	remaining amount
6	transacDet	int	30	transaction date

Table 11

Data structure for the attendee's information

Field No.	Field Name	Type	Width	Description
1	attendeeID	varchar	30	identification
2	actcode	varchar	30	activity code
3	det	date		date attended
4	taymin	time		time attended

Table 12

Data structure for the log information

Field No.	Field Name	Type	Width	Description
1	user	varchar	30	Log user
2	iddd	varchar	30	Log id
3	sd	varchar	30	Type of user
4	fnme	varchar	30	User's name
5	intim	varchar	30	Time in
6	indat	varchar	30	Date log in
7	outtim	varchar	30	Time out
8	outdate	varchar	30	Date log out

Program Hierarchy

A program hierarchy is an organizational structure in which items is ranked according to levels of importance. Each module is represented by a box, which contains the modules. The system comprises of eight buttons representing main modules that hold the activity that the system is capable of. (Wigmore, I., 2012).

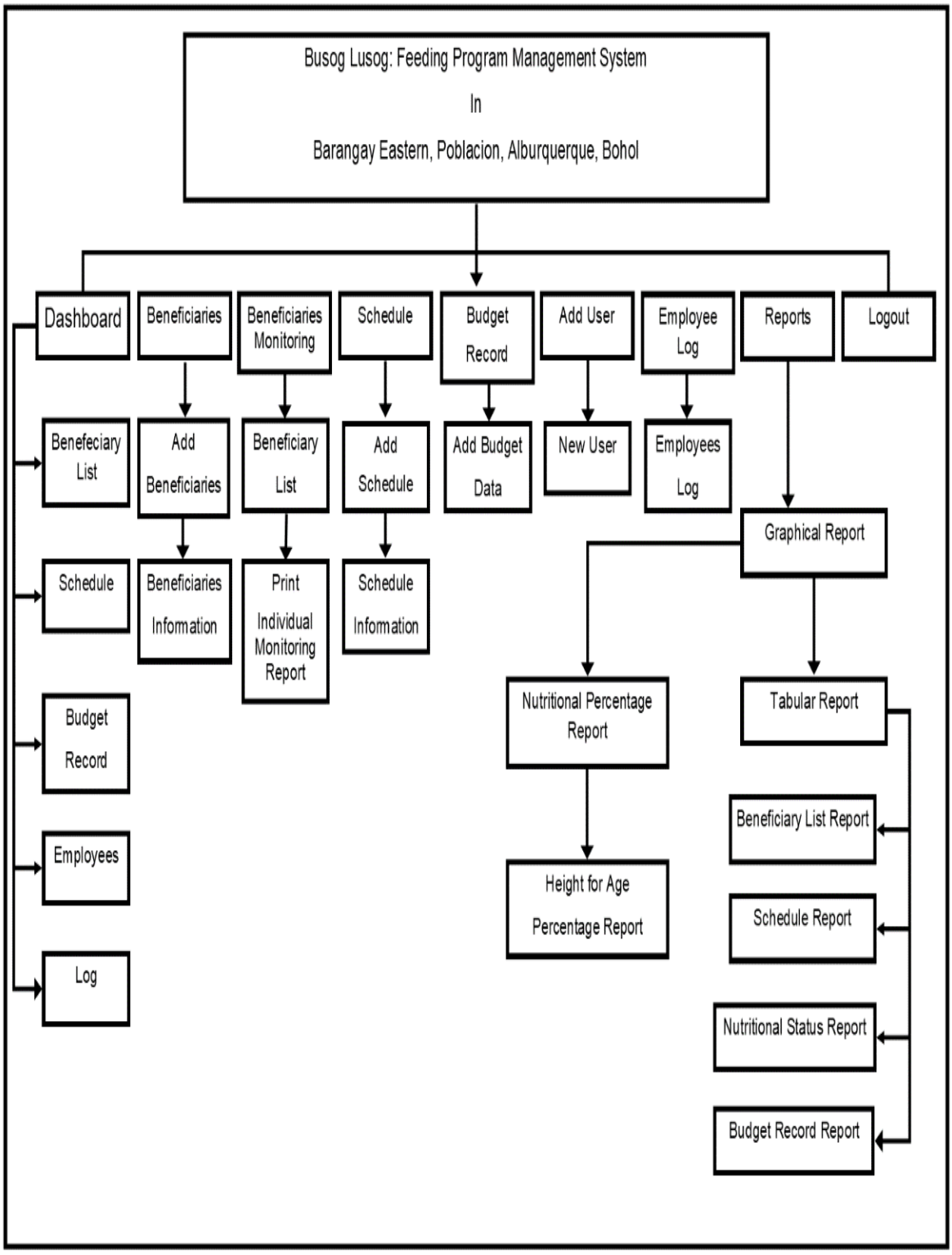


Figure 11. Program Hierarchy

Functional Requirements

The functional requirement was formulation using the prototype in eliciting capture requirement through contrast communication with the BNS, Health Worker, and Daycare Worker. The function mentioned are based on the existing standard need of the BUSOG-LUSOG: A Feeding Program Management System in Eastern Poblacion, Alburquerque, Bohol., with the approval and coordination from the respondents as follows:

Login Process

FREQ 1: Access to the system must be password protected.

FREQ 2: All the data and information should be in a secure environment, limiting access to authorize only.

FREQ 3: The system will record all the login time and logout time of the BNS, Health Worker and Daycare Worker.

Add Beneficiaries Process

FREQ 4: The system should allow the BNS and Daycare/Health Worker to manage all the beneficiaries' information.

FREQ 5: The system should allow the BNS and Daycare/ Barangay Health Worker to search all the beneficiaries' information.

FREQ 6: The system should be able to verify the category from the beneficiaries Nutritional status according to their body mass index (BMI) and Height-For-Age (HFA).

Monitoring Beneficiaries Information Process

FREQ 7: The system should allow the BNS and Barangay Health Worker to monitor the beneficiaries' confidential information.

Scheduling Process

FREQ 8: The system should allow the BNS and Barangay Health Worker to create schedule for the beneficiaries' feeding program.

Budget Recording Process

FREQ 9: The system should allow the BNS to record the feeding program's budget.

Managing Beneficiaries Information Process

FREQ 10: The system should allow the BNS and Daycare/Health Worker to manage beneficiaries' information.

FREQ 11: The system should allow the BNS and Daycare/Health Worker to search for beneficiaries' information.

FREQ 12: The system should allow the BNS and Daycare/Health Worker to view the list of approval and approved transmittal documents.

FREQ 13: The system should allow the BNS and Daycare/Health Worker to view the list of the active beneficiaries.

Generate Report Process

FREQ 14: The system should provide the BNS and Daycare/Health Worker the tabular and graphical report of beneficiaries' nutritional status.

FREQ 15: The system should provide the BNS and Daycare/Health Worker the tabular and graphical report of approved beneficiaries.

Non-Functional Requirements

A non-functional requirement shows the operation of a system, rather than functional requirements that define specific behavior of functions. The following are the non-functional requirements of the system:

NFQ 1. The system should be easy to use. It should be user-friendly and manageable.

NFQ 2. The system should operate on available technology (Windows) provided by the office.

Test Cases

A test case is a set of conditions or variables under which a tester will determine whether an application of a software system is working correctly or not. A detailed procedure that fully tests a feature. And also, a set of input variables, execution pre-condition, results, and execution, developed for the particular objectives or test conditions.

These are test case scenarios conducted during the acceptance testing. The test cases plan is to let the users use the system and follow the instruction in each test case in order to be considered successful. This test case is somewhat like guidelines on how to use the system.

The following are the details of each test case:

Test Case 1:

Module: Login Form

Instruction:

1. On login form enter the password and username
2. Then click the “Login” button.

Expected Results:

1. The loading screen will show before main form.

Test Case 2:

Module: BENEFICIARIES

Instruction:

1. Click “BENEFICIARIES” to add new beneficiary.
2. Fill up all the textbox of the information of beneficiaries.
3. Then click “Save”

Expected Result:

1. Successfully Added
2. Display List of Beneficiaries

Test Case 3:

Module: BENEFICIARIES MONITORING

Instruction:

1. Click “BENEFICIARIES MONITORING”
2. Search the information of a specific beneficiary or date “from-to”.
3. Then click “Print”

Expected Result:

1. Display the time series nutritional status percentage report of a specific beneficiary.

Test Case 4:

Module: SCHEDULE

Instruction:

1. Fill up all the missing information Click “save” button.

Expected Results:

1. All the schedule information will be displayed.
2. Successfully added.

Test Case 5:

Module: BUDGET RECORD

Instruction:

1. Fill up all the missing information Click “save” button.
2. On the Datagridview Click the Data

Expected Results:

1. Successfully added and Data will be displayed
2. ExpenseDetails will show and added expense goods will show

Test Case 6:

Module: ADD USER

Instruction:

1. Fill up user’s information
2. Click “Save” button

Expected Results:

1. User Successfully added
2. Display the list of users

Test Case 7:

Module: DASHBOARD

Instruction:

1. Click “DASHBOARD” button

Expected Results:

1. Display all the information count in different form provided

Test Case 8:

Module: EMPLOYEE LOG

Instruction:

1. Click “EMPLOYEE LOG” button

Expected Results:

1. Display all the user’s log history

Test Case 9:

Module: REPORTS

Instruction:

1. Click the “Report” button on menu.
2. Select the “Schedule Report”
3. Select “Beneficiary List Report” button
4. Select “Budget Record Report” button
5. Select “Nutritional Status Percentage Report” button
6. Select “Nutritional Status Report” button

7. Select “Height-For-Age Percentage Report” button

Expected Results:

1. Display the list reports
2. Generate a tabular report of schedule
3. Generate a tabular report of beneficiaries
4. Generate a tabular report of budgets recorded
5. Generate a graphical report of nutritional status percentage
6. Generate a graphical report of nutritional status
7. Generate a graphical report of height-for-age percentage

Technical Requirements

The proper selection of hardware and software components, as well as identification of people involved in the operation and network, were identified. This is necessary for proper usage so that the system could be used to its fullest capacity.

Hardware components refer to the physical parts of the computer. This includes the motherboard, processor, random access memory, and hard disk. However, there were only three (3) components which basically facilitate the processing of data. These components were the Microprocessor, Hard Disk Drive (HDD) and the Random-Access Memory (RA M). Thus, components were just specified in the presentation.

Software is the general name given to all programs, documentation, manuals, and routines necessary to make the computer usable. It is a set of

machine-readable instructions. The software produces an output that can be understood by human.

Peopleware refers to those who operate the system. The person-in-charge in the operating system is the BNS and Health/Daycare worker of Eastern Poblacion in Alburquerque, Bohol who is responsible in keeping of all the records of the beneficiaries, and must be computer literate and have a piece of knowledge about the system.

A network is a system of interconnected electric components or circuits. It connects two or more computers or other devices.

Minimum Hardware Specification

Component	Specification
Microprocessor	Intel Pentium, 1.6 Ghz
Hard Disk Drive	280 Gigabytes
Random Access Memory	4 Gigabytes, DDR3

Minimum Software Specification

Feeding Program Management System in Barangay Eastern Poblacion Alburquerque, Bohol requires a software to function properly. This software was enumerated below with its corresponding specifications. The specifications as provided were based on the specifications of the computer units utilized during the development of the system.

Components	Specification
Windows Operating System	Windows 8, 8.1, 10

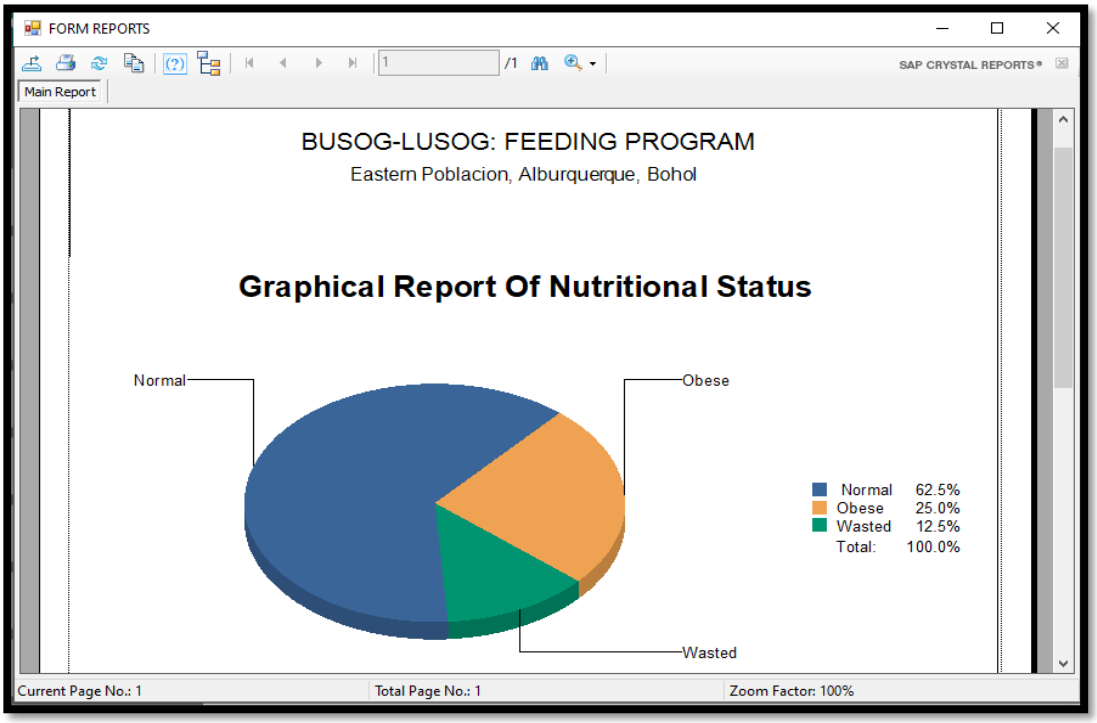
Business Intelligence

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 take business intelligence (BI) to a whole new level and getting the right information. The system integrated business intelligence specifically in the query and reporting component.

The developed system is capable of analyzing data and generating statistical reports thru tabular and graphical reports. Automated representation of information allows real time data representation. These generated tabular reports maybe used by the BNS and Health/Daycare worker of Eastern Poblacion as basis for monitoring of accomplishment of Information and the status of the beneficiaries.

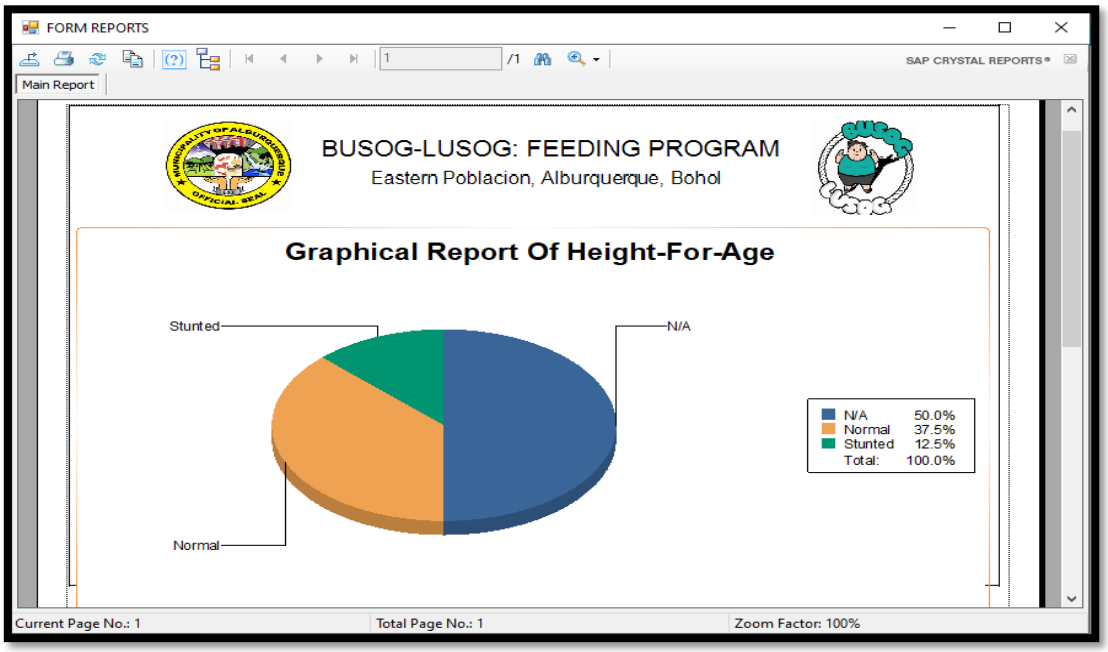
Reports under business intelligence are namely: Graphical Report of Nutritional Status Percentage Type, Graphical Report of Height-For-Age, Graphical Report of Individual Monitoring Tabular Report of Schedule, Tabular Report of Beneficiary List, Tabular Report of Nutritional Status, Tabular Report of Budget Record.

Preview 1 shows the graphical report of nutritional status percentage type.



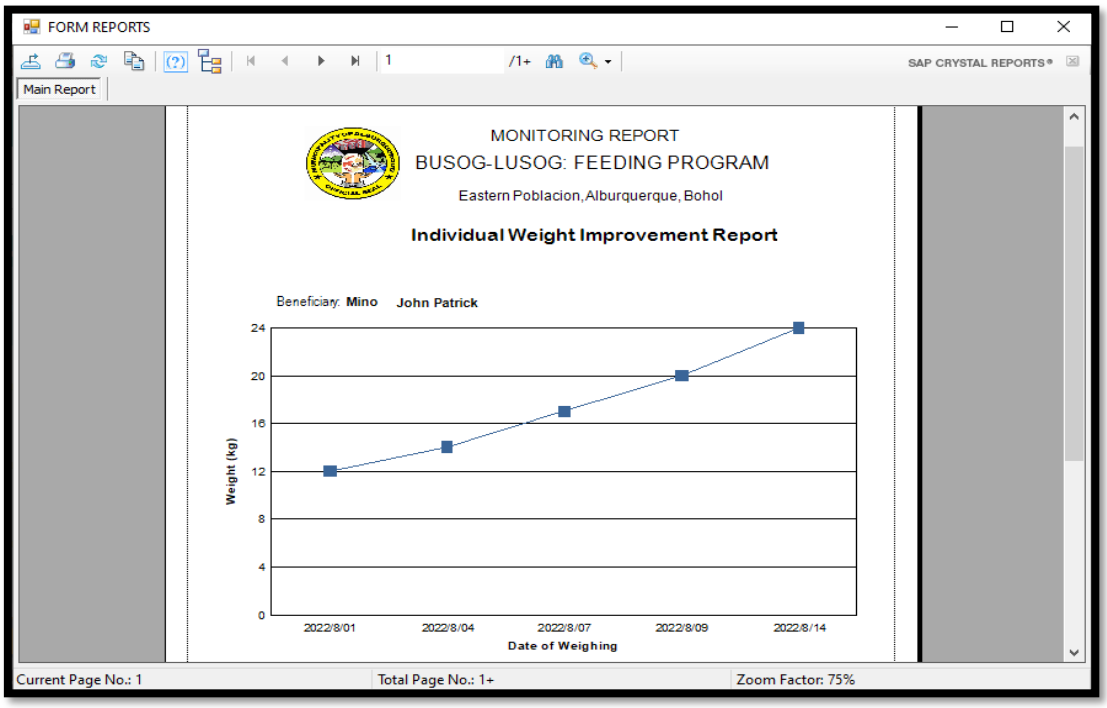
Preview 1. Nutritional Status Type Graphical Report

Preview 2 shows the graphical report height-for-age



Preview 2. Graphical Report of Height-For-Age

Preview 3 shows the graphical report individual monitoring report

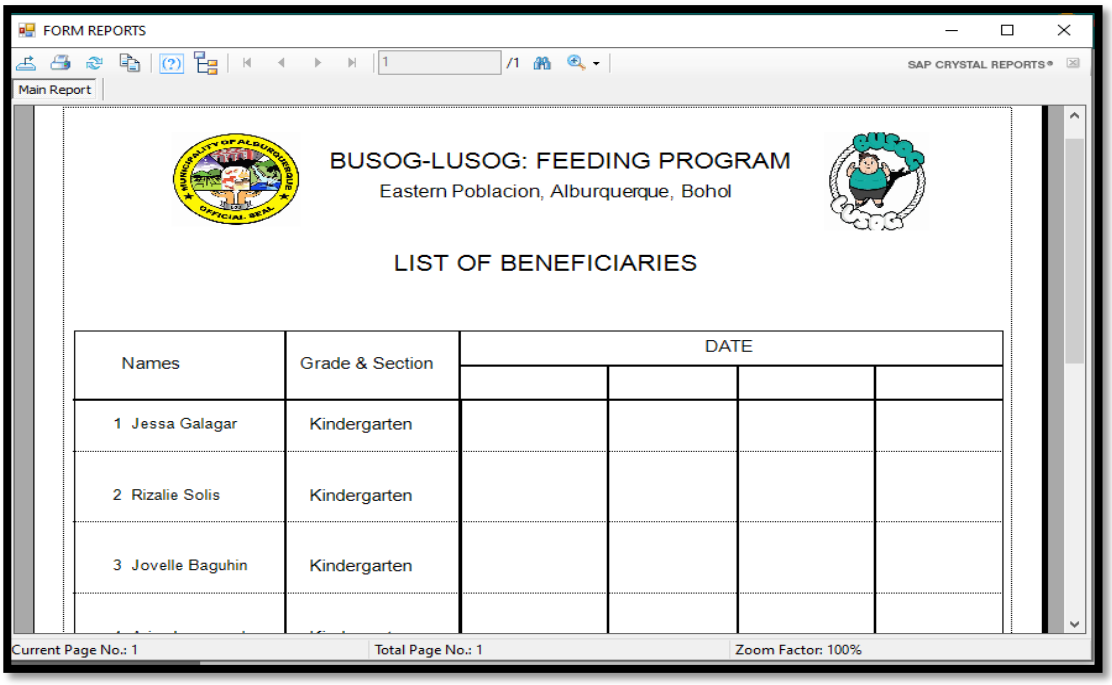


Preview 3. Graphical Report of Individual Monitoring Report

Preview 4 shows the tabular report of schedule.

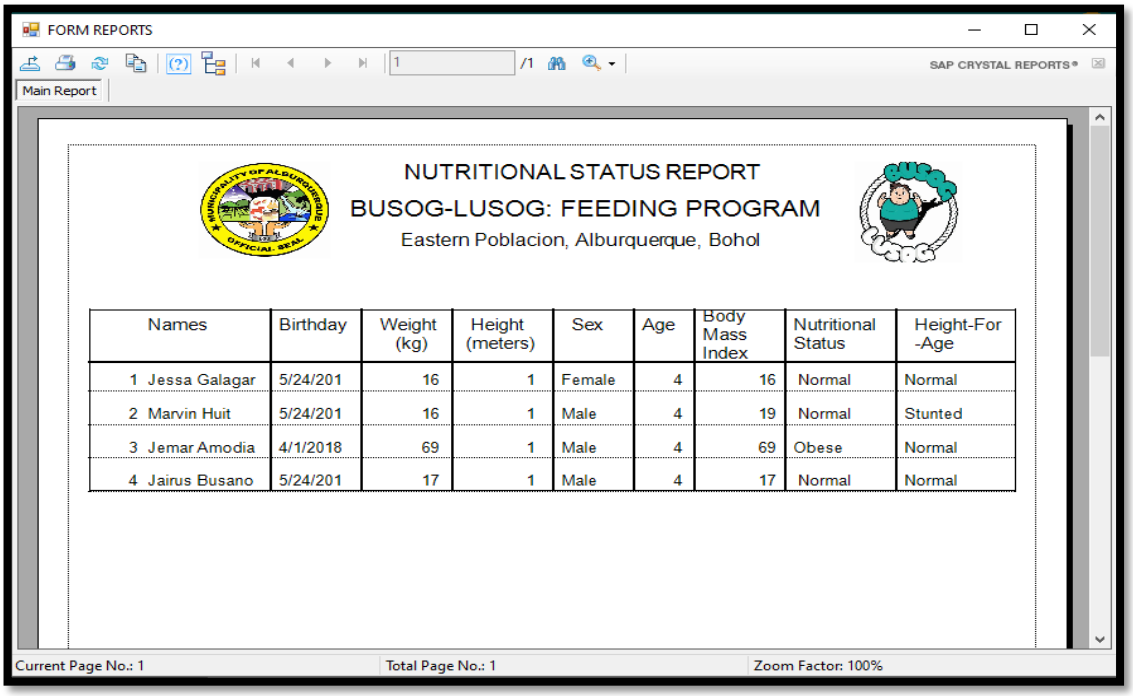
Preview 4. Tabular Report of Schedule.

Preview 5 shows the graphical status report of scholar.



Preview 5. Tabular Report of Beneficiary List

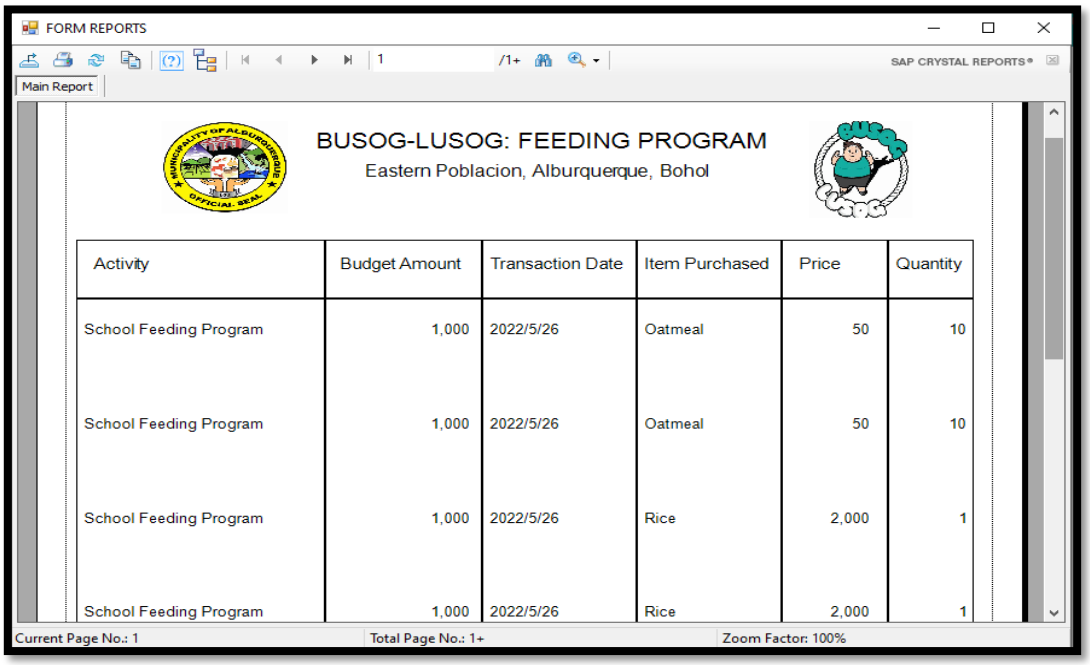
Preview 6 shows the tabular report of nutritional status



Names	Birthday	Weight (kg)	Height (meters)	Sex	Age	Body Mass Index	Nutritional Status	Height-For-Age
1 Jessa Galagar	5/24/201	16	1	Female	4	16	Normal	Normal
2 Marvin Huit	5/24/201	16	1	Male	4	19	Normal	Stunted
3 Jemar Amodia	4/1/2018	69	1	Male	4	69	Obese	Normal
4 Jairus Busano	5/24/201	17	1	Male	4	17	Normal	Normal

Preview 6. Tabular Report of Nutritional Status

Preview 7 Shows the Tabular of Budget Record Report.

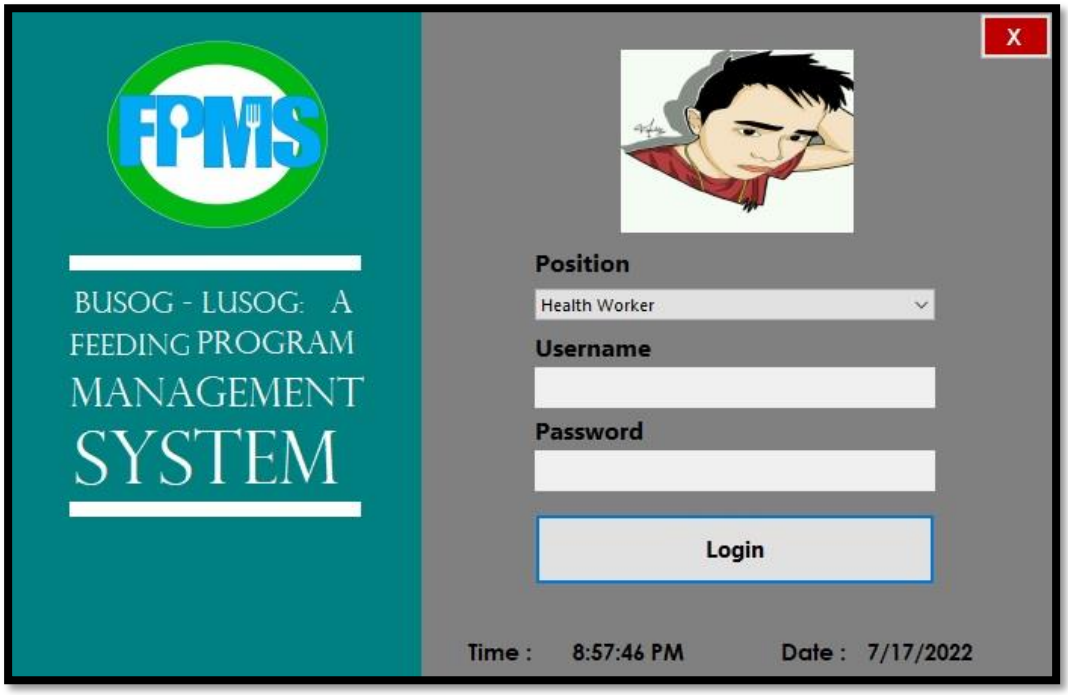


Preview 7. Tabular of Budget Record Report.

Screen Layout

The Screen layout describes the design of graphical user interfaces. It includes a wide variety of applications where screens or displays can be used as part of human-machine interaction and should be distinguished from the functions of a graphical user interface" (ryte.com, 2020). Screen Layout is one of the many attributes of the system's user-friendliness. It should be designed in such a way to navigate the system quickly, easily, and it should provide clear recognition of the task of the users need to perform.

Preview 8. shows the log-in display form for the user.

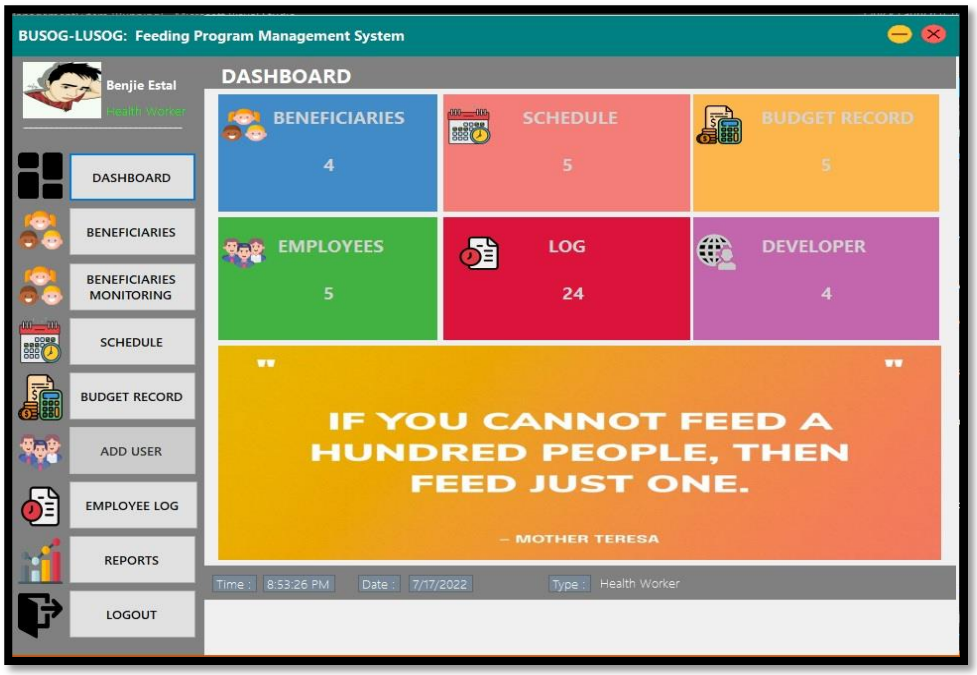


Preview 8. User Log-in Form

Preview 9 illustrates the loading screen form of the system.

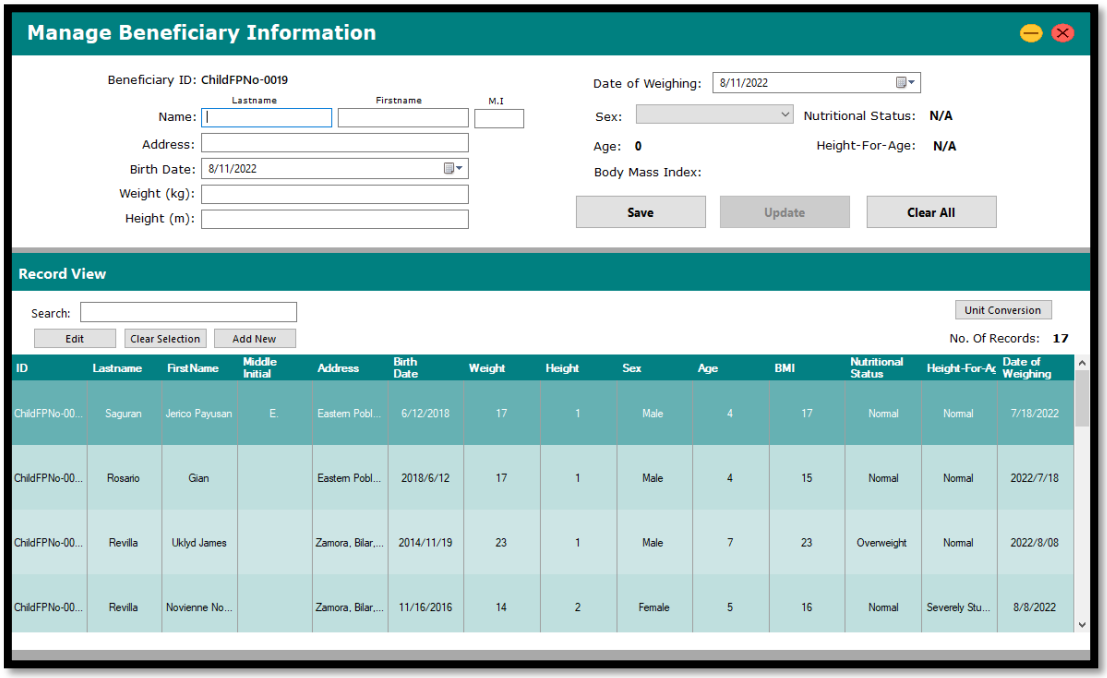
Preview 9. Loading Screen Form

Preview 10 presents the main dashboard form of the system.



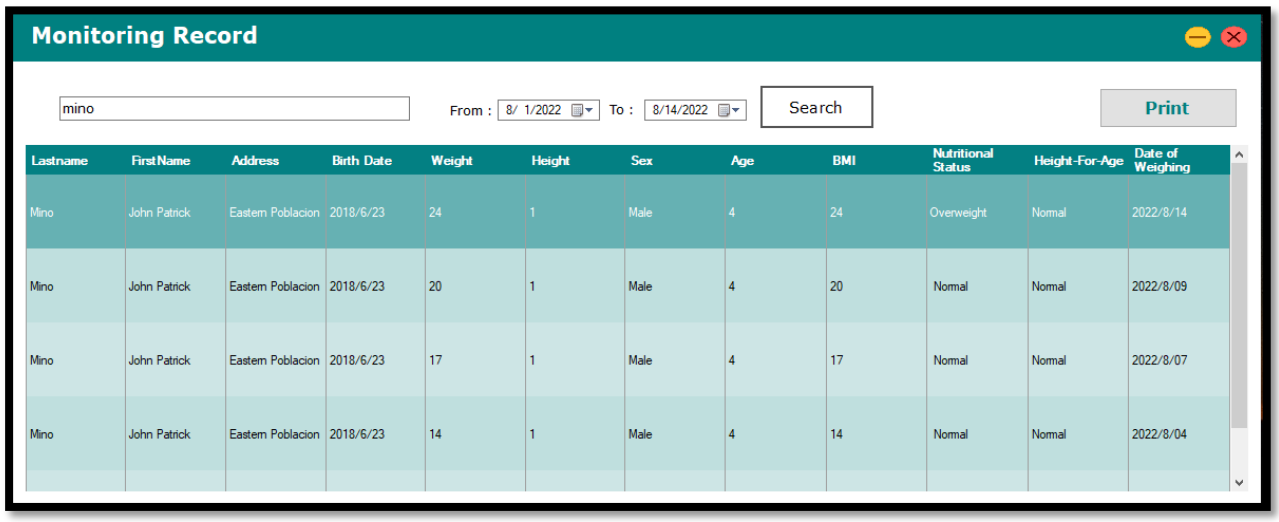
Preview 10. Main Dash Board Form

Preview 11 shows the adding of beneficiaries information.



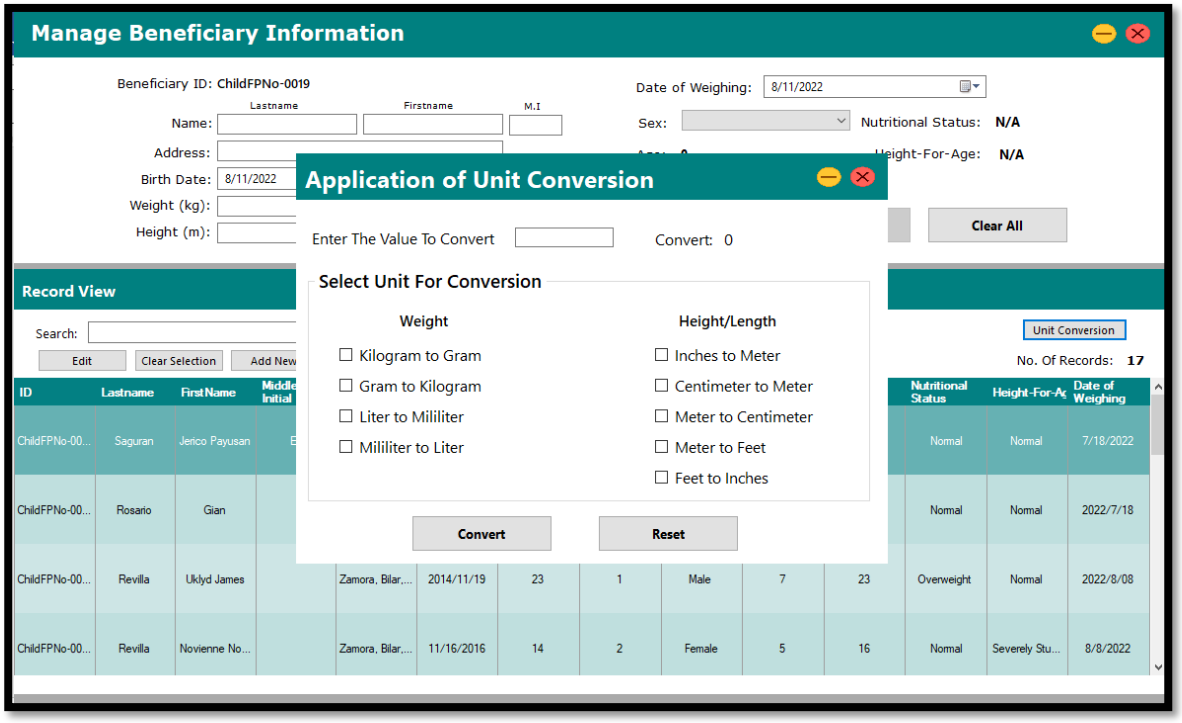
Preview 11. Adding of Beneficiaries Information Form

Preview 12 shows the graphical report individual monitoring.



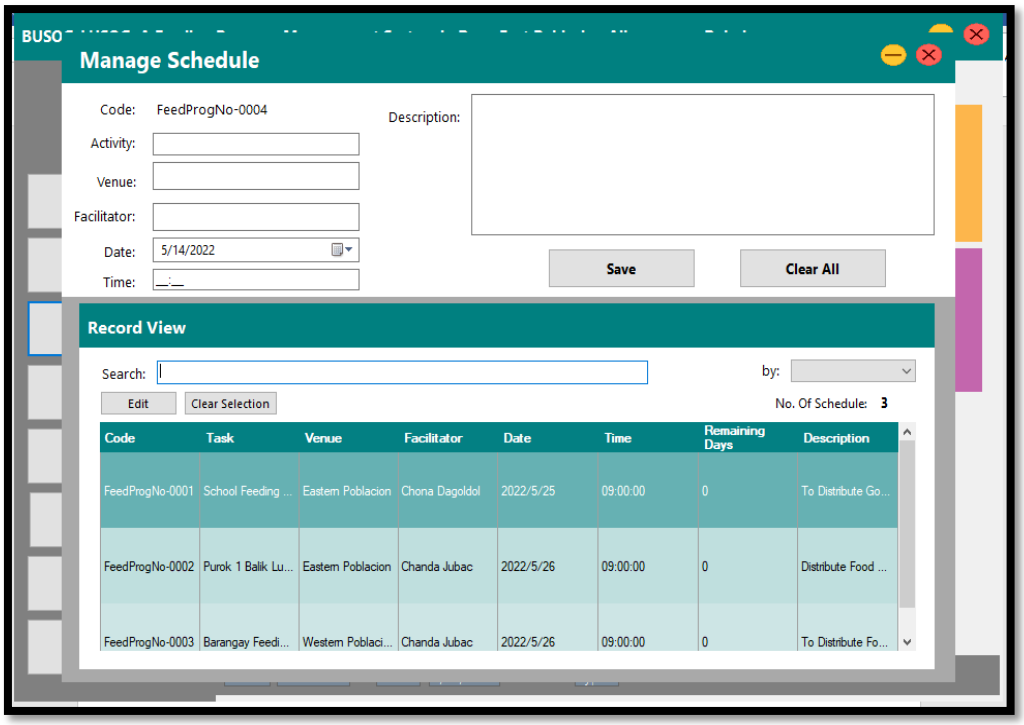
Preview 12. Beneficiaries' Monitoring Form.

Preview 13 Shows the Unit Conversion.



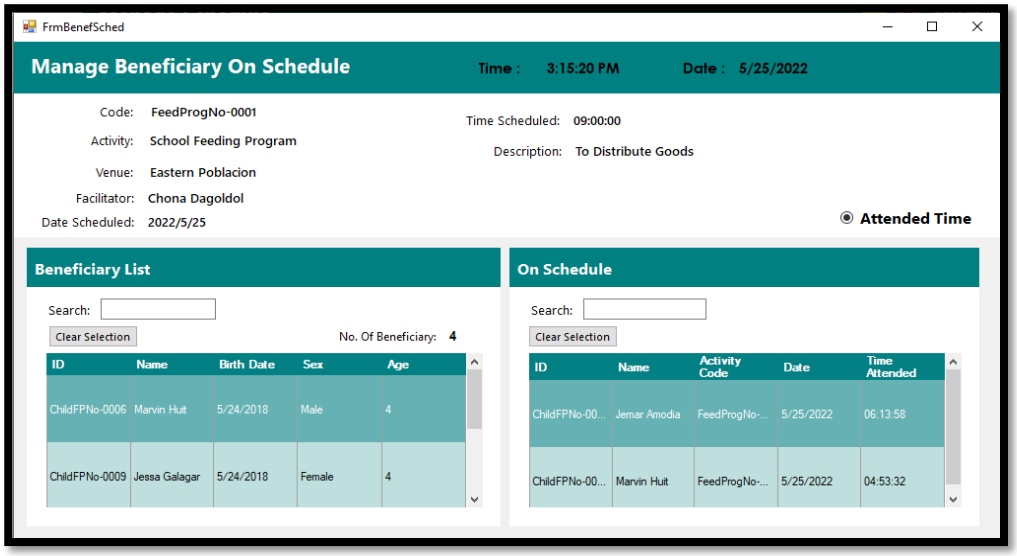
Preview 13. List of Unit Conversion Form

Preview 14 shows the adding of schedule.



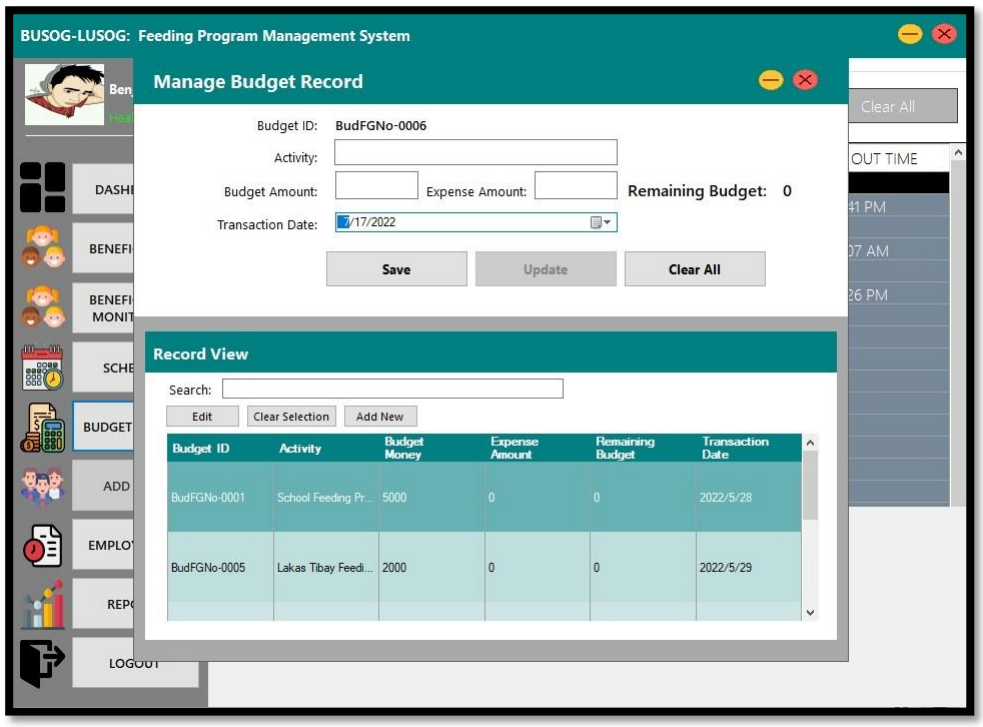
Preview 14. Adding Form for Schedule

Preview 15 presents the beneficiaries list attended.



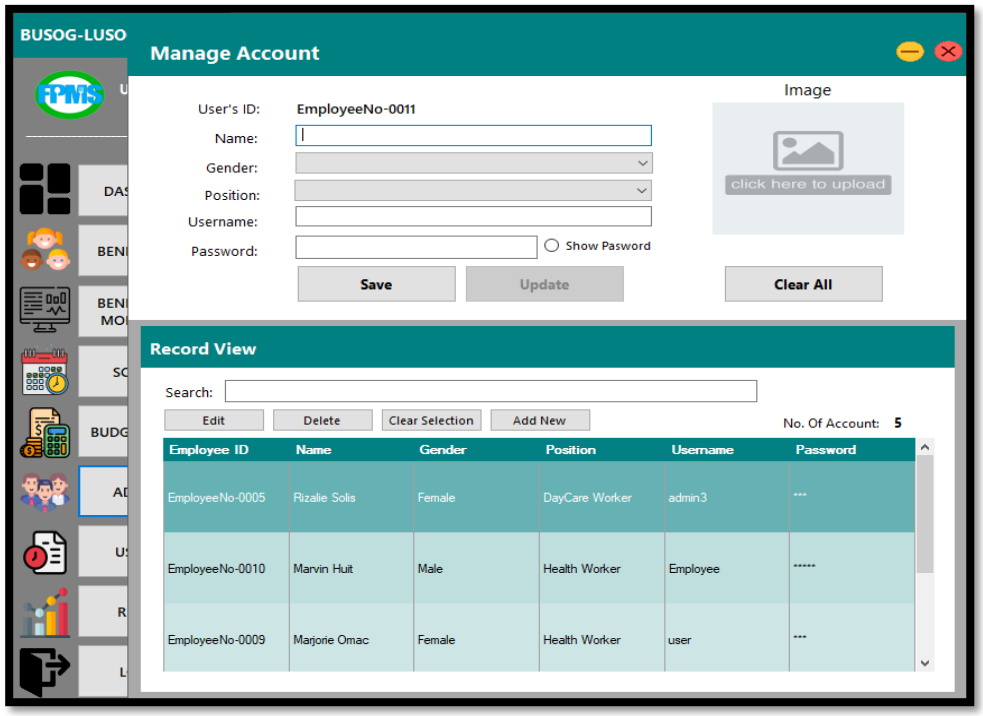
Preview 15. Beneficiaries List Attended Form

Preview 16 shows the recording of budget.



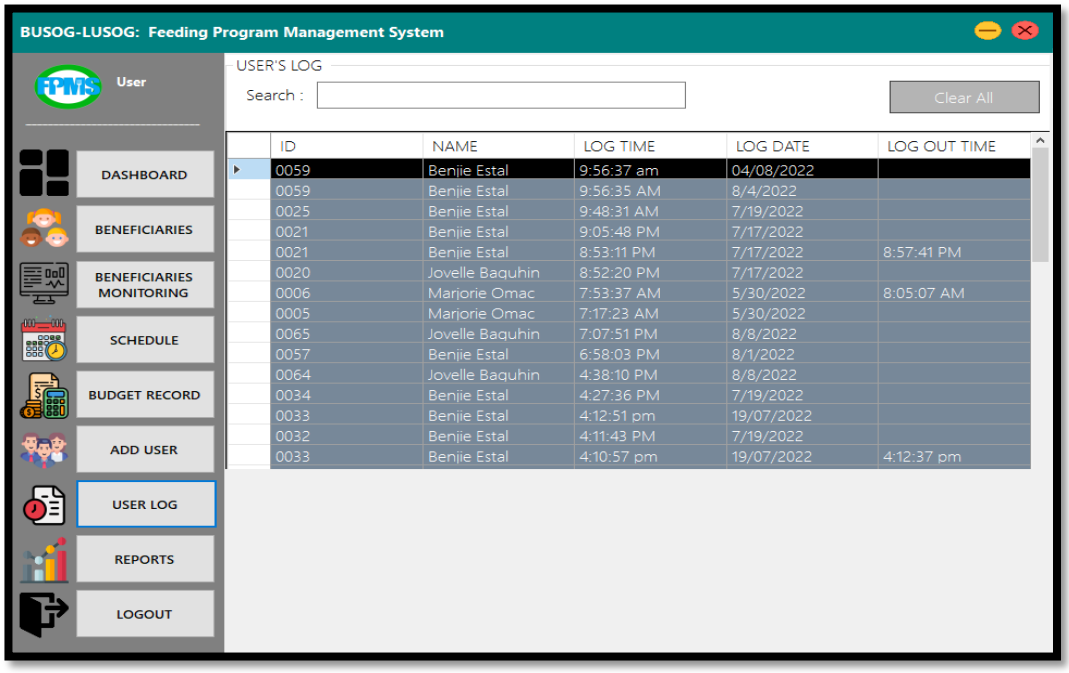
Preview 16. Budget Recording Form

Preview 17 shows the adding of users.



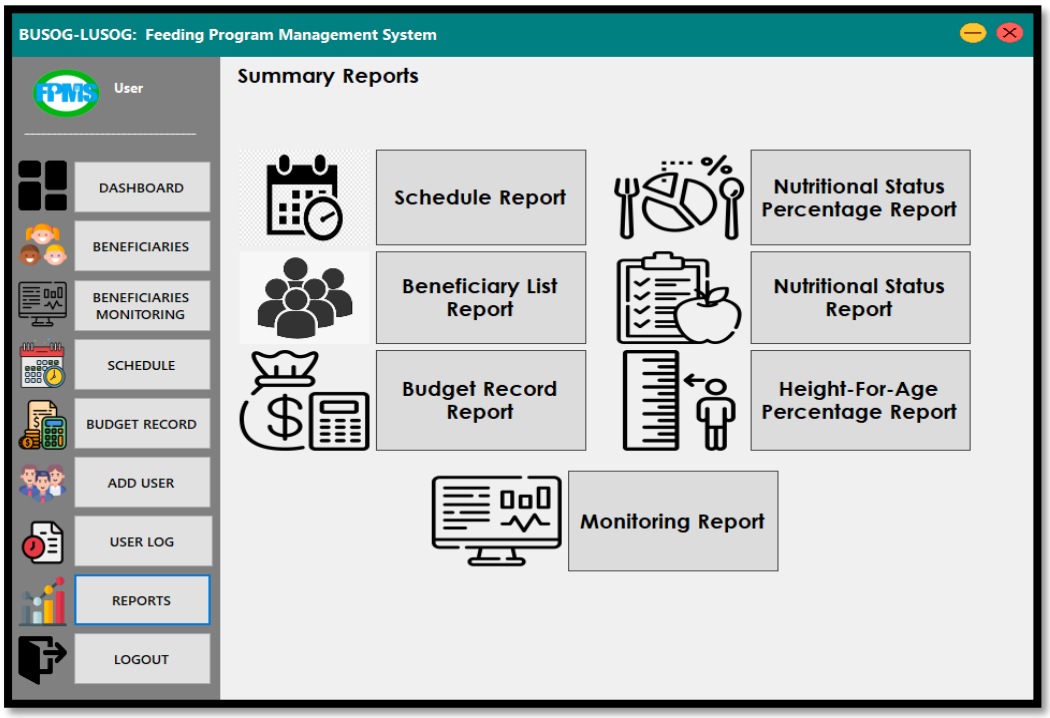
Preview 17. Adding of Users Form

Preview 18 shows the employees log form



Preview 18. Employees Log Form

Preview 19 presents the summary of reports



Preview 19. Summary of Reports Form

Economic Performance Evaluation

The economic performance of the BUSOG-LUSOG: A Feeding Program Management System in Barangay Eastern Poblacion, Alburquerque Bohol was evaluated in terms of initial investment and annual operating cost. The initial investment was the amount required by the client before the commencement of the operation and implementation of the system. On the other hand, the annual operating cost was the total amount required in one year of implementation. There include office supplies, utilities, system maintenance, and other related expenditures. The table below presents the required investment and annual operating cost in the adoption of the system. Based on the result of the analysis, adopting the system would require a total amount of ₱ **67,066.00**.00 for the first year of implementation.

The estimated amount would provide an idea to the client whether to adopt the computerization for feeding program management system or not.

Table 13

Initial Investment and annual Operating Cost

Item	Qty	Unit	Unit Price	Total
A. Initial Investment				
1. Hardware				
Desktop Computer	2	Set	₱ 20,000.00	₱ 40,000.00
Printer	1	Piece	₱ 7,500.00	₱ 7,500.00
Printer Ink	4	Pieces	₱ 350.00	₱ 1,400.00
			Sub-total	**₱ 48,900.00**
2. Software				
Software Licensing			₱ 8,000.00	₱ 8,000.00
Software Installation			₱ 1,000.00	₱ 1,000.00
			Sub-total	**₱ 9,000.00**

			Total Initial Investment Cost	**₱ 57,900.00**
B. Annual Operating Cost				
1. Office Supplies				
Bond paper	1	Reams	₱ 300.00	₱ 300.00
Ball Pen	3	Pieces	₱ 8.00	₱ 16.00
Stapler	1	Pieces	₱ 90.00	₱ 90.00
2. UTILITIES				
Electricity	12	Months	₱ 230.00	₱ 2,760.00
3. GENERAL SERVICES				
System Maintenance	4	Quarters	₱ 1,500.00	₱ 6,000.00
			Sub-total	₱ 9,166.00
			Total Annual Operating Cost	**₱ 67,066.00**

Testing and Evaluation

System testing of the application is usually done on complete application software to evaluate software's overall compliance with the business, functional, and end-user requirements. In system testing, a software test professional aims to detect defects or bugs both within the interfaces and also within the software as a whole. However, during integration testing of the application or software, the tester aims to detect the bugs or defects between the individual units that were integrated. During system testing, the focus is on the software design, behavior and even the believed expectations of the customer. Thus, a significant aspect of the design should be developed to ensure that the artifact meets the specified requirements, that is, the evaluation of the system. System usability was used as a parameter in this study.

System Usability

The researchers adopted a system usability questionnaire by Lewis, J. R. (1995). The system usability test was conducted by the researchers of

Alburquerque. The test was done on May 24, 2022 at around 9:30 to 10:30 in the morning. It took 1 hour to demonstrate and do a hands-on activity on system usaibility. Then respondents were the Barangay Nutrition Scholar, and the DayCare/Health Workers of Eastern Poblacion, Alburquerque, Bohol. The researchers demonstrated how the system must be used for testing. They demonstrated the system in detail like the recording process, and generation of reports. The researchers also presented graphical reports of nutritional status percentage type, graphical report of height-for-age, graphical report of individual monitoring, tabular report of schedule, tabular report of beneficiary list, tabular report of nutritional status, tabular report of budget record.

Table 14

System Usability Result

Criteria for system usability	Weighted Mean	Rating
1. Overall, I am satisfied with how easy it is to use this system.	6.30	Strongly Agree
2. It was simple to use this system.	6.00	Agree
3. I can effectively complete my work using this system.	6.00	Agree
4. I am able to complete my work quickly using this system.	5.60	Agree
5. I am able to effectively complete my work using this system.	6.00	Agree
6. I feel comfortable using this system.	6.00	Agree
7. It was easy to learn to use this system.	5.60	Agree
8. I believe I became productive quickly using this system.	6.00	Agree
9. The system gives error messages that clearly tell me how to fix problems.	6.30	Strongly Agree
10. Whenever I make a mistake using the system, I recover easily and quickly.	6.00	Agree

11. The information (such as online help, on-screen messages, and other documentation) provided with this system is clear.	6.30	Strongly Agree
12. It is easy to find the information I needed.	6.30	Strongly Agree
13. The information provided for the system is easy to understand.	6.30	Strongly Agree
14. The information is effective in helping me complete tasks and scenarios.	6.30	Strongly Agree
15. The organization of this system screens is clear.	6.30	Strongly Agree
16. The interface of this system is pleasant,	6.00	Agree
17. I like using the interface of this system.	5.60	Agree
18. This system has all the functions and capabilities I expect it to have.	5.60	Agree
19. Overall, I am satisfied with this system.	6.30	Strongly Agree
AVERAGE WEIGHTED	6.0	Agree

Chapter 3

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

Summary of Findings

Based on the results of the study, the researchers found out that the Eastern Poblacion barangay office used the manual method in recording and management of information. Moreover, the said office has been using Microsoft Office in the printing of Informations of Beneficiaries, Graphical Report of Nutritional Status Percentage Type, Graphical Report of Height-For-Age, Graphical Report of Individual Monitoring, Tabular Report of Schedule, Tabular Report of Beneficiary List, Tabular Report of Nutritional Status, Tabular Report of Budget Record. There was a greater chance of running into issues like difficulty accessing and updating beneficiaries' records in tracking, potential record loss, unsecured documents, and difficulty customizing reports, all of which contribute to slow record and report retrieval. The researchers came up with a solution that protected the beneficiaries' data and information to prevent loss or misplacement, ease of access, and timely generation of tabular and graphical reports, based on the defined problems and issues in documenting and managing records.

Conclusion

The recording and monitoring frameworks were generated based on the defined needs, with the following modules: data processing, recording, administration, and report generation. The developed framework was put through

its paces and evaluated for usability. The respondents gave an “Agree” rating based on the evaluation results, suggesting that they were pleased with the features such as ease of use, visual clarity, language, and its implementation in general.

Recommendation

Based from the observations during implementation and on the aforementioned conclusions, the researchers have suggested the following for smooth system adaptation and operation, as well as for future development.

1. Office of the barangay must adjust to the developed system in order to enhance record keeping and identify any glitches or errors.
2. To familiarize and orient the target users with the functionality and function of the new system, a training and orientation must be performed by developers.
3. System maintenance must be done on a regular basis to ensure the protection of records and the system’s dependability by developers.

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APPENDICES

APPENDIX A

LETTER OF INTENT

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

May 20,2022

MRS. CHONA H. DAGOLDOL
Daycare Worker
6302 Purok Conan Eastern Poblacion
Alburquerque, Bohol

Ma'am:

Greetings!

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 Feeding Management System as basis for our proposed automation. This study would include an interview, observation of transactions and review of documents significant of 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!
Respectfully Yours,

ESTAL BENJIE

LAGUNSAD ARJAY

SOLIS RIZALIE

BAGUHIN JOVELLE

Noted by:

RENANTE DIGAMON, Ph. D
Subject Adviser

DARREL CARDAÑA
Thesis Adviser

Recommended by:

SHEILA G. TABUNO
Chairperson, DCoS

Endorsed by:

ARLENE B. GUDMALIN, Ph. D
Dean, CTAS

Approved by:

CHONA H. DAGOLDOL
DayCare Worker

DEBBIE LIWAGON
Barangay Heath Worker

ARSENIO A. ACLA
Designate Barangay Captain

LETTER OF IMPLEMENTATION

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

May 24,2022

MRS. CHONA H. DAGOLDOL
Daycare Worker
6302 Purok Conan Eastern Poblacion
Alburquerque, Bohol

Ma'am:

Greetings!

It is our pleasure to inform you that the system "Busog-Lusog: Feeding Program Management System in Eastern Poblacion Alburquerque Bohol" is now on its final phase. With this, we would like to conduct benchmarking activities as part of the implementation.

It will be conducted on May 24,2022 at exactly 1:00 – 4:00 PM at Eastern Poblacion, Alburquerque 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 bless you and your business.

Respectfully Yours,

ESTAL BENJIE

LAGUNSAD ARJAY

SOLIS RIZALIE

BAGUHIN JOVELLE

Noted by:

RENANTE DIGAMON, Ph. D
Subject Adviser

DARREL CARDAÑA
Thesis Adviser

Recommended by:

SHEILA G. TABUNO
Chairperson, DCoS

Endorsed by:

ARLENE B. GUDMALIN, Ph. D
Dean, CTAS

Approved by:

CHONA H. DAGOLDOL
DayCare Worker

DEBBIE LIWAGON
Barangay Heath Worker

ARSENIO A. ACLA
Designate Barangay Captain

Letter of Questionnaire Distribution

Bohol Island State University

Bilar Campus

Zamora Bilar, Bohol

May 24, 2022

Greetings!

We, the system developer of the new automated system would like to get your views and opinions in the developed system, Thus, this survey is conducted. We wish to know your feedback as we worked for the improvement of the system. Your Input would be very valuable.

We really appreciate it if you would take time and complete the questionnaire. The data that would 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 gladly assist you.

We wish to convey our heartfelt gratitude to the establishments for allowing us to conduct the study, to all the people who helped, who had inspired as to dream greater. Thank you so much! Together let us build a better world for everyone.

-The Developers

Interview Guide Questions

BNS

1. How are these records being kept and retrieve?
2. Who can access the system?
3. How many beneficiaries every year?
4. What are the data to be collected in the present system?

Barangay Health Workers

5. How is this procedure being done?
6. What are the problems encountered in collecting data?
7. What are the procedures in collecting data?
8. Who is in-charge of all the data and files?

DayCare Worker

9. Who are the beneficiaries?
10. When is this information recorded?
11. What are the current processes involved in implementing the feeding program?
12. What are the needs in the management of records in the feeding program?

APPENDIX B

System Usability Questionnaire

Instructions:

- Please rate the usability questioner
- 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

	System Usability Criteria	Weighted Mean	Interpretation
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 extremely complete my work using this system.		
4	I am able to efficiently complete my work using this system.		
5	I can effectively 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,		
11	I recover easily and quickly.		

12	The information (such as on-line help, on-screen messages and other documentation) provided with this system is clear.		
13	It is easy to find the information I need.		
14	The information provided with the system is easy to understand.		
15	The information provided is effective in helping me complete the tasks and scenarios.		
16	The organization of information on the system screens is clear.		
17	The interface of this system is pleasant		
18	I like using the interface of this system.		
19	This system has all the functions and capabilities I expect it to have.		
20	Overall, I am satisfied with this system.		
	Total Average		

Based on Lewis J.R (1995) IBM Computer Usability Satisfaction Questioners:

Psychometric Evaluation & Instruction for Use

APPENDIX C

User's Manual

Login Form

Steps:

1. On the login form select the type of user.
2. Enter username and password
3. Then click the "Login" button.
4. Loading screen will appear.

BENEFICIARIES

Steps:

1. Click "BENEFICIARIES" button
2. Fill in the Beneficiaries Information section to save.
3. Confirmation "Successfully Save" will appear.

BENEFICIARIES MONITORING

Steps:

4. Click "BENEFICIARIES MONITORING" button.
5. Search the information of the specific beneficiary and date "form-to".
6. Then click "Print".

SCHEDULE

Steps:

1. Click "SCHEDULE" button.
2. Fill in the information section to save.
3. Confirmation "Successfully Save".

BUDGET RECORD

Steps:

1. Click "BUDGET RECORD" button.

2. Fill in the information section to save.
3. Confirmation “Successfully Save”.

ADD USER

Steps:

1. Click “ADD USER” button.
2. Fill in the information to save.
3. Confirmation “Successfully Registered”.

Dashboard

Steps:

1. Click “DASHBOARD” button.
2. Display all information count in different form provided.

User’s Log

Steps:

1. Click “USER LOG” button.
2. Display all the user’s log in history.

Reports

Steps:

1. Click “REPORT” button.
2. Select the “Schedule Report” button.
3. Select the “Beneficiary List Report” button.
4. Select the “Budget Record Report” button.
5. Select the “Nutritional Status Report Percentage” button.
6. Select the “Nutritional Status Report” button.
7. Select the “Height-For-Age Percentage Report” button.

APPENDIX D

Login Form

```
Imports MySql.Data.MySqlClient

Public Class FrmLogin

    Dim b As Boolean = False
    Sub scan()
        Dim benj As String = "123"
        Dim sc As String = "select * from user where
Username='" & user.Text & "' and Password='" &
pass.Text & "' and Position='" & combopos.Text & "'"
            Dim cmd As New MySqlCommand(sc,
connect)
            connect.Open()
            Dim dr As MySqlDataReader =
cmd.ExecuteReader
            If dr.HasRows Then
                While dr.Read
                    b = True
                End While
            End If
            connect.Close()
    End Sub

    Sub luser()
        Dim s As String = "select * from user where
Username='" & user.Text & "' and Password='" &
pass.Text & "'"
        Dim t As New MySqlCommand(s, connect)
        connect.Open()
        Dim d As MySqlDataReader = t.ExecuteReader
        If d.HasRows Then
            While d.Read
            End While
        End If
        connect.Close()
    End Sub

    Function AutoID(ByVal Tablename As String,
ByVal Fieldname As String) As Int32
        Dim cmd As New MySqlCommand
        Dim dr1 As MySqlDataReader
        cmd.Connection = connect
        cmd.CommandType = CommandType.Text
        cmd.CommandText = "select " & Fieldname & "
from " & Tablename & " Order by 1 Desc Limit 1 "
        If connect.State = ConnectionState.Closed Then
connect.Open()
        dr1 = cmd.ExecuteReader
        If dr1.Read = True Then
            AutoID = Microsoft.VisualBasic.Right(dr1(0),
4) + 1
        Else
            AutoID = 1
        End If
        dr1.Close()
        connect.Close()
    End Function

    Sub incremid()
        myid.Text = Format(AutoID("log_info", "iddd"),
"0000")
    End Sub

    Private Sub AUTOCOMPLETE()
        Dim benest As New DataTable
        Dim bench As New DataSet
        bench.Tables.Add(benest)
        Dim estal As New MySqlDataAdapter("Select
Name from user", connect)
        estal.Fill(benest)
        Dim r As DataRow
        user.AutoCompleteCustomSource.Clear()
        For Each r In benest.Rows

user.AutoCompleteCustomSource.Add(r.Item(0).ToSt
ring)
            'PARA NI SA PAG SEARCH BISAN WAKAY
DGVIEW NGA GETAN AWAN FILTER NI SYA'
        Next
        connect.Close()
    End Sub

    Sub logins()
        Dim s As String = "insert into
log_info(iddd,sd,fnme,intim,indat,user)values('" &
myid.Text & "','" & combopos.Text & "','" & fanme.Text
& "','" & tim.Text & "','" & dat.Text & "','" & user.Text &
"')"
        Dim cmd As New MySqlCommand(s, connect)
        connect.Open()
        cmd.ExecuteNonQuery()
        connect.Close()
    End Sub

    Private Sub loginbtn_Click_1(sender As Object, e
As EventArgs) Handles loginbtn.Click
        If combopos.Text = Nothing Or user.Text =
Nothing Or pass.Text = Nothing Then
            MsgBox("Please fill out missing form",
MsgBoxStyle.Exclamation, "Security")
            Return
        End If
        b = False
        scan()
        If b = True Then
            logins()
            Me.Hide()
            FrmWelcome.Show()
```

```
        Else
            MsgBox(" Account Doesnt Exist",
MsgBoxStyle.Information, "System Checked")
            pass.Text = Nothing
            pass.Focus()
            Return
        End If
    End Sub

    Sub changepic()
        If b = True Then
            Picturebox1.Show()
        End If
    End Sub

    Sub pictures()
        Dim arrImage() As Byte
        Try
            Dim sql As String = "SELECT Name,Image
FROM user WHERE Username= '" & user.Text & "'"
            Dim cmd As New MySqlCommand(sql,
connect)
            connect.Open()
            Dim dr As MySqlDataReader =
cmd.ExecuteReader
            If dr.HasRows Then
                While dr.Read
                    arrImage = dr.Item("Image")
                    Dim mstream As New
System.IO.MemoryStream(arrImage)
                    Picturebox1.Image =
Image.FromStream(mstream)

                End While
            End If
        Catch ex As Exception
            MsgBox(ex.Message)
            Exit Sub
        End Try
        connect.Close()
    End Sub

    Sub searchname()
        Dim da As New MySqlDataAdapter("Select
Name from user where Username = '" & user.Text &
"';", connect)
        Dim benest As New DataSet
        da.Fill(benest)
        If benest.Tables(0).DefaultView.Count > 0 Then
            fanme.Text =
benest.Tables(0).DefaultView.Item(0).Item(0)
        End If
    End Sub

    Sub searlog()
        Dim da As New MySqlDataAdapter("Select
EmployeeID from user where Name = '" & user.Text &
"' order by Name;", connect)
        Dim jink As New DataSet
        da.Fill(jink)
        If jink.Tables(0).DefaultView.Count > 0 Then
            frmMain.idemp.Text =
jink.Tables(0).DefaultView.Item(0).Item(0)
        End If
    End Sub

    Private Sub user_TextChanged(sender As Object,
e As EventArgs) Handles user.TextChanged
        pictures()
        searchname()
        AUTOCOMPLETE()
        searlog()
    End Sub

    Private Sub Timer1_Tick(sender As Object, e As
EventArgs) Handles Timer1.Tick
        dat.Text = Date.Now.Date
        tim.Text = TimeOfDay
    End Sub

    Private Sub Button2_Click(sender As Object, e As
EventArgs) Handles Button2.Click
        Me.Close()
    End Sub

    Private Sub FrmLogin_Load(sender As Object, e
As EventArgs) Handles MyBase.Load
        AUTOCOMPLETE()
        incremid()
        clr()
    End Sub
    Sub clr()
        user.Text = ""
        pass.Text = ""
    End Sub

End Class
```

Dashboard Form

```
Imports MySql.Data.MySqlClient
Imports System.IO
Public Class FrmDashboard

    Private Sub Button1_Click(sender As Object, e As
EventArgs)
        FrmInformation.Show()
    End Sub

    Private Sub Button2_Click(sender As Object, e As
EventArgs)
        FrmSchedule.Show()
    End Sub

    Private Sub Button3_Click(sender As Object, e As
EventArgs)
        FrmFinance.Show()
    End Sub
    Private Sub Button6_Click(sender As Object, e As
EventArgs)
        FrmAccount.Show()
    End Sub
```

```
    Private Sub Button4_Click(sender As Object, e As
EventArgs)
        FrmReport.Show()
    End Sub

    Private Sub Timer2_Tick(sender As Object, e As
EventArgs) Handles Timer2.Tick

    End Sub

    Private Sub Timer1_Tick(sender As Object, e As
EventArgs) Handles Timer1.Tick
        dat.Text = Date.Now.Date
        tim.Text = TimeOfDay
    End Sub

    Private Sub FrmDashboard_Load(sender As
Object, e As EventArgs) Handles MyBase.Load
        Timer3.Start()
        'Dim con As New MySqlConnection
        Dim beneficiary_cmd, schedule_cmd,
budget_cmd, employee_cmd, log_cmd As New
MySqlCommand
        ' con.ConnectionString =
"Server=localhost;password=;user=root;database=fp
ms;"
        connect.Open()

        Try
            Dim beneficary_query As String = "SELECT
count(*) FROM beneficiaries_info"
            beneficiary_cmd = New
MySqlCommand(beneficary_query, connect)
            Dim beneficiary_count As String
            beneficiary_count =
beneficiary_cmd.ExecuteScalar()

            Dim schedule_query As String = "SELECT
count(*) FROM schedule_info"
            schedule_cmd = New
MySqlCommand(schedule_query, connect)
            Dim schedule_count As String
            schedule_count =
schedule_cmd.ExecuteScalar()

            Dim budget_query As String = "SELECT
count(*) FROM budget_info"
            budget_cmd = New
MySqlCommand(budget_query, connect)
            Dim budget_count As String
            budget_count = budget_cmd.ExecuteScalar()

            Dim employee_query As String = "SELECT
count(*) FROM user"
            employee_cmd = New
MySqlCommand(employee_query, connect)
            Dim employee_count As String
            employee_count =
employee_cmd.ExecuteScalar()

            Dim log_query As String = "SELECT count(*)
FROM log_info"
            log_cmd = New MySqlCommand(log_query,
connect)
            Dim log_count As String
            log_count = log_cmd.ExecuteScalar()

            bene.Text = beneficiary_count
            sched.Text = schedule_count
            bud.Text = budget_count
            emp.Text = employee_count
            log.Text = log_count

        Catch ex As Exception
            MsgBox(ex.Message)
        End Try
        connect.Close()
        type.Text = (FrmLogin.combopos.Text)
    End Sub

    Private Sub Timer3_Tick(sender As Object, e As
EventArgs) Handles Timer3.Tick
        If pic1.Visible = True Then
            pic1.Visible = False
            pic2.Visible = True
        ElseIf pic2.Visible = True Then
            pic2.Visible = False
            pic3.Visible = True
        ElseIf pic3.Visible = True Then
            pic3.Visible = False
            pic1.Visible = True
        End If
    End Sub

End Class
```

Adding of Beneficiaries Form

```
Imports MySql.Data.MySqlClient
Imports System.IO
Public Class FrmInformation

    Sub clear()
        loadidd()
        benef.Text = ""
        frstnem.Text = ""
        midint.Text = ""
        address.Text = ""
        birtd.Text = Date.Now
        weight.Text = ""
        height.Text = ""
        sex.Text = ""
        ag.Text = "0"
        bmi.Text = ""
        nutstat.Text = "N/A"
        hfa.Text = "N/A"
        dtscaled.Text = Date.Now
        benef.Focus()
    End Sub

    Sub enableControl()
        benef.Enabled = True
```

```
        frstnem.Enabled = True
        midint.Enabled = True
        address.Enabled = True
        birtd.Enabled = True
        weight.Enabled = True
        height.Enabled = True
        sex.Enabled = True
        bmi.Enabled = True
        nutstat.Enabled = True
        hfa.Enabled = True
        dtscaled.Enabled = True
    End Sub

    Sub counter()
        Dim count As Integer
        For i As Integer = 0 To dgviewinfo.RowCount - 1
            count += 1
        Next
        tots.Text = count
    End Sub

    Function AutoID(ByVal Tablename As String,
ByVal Fieldname As String) As Int32
        Dim cmd As New MySqlCommand
        Dim dr1 As MySqlDataReader
        cmd.Connection = connect
        cmd.CommandType = CommandType.Text
        cmd.CommandText = "select " & Fieldname & "
from " & Tablename & " Order by 1 Desc Limit 1 "
        If connect.State = ConnectionState.Closed Then
connect.Open()
        dr1 = cmd.ExecuteReader
        If dr1.Read = True Then
            AutoID = Microsoft.VisualBasic.Right(dr1(0),
4) + 1
        Else
            AutoID = 1
        End If
        dr1.Close()
        connect.Close()
    End Function

    Sub loadidd()
        childid.Text = "ChildFPNo-" &
Format(AutoID("beneficiaries_info", "childIDD"),
"0000")
    End Sub

    Sub listrecord()
        Dim s As String = "select childIDD as `ID`, benef
as `Lastname`,benefname as `FirstName`,midinitial
as `Middle Initial`,address as `Address`, bdate as
`Birth Date`,weight as `Weight`,height as `Height`,sex
as `Sex`,age as `Age`,bmi as `BMI`,nutstat as
`Nutritional Status`,hfa as `Height-For-Age`,
datescaled as `Date of Weighing` from
beneficiaries_info order by benef desc"

        Dim da As New MySqlDataAdapter(s, connect)
        connect.Open()
        Dim ds As New DataSet
        da.Fill(ds, "beneficiaries_info")
        da.Dispose()
        dgviewinfo.DataSource = ds.Tables(0)
        connect.Close()

    End Sub

    Sub retsearch()
        Dim s As String = "select childIDD as `ID`, benef
as `Lastname`,benefname as `FirstName`,midinitial
as `Middle Initial`,address as `Address`, bdate as
`Birth Date`,weight as `Weight`,height as `Height`,sex
as `Sex`,age as `Age`,bmi as `BMI`,nutstat as
`Nutritional Status`,hfa as `Height-For-Age`,
datescaled as `Date of Weighing` from
beneficiaries_info where benef like '" +
searchinfo.Text + "%'"

        Dim da As New MySqlDataAdapter(s, connect)
        connect.Open()
        Dim ds As New DataSet
        da.Fill(ds, "beneficiaries_info")
        da.Dispose()
        dgviewinfo.DataSource = ds.Tables(0)
        connect.Close()
    End Sub

    Sub calage()
        With birtd.Value
            Dim edad As DateTime = New
DateTime(Now.Year, .Month, .Day)
            Dim age As Integer = Now.Year - .Year
            If edad > Now Then age -= 1
            ag.Text = CStr(age)
        End With
    End Sub

    Private Sub FrmInformation_Load(sender As
Object, e As EventArgs) Handles MyBase.Load
        listrecord()
        loadidd()
        counter()
    End Sub

    Private Sub saveinfo_Click(sender As Object, e As
EventArgs) Handles saveinfo.Click
        If benef.Text = "" Or frstnem.Text = "" Or
midint.Text = "" Or birtd.Text = "" Or weight.Text = ""
Or height.Text = "" Or sex.Text = "" Then
            MsgBox("Fill the Missing Data!",
MsgBoxStyle.Information, "System Checked")
            Return
        Else
            If MessageBox.Show("Save the changes?",
"System Checked", MessageBoxButtons.YesNo,
MessageBoxIcon.Question) =
Windows.Forms.DialogResult.Yes Then
                Dim s As String = "insert into
beneficiaries_info(childIDD,benef,benefname,midinitia
l,address,bdate,weight,height,sex,age,bmi,nutstat,hfa,
datescaled) values ('" & childid.Text & "','" &
benef.Text & "','" & frstnem.Text & "','" & midint.Text &
```

```
'",'" & address.Text & "','" &
birtd.Value.ToString("yyyy/M/dd") & "', '" & _
                                weight.Text & "', '" &
height.Text & "', '" & sex.Text & "', '" & ag.Text & "', '"
& bmi.Text & "', '" & nutstat.Text & "', '" & hfa.Text & "',
'" & dtscaled.Value.ToString("yyyy/M/dd") & "')"
            Dim cmd As New MySqlCommand(s,
connect)
            connect.Open()
            cmd.ExecuteNonQuery()
            MsgBox("Successfully Added!",
MsgBoxStyle.Information, "System Checked")
            connect.Close()
            listrecord()
            loadidd()
            counter()
            updinfo.Enabled = False
            clear()
        End If
    End If
End Sub

Private Sub birtd_ValueChanged(sender As Object,
e As EventArgs) Handles birtd.ValueChanged
    calage()
End Sub

Private Sub updinfo_Click(sender As Object, e As
EventArgs) Handles updinfo.Click
    If MessageBox.Show("Save the changes?",
"System Checked", MessageBoxButtons.YesNo,
MessageBoxIcon.Question) =
Windows.Forms.DialogResult.Yes Then
        Dim up As String = "Update beneficiaries_info
set benef='" & benef.Text & "',benefname='" &
frstnm.Text & "',midinitial='" & midint.Text &
"',address='" & address.Text & "',bdate='" & birtd.Text
& _
        "',weight='" & weight.Text & "',height='" &
height.Text & _
        "',age='" & ag.Text & "',bmi='" & bmi.Text &
"',nutstat='" & nutstat.Text & "',hfa='" & hfa.Text &
"',datescaled='" & dtscaled.Text & "' WHERE
childIDD='" & childid.Text & "'"
        Dim cmd As New MySqlCommand(up,
connect)
        connect.Open()
        cmd.ExecuteNonQuery()
        MsgBox("Successfully Updated!",
MsgBoxStyle.Information, "System Checked")
        connect.Close()
        listrecord()
        clear()
    End If
End Sub

Private Sub searchinfo_TextChanged(sender As
Object, e As EventArgs) Handles
searchinfo.TextChanged
    loadidd()
    retsearch()
End Sub

Private Sub dgviewinfo_CellContentClick(sender
As Object, e As DataGridViewCellEventArgs) Handles
dgviewinfo.CellContentClick
    loadidd()
    listrecord()
End Sub

Private Sub bmi_TextChanged(sender As Object, e
As EventArgs) Handles bmi.TextChanged
    If Val(bmi.Text) <= 9 Then
        nutstat.Text = "Severely Wasted"

    ElseIf Val(bmi.Text) <= 13 Then
        nutstat.Text = "Wasted"

    ElseIf Val(bmi.Text) <= 20 Then
        nutstat.Text = " Normal"

    ElseIf Val(bmi.Text) <= 25 Then
        nutstat.Text = "Overweight"

    ElseIf Val(bmi.Text) >= 26 Then
        nutstat.Text = "Obese"
    End If
End Sub

Private Sub clrininfo_Click(sender As Object, e As
EventArgs) Handles clrininfo.Click
    clear()
End Sub

Private Sub editinfo_Click(sender As Object, e As
EventArgs) Handles editinfo.Click
    If dgviewinfo.RowCount() = 0 Then
        MsgBox("Invalid Command!",
MsgBoxStyle.Information, "System Checked")
        Return
    End If
    childid.Text = dgviewinfo.SelectedCells(0).Value
    benef.Text = dgviewinfo.SelectedCells(1).Value
    frstnm.Text =
dgviewinfo.SelectedCells(2).Value
    midint.Text = dgviewinfo.SelectedCells(3).Value
    address.Text =
dgviewinfo.SelectedCells(4).Value
    birtd.Text = dgviewinfo.SelectedCells(5).Value
    weight.Text = dgviewinfo.SelectedCells(6).Value
    height.Text = dgviewinfo.SelectedCells(7).Value
    sex.Text = dgviewinfo.SelectedCells(8).Value
    ag.Text = dgviewinfo.SelectedCells(9).Value
    bmi.Text = dgviewinfo.SelectedCells(10).Value
    nutstat.Text =
dgviewinfo.SelectedCells(11).Value
    hfa.Text = dgviewinfo.SelectedCells(12).Value
    dtscaled.Text =
dgviewinfo.SelectedCells(13).Value
    saveinfo.Enabled = False
    updinfo.Enabled = True
    enableControl()
End Sub
```

```
    Private Sub clearselection_Click(sender As Object,
e As EventArgs) Handles clearselection.Click
        dgviewinfo.ClearSelection()
    End Sub

    Private Sub addnew_Click(sender As Object, e As
EventArgs) Handles addnew.Click
        saveinfo.Enabled = True
        loadidd()
        updinfo.Enabled = False
        benef.Text = Nothing
        frstnem.Text = Nothing
        midint.Text = Nothing
        address.Text = Nothing
        birtd.Text = Date.Now
        weight.Text = Nothing
        height.Text = Nothing
        sex.Text = Nothing
        ag.Text = "0"
        bmi.Text = "0"
        nutstat.Text = "N/A"
        hfa.Text = "N/A"
        dtscaled.Text = Date.Now
        benef.Focus()
    End Sub

    Private Sub Button1_Click(sender As Object, e As
EventArgs) Handles unit.Click
        FrmConversion.Show()
    End Sub

    Private Sub sex_SelectedIndexChanged(sender As
Object, e As EventArgs) Handles
sex.SelectedIndexChanged
        If Not (height.Text = Nothing) Then
            Dim w = weight.Text
            Dim h = height.Text
            Dim bm = w / (h * h)
            bmi.Text = Math.Round(Val(bm), 2)
        End If

    End Sub
    Private Sub height_TextChanged(sender As
Object, e As EventArgs) Handles height.TextChanged
        If Val(height.Text) <= 0.72 Then
            hfa.Text = "Severely Stunted"

        ElseIf Val(height.Text) <= 0.91 Then
            hfa.Text = "Stunted"

        ElseIf Val(height.Text) <= 1.11 Then
            hfa.Text = "Normal"

        ElseIf Val(height.Text) <= 1.12 Then
            hfa.Text = "Tall"
        End If
    End Sub

    Private Sub benef_Leave(sender As Object, e As
EventArgs) Handles benef.Leave
        benef.Text = StrConv(benef.Text,
VbStrConv.ProperCase)
    End Sub

    Private Sub PictureBox8_Click(sender As Object, e
As EventArgs) Handles PictureBox8.Click
        Me.WindowState = FormWindowState.Minimized
    End Sub

    Private Sub clos_Click(sender As Object, e As
EventArgs) Handles clos.Click
        Me.Close()
    End Sub

    Private Sub frstnem_Leave(sender As Object, e As
EventArgs) Handles frstnem.Leave
        frstnem.Text = StrConv(frstnem.Text,
VbStrConv.ProperCase)
    End Sub

    Private Sub address_Leave(sender As Object, e As
EventArgs) Handles address.Leave
        address.Text = StrConv(address.Text,
VbStrConv.ProperCase)
    End Sub

    Private Sub midint_Leave(sender As Object, e As
EventArgs) Handles midint.Leave
        midint.Text = StrConv(midint.Text,
VbStrConv.ProperCase)
    End Sub
End Class
```

Beneficiaries Monitoring Form

```
Imports MySql.Data.MySqlClient
Imports System.IO
Imports CrystalDecisions.CrystalReports.Engine
Public Class FrmMonitoring

    Dim daGEJJ As New MySqlDataAdapter()
    Dim dsGEJJ As New DataSet()

    Dim file As String
    Function GetDirPath(ByVal file As String) As String
        Dim fi As New FileInfo(file)
        Return fi.Directory.ToString
    End Function

    Sub listrecord()
        Dim s As String = "select benef as
`Lastname`,benefname as `FirstName`,midinitial as
`Middle Initial`,address as `Address`, bdate as  `Birth
Date`,weight as `Weight`,height as `Height`,sex as
`Sex`,age as `Age`,bmi as `BMI`,nutstat as
`Nutritional Status`,hfa as `Height-For-Age`,
datescaled as `Date of Weighing` from
beneficiaries_info where benef like '" + txtsearch.Text
+ "%'"

        Dim da As New MySqlDataAdapter(s, connect)
        connect.Open()
        Dim ds As New DataSet
        da.Fill(ds, "beneficiaries_info")
```

```
        da.Dispose()
        dgviewmon.DataSource = ds.Tables(0)
        connect.Close()

    End Sub

    Sub retsearch()
        Dim s As String = "select benef as
`Lastname`,benefname as `FirstName`,midinitial as
`Middle Initial`,address as `Address`, bdate as  `Birth
Date`,weight as `Weight`,height as `Height`,sex as
`Sex`,age as `Age`,bmi as `BMI`,nutstat as
`Nutritional Status`,hfa as `Height-For-Age`,
datescaled as `Date of Weighing` from
beneficiaries_info where datescaled between '" &
Format(dtfrom.Value, "yyyy/M/dd") & "' and '" &
Format(dtto.Value, "yyyy/M/dd") & "' and benef  like
'%" + txtsearch.Text + "%' or benefname like '%" +
txtsearch.Text + "%' order by benef,benefname "

        Dim da As New MySqlDataAdapter(s, connect)
        connect.Open()
        Dim ds As New DataSet
        da.Fill(ds, "beneficiaries_info")
        da.Dispose()
        dgviewmon.DataSource = ds.Tables(0)
        connect.Close()
    End Sub

    Sub daily()
        Dim dt1 As Date = dtto.Text
        Dim dt2 As Date = dtfrom.Text
        Dim dt As New DataTable
        Dim source As New BindingSource
        Dim s As String = "select benef as
`Lastname`,benefname as `FirstName`,address as
`Address`, bdate as  `Birth Date`,weight as
`Weight`,height as `Height`,sex as `Sex`,age as
`Age`,bmi as `BMI`,nutstat as `Nutritional Status`,hfa
as `Height-For-Age`, datescaled as `Date of
Weighing` from beneficiaries_info"
        Dim cmd As New MySqlDataAdapter(s, connect)
        connect.Open()
        Dim ds As New DataSet
        cmd.Fill(ds, "beneficiaries_info")
        cmd.Dispose()
        source.DataSource = dt
        dgviewmon.DataSource = ds.Tables(0)
        connect.Close()
    End Sub

    Private Sub FrmMonitoring_Load(sender As
Object, e As EventArgs) Handles MyBase.Load
        retsearch()
    End Sub

    Private Sub txtsearch_TextChanged(sender As
Object, e As EventArgs) Handles
txtsearch.TextChanged
        retsearch()
    End Sub

    Private Sub prntmon_Click(sender As Object, e As
EventArgs) Handles prntmon.Click
        If txtsearch.Text = "" Then
            MsgBox("Please input Type",
MsgBoxStyle.Information, "Feeding Program")
        Else
            FrmReportBenef.Show()

            dsGEJJ.Clear()
            Try
                With connect
                    If .State = ConnectionState.Open Then
.Close()


                    connect.Open()
                End With
            Catch ex As MySqlException
                MsgBox(ex.ToString)
            End Try
            Try
                Dim qr As String = "select * from
beneficiaries_info where datescaled  between '" &
Format(dtfrom.Value, "yyyy/M/dd") & "' and '" &
Format(dtto.Value, "yyyy/M/dd") & "' and benef  like '"
& txtsearch.Text & "' order by datescaled "

                daGEJJ.SelectCommand = New
MySqlCommand(qr, connect)

                Dim cb As MySqlCommandBuilder = New
MySqlCommandBuilder(daGEJJ)

                daGEJJ.Fill(dsGEJJ, "beneficiaries_info")
                daGEJJ.Dispose()
            Catch ex As MySqlException
                MsgBox(ex.ToString)
            Finally
                connect.Close()
            End Try

            Dim cr As New monreport   'report name'

cr.SetDataSource(dsGEJJ.Tables("beneficiaries_info"
))

FrmReportBenef.CrystalReportViewer1.ReportSource
= cr

FrmReportBenef.CrystalReportViewer1.Refresh()
            cr.Close()
            cr.Dispose()

        End If
    End Sub

    Private Sub btndaily_Click(sender As Object, e As
EventArgs) Handles btndaily.Click
        If txtsearch.Text = "" Then
            MsgBox("Please input Type",
MsgBoxStyle.Information, "Feeding Program")
        Else '
```

```
            retsearch()
        End If
    End Sub

    Private Sub clos_Click(sender As Object, e As
EventArgs) Handles clos.Click
        Me.Close()
    End Sub

    Private Sub PictureBox8_Click(sender As Object, e
As EventArgs) Handles PictureBox8.Click
        Me.WindowState = FormWindowState.Minimized
    End Sub
End Class
```

Adding of Schedule Form

```
Imports MySql.Data.MySqlClient
Imports System.IO
Public Class FrmSchedule

    Sub clear()
        loadidd()
        task.Text = ""
        venue.Text = ""
        faci.Text = ""
        schdate.Text = Date.Now
        timesched.Text = ""
        description.Text = ""
        task.Focus()
    End Sub

    Sub enableControl()
        task.Enabled = True
        venue.Enabled = True
        faci.Enabled = True
        schdate.Enabled = True
        timesched.Enabled = True
        description.Enabled = True
    End Sub

    Sub counter()
        Dim count As Integer
        For i As Integer = 0 To
dgviewschedule.RowCount - 1
            count += 1
        Next
        tots.Text = count
    End Sub

    Function AutoID(ByVal Tablename As String,
ByVal Fieldname As String) As Int32
        Dim cmd As New MySqlCommand
        Dim dr1 As MySqlDataReader
        cmd.Connection = connect
        cmd.CommandType = CommandType.Text
        cmd.CommandText = "select " & Fieldname & "
from " & Tablename & " Order by 1 Desc Limit 1 "
        If connect.State = ConnectionState.Closed Then
connect.Open()
        dr1 = cmd.ExecuteReader
        If dr1.Read = True Then
            AutoID = Microsoft.VisualBasic.Right(dr1(0),
4) + 1
        Else
            AutoID = 1
        End If
        dr1.Close()
        connect.Close()
    End Function

    Sub loadidd()
        cod.Text = "FeedProgNo-" &
Format(AutoID("schedule_info", "code"), "0000")
    End Sub

    Sub listrecord()
        Dim s As String = "select code as `Code`,task as
`Task`, venue as  `Venue`,facilitator as
`Facilitator`,schedate as `Date`,schetime as
`Time`,description as `Description` from
schedule_info order by task desc"

        Dim da As New MySqlDataAdapter(s, connect)
        connect.Open()
        Dim ds As New DataSet
        da.Fill(ds, "schedule_info")
        da.Dispose()
        dgviewschedule.DataSource = ds.Tables(0)
        connect.Close()
        dgviewschedule.AllowUserToAddRows = False
    End Sub


    Sub retsearch()
        Dim s As String = "select code as `Code`,task as
`Task`, venue as  `Venue`,facilitator as
`Facilitator`,schedate as `Date`, schetime as `Time`,
description as `Description` from schedule_info where
facilitator like '" + searchsched.Text + "%'"

        Dim da As New MySqlDataAdapter(s, connect)
        connect.Open()
        Dim ds As New DataSet
        da.Fill(ds, "schedule_info")
        da.Dispose()
        dgviewschedule.DataSource = ds.Tables(0)
        connect.Close()
    End Sub


    Private Sub savesched_Click(sender As Object, e
As EventArgs) Handles savesched.Click
        If task.Text = "" Or venue.Text = "" Or faci.Text =
"" Or schdate.Text = "" Or timesched.Text = "" Or
description.Text = "" Then
            MsgBox("Fill the Missing Data!",
MsgBoxStyle.Information, "System Checked")
            Return
        Else
            If MessageBox.Show("Save the changes?",
"System Checked", MessageBoxButtons.YesNo,
```

```
MessageBoxIcon.Question) =
Windows.Forms.DialogResult.Yes Then
            Dim s As String = "insert into
schedule_info(code,task,venue,facilitator,schedate,sc
hetime,description) values ('" & cod.Text & "','" &
task.Text & "','" & venue.Text & "', '" & _
                                faci.Text & "', '" &
schdate.Value.ToString("yyyy/M/dd") & "', '" &
timesched.Text & "', '" & description.Text & "')"
            Dim cmd As New MySqlCommand(s,
connect)
            connect.Open()
            cmd.ExecuteNonQuery()
            MsgBox("Successfully Save!",
MsgBoxStyle.Information, "System Checked")
            connect.Close()
            listrecord()
            counter()
            update.Enabled = False
            clear()
        End If
    End If
End Sub

Private Sub clearselectionsched_Click(sender As
Object, e As EventArgs) Handles
clearselectionsched.Click
    dgviewschedule.ClearSelection()
End Sub

Private Sub clr2_Click(sender As Object, e As
EventArgs) Handles clr2.Click
    clear()
End Sub

Private Sub
dgviewschedule_CellContentClick(sender As Object,
e As DataGridViewCellEventArgs) Handles
dgviewschedule.CellContentClick
    If dgviewschedule.RowCount = 0 Then
        MsgBox("Invalid Command!",
MsgBoxStyle.Information, "System Checked")
        Return
    End If

    FrmBenefSched.code.Text =
dgviewschedule.SelectedCells(0).Value
    FrmBenefSched.act.Text =
dgviewschedule.SelectedCells(1).Value
    FrmBenefSched.ven.Text =
dgviewschedule.SelectedCells(2).Value
    FrmBenefSched.fac.Text =
dgviewschedule.SelectedCells(3).Value
    FrmBenefSched.dat.Text =
dgviewschedule.SelectedCells(4).Value.ToString
    FrmBenefSched.oras.Text =
dgviewschedule.SelectedCells(5).Value.ToString
    FrmBenefSched.desc.Text =
dgviewschedule.SelectedCells(6).Value.ToString
    FrmBenefSched.Show()
End Sub

Private Sub FrmSchedule_Load(sender As Object,
e As EventArgs) Handles MyBase.Load
    loadidd()
    listrecord()
    counter()
End Sub

Private Sub searchsched_TextChanged(sender As
Object, e As EventArgs) Handles
searchsched.TextChanged
    retsearch()
End Sub

Private Sub clos_Click(sender As Object, e As
EventArgs) Handles clos.Click
    Me.Close()
End Sub

Private Sub PictureBox8_Click(sender As Object, e
As EventArgs) Handles PictureBox8.Click
    Me.WindowState = FormWindowState.Minimized
End Sub

Private Sub task_Leave(sender As Object, e As
EventArgs) Handles task.Leave
    task.Text = StrConv(task.Text,
VbStrConv.ProperCase)
End Sub

Private Sub venue_Leave(sender As Object, e As
EventArgs) Handles venue.Leave
    venue.Text = StrConv(venue.Text,
VbStrConv.ProperCase)
End Sub

Private Sub faci_KeyPress(sender As Object, e As
KeyPressEventArgs) Handles faci.KeyPress

End Sub

Private Sub faci_Leave(sender As Object, e As
EventArgs) Handles faci.Leave
    faci.Text = StrConv(faci.Text,
VbStrConv.ProperCase)
End Sub

Private Sub edit_Click(sender As Object, e As
EventArgs) Handles edit.Click
    If dgviewschedule.RowCount() = 0 Then
        MsgBox("Invalid Command!",
MsgBoxStyle.Information, "System Checked")
        Return
    End If
    cod.Text =
dgviewschedule.SelectedCells(0).Value
    task.Text =
dgviewschedule.SelectedCells(1).Value
    venue.Text =
dgviewschedule.SelectedCells(2).Value
    faci.Text =
dgviewschedule.SelectedCells(3).Value
```

```
        schdate.Value =
dgviewschedule.SelectedCells(4).Value
        timesched.Text =
dgviewschedule.SelectedCells(5).Value
        description.Text =
dgviewschedule.SelectedCells(6).Value
        update.Enabled = True
        savesched.Enabled = False
        enableControl()
    End Sub

    Private Sub update_Click(sender As Object, e As
EventArgs) Handles update.Click
        If MessageBox.Show("Save the changes?",
"System Checked", MessageBoxButtons.YesNo,
MessageBoxIcon.Question) =
Windows.Forms.DialogResult.Yes Then
            Dim up As String = "Update schedule_info set
task='" & task.Text & "',venue='" & venue.Text & _
            "',facilitator='" & faci.Text & "',schedate='" &
schdate.Text & _
            "',schetime='" & timesched.Text & "',
description='" & description.Text & "' WHERE code='"
& cod.Text & "'"
            Dim cmd As New MySqlCommand(up,
connect)
            connect.Open()
            cmd.ExecuteNonQuery()
            MsgBox("Successfully Updated!",
MsgBoxStyle.Information, "System Checked")
            connect.Close()
            listrecord()
            clear()
        End If
    End Sub
End Class
```

Budget Record Form

```
Imports MySql.Data.MySqlClient
Imports System.IO
Public Class FrmFinance

    Sub clear()
        loadidd()
        activ.Text = ""
        money.Text = ""
        expense.Text = ""
        sum.Text = "0"
        dtdate.Text = Date.Now
        activ.Focus()
    End Sub

    Sub enableControl()
        money.Enabled = True
        dtdate.Enabled = True
    End Sub

    Function AutoID(ByVal Tablename As String,
ByVal Fieldname As String) As Int32
        Dim cmd As New MySqlCommand
        Dim dr1 As MySqlDataReader
        cmd.Connection = connect
        cmd.CommandType = CommandType.Text
        cmd.CommandText = "select " & Fieldname & "
from " & Tablename & " Order by 1 Desc Limit 1 "
        If connect.State = ConnectionState.Closed Then
connect.Open()
        dr1 = cmd.ExecuteReader
        If dr1.Read = True Then
            AutoID = Microsoft.VisualBasic.Right(dr1(0),
4) + 1
        Else
            AutoID = 1
        End If
        dr1.Close()
        connect.Close()
    End Function

    Sub loadidd()
        budid.Text = "BudFGNo-" &
Format(AutoID("budget_info", "budgetID"), "0000")
    End Sub

    Sub retsearch()
        Dim s As String = "select budgetID as `Budget
ID`, actvity as  `Activity`,money as `Budget
Money`,expense as `Expense Amount`, sum as
`Remaining Budget`, transacDet as `Transaction
Date` from budget_info where actvity like '" +
searchmon.Text + "%'"

        Dim da As New MySqlDataAdapter(s, connect)
        connect.Open()
        Dim ds As New DataSet
        da.Fill(ds, "budget_info")
        da.Dispose()
        dgviewbudget.DataSource = ds.Tables(0)
        connect.Close()
    End Sub


    Sub listrecord()
        Dim s As String = "select budgetID as `Budget
ID`, actvity as  `Activity`,money as `Budget
Money`,expense as `Expense Amount`, sum as
`Remaining Budget`, transacDet as `Transaction
Date` from budget_info order by actvity desc"

        Dim da As New MySqlDataAdapter(s, connect)
        connect.Open()
        Dim ds As New DataSet
        da.Fill(ds, "budget_info")
        da.Dispose()
        dgviewbudget.DataSource = ds.Tables(0)
        connect.Close()

    End Sub

    Private Sub registerbtn2_Click(sender As Object, e
As EventArgs) Handles registerbtn2.Click
        If activ.Text = "" Or money.Text = "" Or
expense.Text = "" Or sum.Text = "" Or dtdate.Text = ""
Then
```

```
            MsgBox("Fill the Missing Data!",
MsgBoxStyle.Information, "System Checked")
            Return
        Else
            If MessageBox.Show("Save the changes?",
"System Checked", MessageBoxButtons.YesNo,
MessageBoxIcon.Question) =
Windows.Forms.DialogResult.Yes Then
                Dim s As String = "insert into
budget_info(budgetID,actvity,money,expense,sum,tra
nsacDet) values ('" & budid.Text & "', '" & activ.Text &
"', '" & money.Text & "', '" & expense.Text & "', '" &
sum.Text & "', '" & _

dtdate.Value.ToString("yyyy/M/dd") & "')"
                Dim cmd As New MySqlCommand(s,
connect)
                connect.Open()
                cmd.ExecuteNonQuery()
                MsgBox("Successfully Recorded!",
MsgBoxStyle.Information, "System Checked")
                connect.Close()
                listrecord()
                update.Enabled = False
                clear()
            End If
        End If
    End Sub

    Private Sub clearselection_Click(sender As Object,
e As EventArgs) Handles clearselection.Click
        dgviewbudget.ClearSelection()
    End Sub

    Private Sub calcu_Click(sender As Object, e As
EventArgs)
        FrmExpenseList.Show()
    End Sub

    Private Sub clr_Click(sender As Object, e As
EventArgs) Handles clr.Click
        clear()
    End Sub

    Private Sub update_Click(sender As Object, e As
EventArgs) Handles update.Click
        If MessageBox.Show("Save the changes?",
"System Checked", MessageBoxButtons.YesNo,
MessageBoxIcon.Question) =
Windows.Forms.DialogResult.Yes Then
            Dim up As String = "Update budget_info set
actvity='" & activ.Text & "',money='" & money.Text &
"',expense='" & expense.Text & "',sum='" & sum.Text
&
            "',transacDet='" & dtdate.Text & "' WHERE
budgetID='" & budid.Text & "'"

            Dim cmd As New MySqlCommand(up,
connect)
            connect.Open()
            cmd.ExecuteNonQuery()
            MsgBox("Successfully Updated!",
MsgBoxStyle.Information, "System Checked")
            connect.Close()
            listrecord()
            clear()
        End If
    End Sub

    Private Sub det_Click(sender As Object, e As
EventArgs) Handles det.Click
        If dgviewbudget.RowCount() = 0 Then
            MsgBox("Invalid Command!",
MsgBoxStyle.Information, "System Checked")
            Return
        End If
        budid.Text =
dgviewbudget.SelectedCells(0).Value
        activ.Text =
dgviewbudget.SelectedCells(1).Value
        money.Text =
dgviewbudget.SelectedCells(2).Value
        expense.Text =
dgviewbudget.SelectedCells(3).Value
        sum.Text =
dgviewbudget.SelectedCells(4).Value
        dtdate.Value =
dgviewbudget.SelectedCells(5).Value
        registerbtn2.Enabled = False
        update.Enabled = True
        enableControl()
    End Sub

    Private Sub FrmFinance_Load(sender As Object, e
As EventArgs) Handles MyBase.Load
        loadidd()
        listrecord()
    End Sub

    Private Sub searchmon_TextChanged(sender As
Object, e As EventArgs) Handles
searchmon.TextChanged
        retsearch()
    End Sub

    Private Sub addn_Click(sender As Object, e As
EventArgs) Handles addn.Click
        loadidd()
        registerbtn2.Enabled = True
        update.Enabled = False
        activ.Text = Nothing
        money.Text = Nothing
        expense.Text = Nothing
        sum.Text = "0"
        dtdate.Text = Date.Now
        activ.Focus()
    End Sub

    Private Sub
dgviewbudget_CellContentClick(sender As Object, e
As DataGridViewCellEventArgs) Handles
dgviewbudget.CellContentClick
```

```
    End Sub

    Private Sub activ_Leave(sender As Object, e As
EventArgs) Handles activ.Leave
        activ.Text = StrConv(activ.Text,
VbStrConv.ProperCase)
    End Sub

    Private Sub money_TextChanged(sender As
Object, e As EventArgs) Handles
money.TextChanged
        If IsNumeric(money.Text) Then
            'do nothing
        Else
            money.Text = ""
        End If
    End Sub

    Private Sub clos_Click(sender As Object, e As
EventArgs) Handles clos.Click
        Me.Close()
    End Sub

    Private Sub PictureBox8_Click(sender As Object, e
As EventArgs) Handles PictureBox8.Click
        Me.WindowState = FormWindowState.Minimized
    End Sub

    Private Sub expense_TextChanged(sender As
Object, e As EventArgs) Handles
expense.TextChanged
        If IsNumeric(expense.Text) Then
            'do nothing
        Else
            expense.Text = ""
        End If

    End Sub

    Private Sub expense_Leave(sender As Object, e
As EventArgs) Handles expense.Leave
        If Not (expense.Text = Nothing) Then
            Dim p = money.Text
            Dim q = expense.Text

            Dim equalss = CDbl(p - q)
            equalss = (Math.Round(Val(equalss), 2))
            sum.Text = Format(equalss, "###,###.00")


        End If
        If expense.TextLength > 0 Then
            pesign.Visible = True
            'ElseIf expense.TextLength > 0 Then
            '    sum.Visible = True
        End If
    End Sub

End Class
```

Adding of User Form

```
Imports MySql.Data.MySqlClient
Imports System.IO
Imports System.Drawing.Imaging
Imports System.Security.Cryptography

Public Class FrmAccount

    Sub clear()
        nicnum.Text = Nothing
        fullname.Text = Nothing
        cmbgender.Text = Nothing
        position.Text = Nothing
        user.Text = Nothing
        pass.Text = Nothing
        nicnum.Focus()
    End Sub

    Sub enableControl()
        nicnum.Enabled = True
        fullname.Enabled = True
        cmbgender.Enabled = True
        position.Enabled = True
        user.Enabled = True
        pass.Enabled = True
    End Sub

    Sub counter()
        Dim count As Integer
        For i As Integer = 0 To dgview.RowCount - 1
            count += 1
        Next
        tots.Text = count
    End Sub

    Function AutoID(ByVal Tablename As String,
ByVal Fieldname As String) As Int32
        Dim cmd As New MySqlCommand
        Dim dr1 As MySqlDataReader
        cmd.Connection = connect
        cmd.CommandType = CommandType.Text
        cmd.CommandText = "select " & Fieldname & "
from " & Tablename & " Order by 1 Desc Limit 1 "
        If connect.State = ConnectionState.Closed Then
connect.Open()
        dr1 = cmd.ExecuteReader
        If dr1.Read = True Then
            AutoID = Microsoft.VisualBasic.Right(dr1(0),
4) + 1
        Else
            AutoID = 1
        End If
        dr1.Close()
        connect.Close()
    End Function
    Sub loadidd()
        nicnum.Text = "EmployeeNo-" &
Format(AutoID("user", "EmployeeID"), "0000")
    End Sub
   Sub listrecord()
        Dim s As String = "select EmployeeID as
`Employee ID`, Name as  `Name`,Gender as
`Gender`,Position as `Position`,Username as
```

```
`Username`,Password as `Password` from user order by Name desc"

        Dim da As New MySqlDataAdapter(s, connect)
        connect.Open()
        Dim ds As New DataSet
        da.Fill(ds, "user")
        da.Dispose()
        dgview.DataSource = ds.Tables(0)
        connect.Close()
    End Sub

    Sub retsearch()
        Dim s As String = "select EmployeeID as `Employee ID`, Name as  `Name`,Gender as `Gender`,Position as `Position`,Username as `Username`,Password as `Password` from user where Name like '" + search.Text + "%'"

        Dim da As New MySqlDataAdapter(s, connect)
        connect.Open()
        Dim ds As New DataSet
        da.Fill(ds, "schedule_info")
        da.Dispose()
        dgview.DataSource = ds.Tables(0)
        connect.Close()
    End Sub

    Sub updateimage()
        Dim FileSize As UInt64
        Dim mstream As New System.IO.MemoryStream()
        pic.Image.Save(mstream, System.Drawing.Imaging.ImageFormat.Jpeg)
        Dim arrImage() As Byte = mstream.GetBuffer()
        FileSize = mstream.Length
        mstream.Close()
        Dim u As String = "Update user set Image= @image_data where EmployeeID='" & nicnum.Text & "'"
        Dim cmd As New MySqlCommand(u, connect)
        connect.Open()
        cmd.Parameters.AddWithValue("@image_data", arrImage)
        cmd.ExecuteNonQuery()
        connect.Close()
    End Sub

    Private Sub registerbtn2_Click(sender As Object, e As EventArgs) Handles registerbtn2.Click
        If nicnum.Text = "" Or fullname.Text = "" Or cmbgender.Text = "" Or position.Text = "" Or user.Text = "" Or pass.Text = "" Then
            MsgBox("Fill the Missing Data!", MsgBoxStyle.Information, "System Checked")
            Return
        Else
            If MessageBox.Show("Save the changes?", "System Checked", MessageBoxButtons.YesNo, MessageBoxIcon.Question) = Windows.Forms.DialogResult.Yes Then
                Dim s As String = "insert into user(EmployeeID,Name,Gender,Position,Username,Password) values ('" & nicnum.Text & "','" & fullname.Text & "', '" & _
                                  cmbgender.Text & "', '" & position.Text & "', '" & user.Text & "', '" & pass.Text & "')"
                Dim cmd As New MySqlCommand(s, connect)
                connect.Open()
                cmd.ExecuteNonQuery()
                MsgBox("Successfully Registered!", MsgBoxStyle.Information, "System Checked")
                connect.Close()
                listrecord()
                counter()
                updateimage()
                update.Enabled = False
                clear()
            End If
        End If
    End Sub


    Private Sub clearselection_Click(sender As Object, e As EventArgs) Handles clearselection.Click
        dgview.ClearSelection()
    End Sub

    Private Sub search_TextChanged(sender As Object, e As EventArgs) Handles search.TextChanged
        retsearch()
    End Sub

    Private Sub EditToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles EditToolStripMenuItem.Click
        If dgview.RowCount() = 0 Then
            MsgBox("Invalid Command!", MsgBoxStyle.Information, "System Checked")
            Return
        End If

        nicnum.Text = dgview.SelectedCells(0).Value
        fullname.Text = dgview.SelectedCells(1).Value
        cmbgender.Text = dgview.SelectedCells(2).Value
        position.Text = dgview.SelectedCells(3).Value
        user.Text = dgview.SelectedCells(4).Value
        pass.Text = dgview.SelectedCells(5).Value
        registerbtn2.Enabled = False
        update.Enabled = True
        enableControl()
    End Sub

    Private Sub DeleteToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles DeleteToolStripMenuItem.Click

        If dgview.RowCount() = 0 Then
```

```
            MsgBox("Invalid Command!",
MsgBoxStyle.Information, "System Checked")
            Return
        End If
        If MessageBox.Show("Delete the record?",
"System Checked", MessageBoxButtons.YesNo,
MessageBoxIcon.Question) =
Windows.Forms.DialogResult.Yes Then
            Dim d As String = "Delete from user where
EmployeeID = '" & dgview.SelectedCells(0).Value &
"'"
            Dim cmd As New MySqlCommand(d, connect)
            connect.Open()
            cmd.ExecuteNonQuery()
            MsgBox("Successfully Deleted!",
MsgBoxStyle.Information, "System Checked")
            connect.Close()
            listrecord()
        End If
    End Sub


    Private Sub showpass_CheckedChanged(sender
As Object, e As EventArgs) Handles
showpass.CheckedChanged
        If showpass.Checked = True Then
            pass.PasswordChar = ""
        Else
            pass.PasswordChar = "*"
        End If
    End Sub


    Private Sub fullname_Leave(sender As Object, e
As EventArgs) Handles fullname.Leave
        fullname.Text = StrConv(fullname.Text,
VbStrConv.ProperCase)
    End Sub



    Private Function resizeImage(ByVal img As Image,
ByVal w As Integer, ByVal h As Integer) As Image
        Try
            Dim newImageSize As New Bitmap(w, h)
            Using g As Graphics =
Graphics.FromImage(newImageSize)
                g.InterpolationMode =
Drawing2D.InterpolationMode.HighQualityBicubic
                g.DrawImage(img, New Rectangle(0, 0, w,
h))
            End Using
            Return newImageSize
        Catch ex As Exception
            MsgBox(ex.ToString)
            Return Nothing
        End Try
        Return Nothing
    End Function

    Private Sub FrmAccount_Load(sender As Object, e
As EventArgs) Handles MyBase.Load
        loadidd()
        listrecord()
        counter()
    End Sub


    Private Sub edit_Click(sender As Object, e As
EventArgs) Handles edit.Click
        If dgview.RowCount() = 0 Then
            MsgBox("Invalid Command!",
MsgBoxStyle.Information, "System Checked")
            Return
        End If

        nicnum.Text = dgview.SelectedCells(0).Value
        fullname.Text = dgview.SelectedCells(1).Value
        cmbgender.Text =
dgview.SelectedCells(2).Value
        position.Text = dgview.SelectedCells(3).Value
        user.Text = dgview.SelectedCells(4).Value
        pass.Text = dgview.SelectedCells(5).Value
        registerbtn2.Enabled = False
        update.Enabled = True
        enableControl()
    End Sub

    Private Sub Button2_Click(sender As Object, e As
EventArgs) Handles Button2.Click
        If dgview.RowCount() = 0 Then
            MsgBox("Invalid Command!",
MsgBoxStyle.Information, "System Checked")
            Return
        End If
        If MessageBox.Show("Delete the record?",
"System Checked", MessageBoxButtons.YesNo,
MessageBoxIcon.Question) =
Windows.Forms.DialogResult.Yes Then
            Dim d As String = "Delete from user where
EmployeeID = '" & dgview.SelectedCells(0).Value &
"'"
            Dim cmd As New MySqlCommand(d, connect)
            connect.Open()
            cmd.ExecuteNonQuery()
            MsgBox("Successfully Deleted!",
MsgBoxStyle.Information, "System Checked")
            connect.Close()
            listrecord()
            counter()
        End If
    End Sub

    Private Sub pic_Click(sender As Object, e As
EventArgs) Handles pic.Click
        Try
            Dim fopen As New OpenFileDialog
            fopen.FileName = ""
            fopen.Filter = "Image Files
(*.jpg)|*.jpg|(*.jpeg)|*.JPEG|(*.gif)|*.gif|(*.png)|*.png|All
Files (*.*)|*.*"
            fopen.ShowDialog()
            pic.Image =
System.Drawing.Bitmap.FromFile(fopen.FileName)
```

```
            pic.Text = fopen.FileName
        Catch ex As Exception

        End Try
    End Sub

    Private Sub update_Click(sender As Object, e As
EventArgs) Handles update.Click
        If MessageBox.Show("Save the changes?",
"System Checked", MessageBoxButtons.YesNo,
MessageBoxIcon.Question) =
Windows.Forms.DialogResult.Yes Then
            Dim up As String = "Update user set Name='"
& fullname.Text & "',Gender='" & cmbgender.Text & _
            "',Position='" & position.Text & "',Username='"
& user.Text & _
            "',Password='" & pass.Text & "' WHERE
EmployeeID='" & nicnum.Text & "'"
            Dim cmd As New MySqlCommand(up,
connect)
            connect.Open()
            cmd.ExecuteNonQuery()
            MsgBox("Successfully Updated!",
MsgBoxStyle.Information, "System Checked")
            connect.Close()
            updateimage()
            listrecord()
        End If
    End Sub

    Private Sub clr_Click(sender As Object, e As
EventArgs) Handles clr.Click
        fullname.Text = Nothing
        cmbgender.Text = Nothing
        position.Text = Nothing
        user.Text = Nothing
        pass.Text = Nothing
    End Sub

    Private Sub addnew_Click(sender As Object, e As
EventArgs) Handles addnew.Click
        loadidd()
        registerbtn2.Enabled = True
        update.Enabled = False
        fullname.Text = Nothing
        cmbgender.Text = Nothing
        position.Text = Nothing
        user.Text = Nothing
        pass.Text = Nothing
        fullname.Focus()
    End Sub



    Private Sub dgview_CellFormatting(sender As
Object, e As DataGridViewCellFormattingEventArgs)
Handles dgview.CellFormatting
        If e.ColumnIndex = 5 Then
            If e.Value IsNot Nothing Then
                e.Value = New String("*",
e.Value.ToString().Length)
            End If
        End If
    End Sub

    Private Sub clos_Click(sender As Object, e As
EventArgs) Handles clos.Click
        Me.Close()
    End Sub

    Private Sub PictureBox8_Click(sender As Object, e
As EventArgs) Handles PictureBox8.Click
        Me.WindowState = FormWindowState.Minimized
    End Sub

End Class
```

User's Log Form

```
Imports MySql.Data.MySqlClient
Imports System.IO
Public Class FrmUserLog

    Private Sub AUTOCOMPLETE()
        Dim ramjink As New DataTable
        Dim ramos As New DataSet
        ramos.Tables.Add(ramjink)
        Dim ortega As New MySqlDataAdapter("Select
fnme from log_info", connect)
        ortega.Fill(ramjink)
        Dim r As DataRow
        txtsearch.AutoCompleteCustomSource.Clear()
        For Each r In ramjink.Rows

txtsearch.AutoCompleteCustomSource.Add(r.Item(0).
ToString)
            'PARA NI SA PAG SEARCH BISAN WAKAY
DGVIEW NGA GETAN AWAN FILTER NI SYA'
        Next
        connect.Close()
    End Sub
    Sub retrev()
        Dim s As String = "select iddd as `ID`, fnme as
`NAME`,intim as `LOG TIME`,indat as `LOG
DATE`,outtim as `LOG OUT TIME` from log_info
order by intim desc"

        Dim da As New MySqlDataAdapter(s, connect)
        connect.Open()
        Dim ds As New DataSet
        da.Fill(ds, "log_info")
        da.Dispose()
        logdg.DataSource = ds.Tables(0)
        connect.Close()
    End Sub

    Sub retsearch()
        Dim s As String = "select iddd as `ID`, fnme as
`NAME`,intim as `LOG TIME`,indat as `LOG
DATE`,outtim as `LOG OUT TIME` from log_info
where fnme like '" + txtsearch.Text + "%'"
```

```
        Dim da As New MySqlDataAdapter(s, connect)
        connect.Open()
        Dim ds As New DataSet
        da.Fill(ds, "log_info")
        da.Dispose()
        logdg.DataSource = ds.Tables(0)
        connect.Close()
    End Sub

    Private Sub Button1_Click(sender As Object, e As
EventArgs) Handles Button1.Click
        Dim s As String = "Delete from log_info "
        qry(s)
        retrev()
        MsgBox("Log is cleared !!")
    End Sub

    Private Sub FrmUserLog_Load(sender As Object,
e As EventArgs) Handles MyBase.Load
        retrev()
        AUTOCOMPLETE()
    End Sub

    Private Sub txtsearch_TextChanged(sender As
Object, e As EventArgs) Handles
txtsearch.TextChanged
        retsearch()
    End Sub

    Private Sub logdg_CellContentClick(sender As
Object, e As DataGridViewCellEventArgs) Handles
logdg.CellContentClick
        txtsearch.Text = logdg.SelectedCells(1).Value
    End Sub
End Class
```

Summary of Reports Form

```
Imports MySql.Data.MySqlClient
Imports CrystalDecisions.CrystalReports.Engine
Imports CrystalDecisions.ReportSource
Public Class FrmReport

    Private Sub expirationBtn_Click(sender As Object,
e As EventArgs) Handles expirationBtn.Click
        FrmReportBenef.Show()
        Dim dt As New DataTable
        Dim cmd As New MySqlCommand("select * from
beneficiaries_info  ", connect)
        Dim sda As New MySqlDataAdapter(cmd)
        sda.Fill(dt)

        Dim cr As New nutgraph
        cr.SetDataSource(dt)
        'cr.SetParameterValue("tp", tp.Text)
        'cr.SetParameterValue("rc", rc.Text)
        'cr.SetParameterValue("change", change.Text)

FrmReportBenef.CrystalReportViewer1.ReportSource
= cr

FrmReportBenef.CrystalReportViewer1.Refresh()
        cr.Close()
        cr.Dispose()
    End Sub


    Private Sub stockinreportsBtn_Click(sender As
Object, e As EventArgs) Handles
stockinreportsBtn.Click
        FrmReportBenef.Show()
        'Dim connect As New
MySqlConnection("Server=localhost;User=root;passw
ord=;database=fpms;")
        'connect.Open()
        Dim dt As New DataTable
        Dim cmd As New MySqlCommand("select * from
beneficiaries_info ", connect)

        Dim sda As New MySqlDataAdapter(cmd)
        sda.Fill(dt)

        Dim cr As New beneflist
        cr.SetDataSource(dt)

FrmReportBenef.CrystalReportViewer1.ReportSource
= cr

FrmReportBenef.CrystalReportViewer1.Refresh()
        cr.Close()
        cr.Dispose()
    End Sub

    Private Sub salesreportBtnn_Click(sender As
Object, e As EventArgs) Handles nutstatrep.Click
        FrmReportBenef.Show()

        Dim dt As New DataTable
        Dim cmd As New MySqlCommand("select * from
beneficiaries_info ", connect)
        Dim sda As New MySqlDataAdapter(cmd)
        sda.Fill(dt)

        Dim cr As New nutstat
        cr.SetDataSource(dt)
        'cr.SetParameterValue("tp", tp.Text)
        'cr.SetParameterValue("rc", rc.Text)
        'cr.SetParameterValue("change", change.Text)

FrmReportBenef.CrystalReportViewer1.ReportSource
= cr

FrmReportBenef.CrystalReportViewer1.Refresh()
        cr.Close()
        cr.Dispose()
    End Sub

    Private Sub productsReportBtn_Click(sender As
Object, e As EventArgs) Handles
productsReportBtn.Click
        FrmReportBenef.Show()
        'Dim connect As New
MySqlConnection("Server=localhost;User=root;passw
ord=;database=fpms;")
```

```
        'connect.Open()
        Dim dt As New DataTable
        Dim cmd As New MySqlCommand("select * from
beneficiaries_info  ", connect)
        'Dim cmd As New MySqlCommand("select * from
sells where id  like '%" & pid.Text & "%'  order by
description ", con)
        Dim sda As New MySqlDataAdapter(cmd)
        sda.Fill(dt)

        Dim cr As New hfareport
        cr.SetDataSource(dt)
        'cr.SetParameterValue("tp", tp.Text)
        'cr.SetParameterValue("rc", rc.Text)
        'cr.SetParameterValue("change", change.Text)

FrmReportBenef.CrystalReportViewer1.ReportSource
= cr

FrmReportBenef.CrystalReportViewer1.Refresh()
        cr.Close()
        cr.Dispose()
    End Sub

    Private Sub defectivereportsBtn_Click(sender As
Object, e As EventArgs) Handles
defectivereportsBtn.Click
        FrmReportBenef.Show()
        'Dim connect As New
MySqlConnection("Server=localhost;User=root;passw
ord=;database=fpms;")
        'connect.Open()
        Dim dt As New DataTable
        Dim cmd As New MySqlCommand("select * from
schedule_info ", connect)
        'Dim cmd As New MySqlCommand("select * from
sells where id  like '%" & pid.Text & "%'  order by
description ", con)
        Dim sda As New MySqlDataAdapter(cmd)
        sda.Fill(dt)

        Dim cr As New schedreport
        cr.SetDataSource(dt)
        'cr.SetParameterValue("tp", tp.Text)
        'cr.SetParameterValue("rc", rc.Text)
        'cr.SetParameterValue("change", change.Text)

FrmReportBenef.CrystalReportViewer1.ReportSource
= cr

FrmReportBenef.CrystalReportViewer1.Refresh()
        cr.Close()
        cr.Dispose()
    End Sub

    Private Sub stockoutreportBtn_Click(sender As
Object, e As EventArgs) Handles
stockoutreportBtn.Click
        FrmReportBenef.Show()
        ' Dim connect As New
MySqlConnection("server=localhost;user=root;passw
ord=;database=fpms;")
        'connect.Open()
        Dim dt As New DataTable
        Dim cmd As New MySqlCommand("select * from
budget_info ", connect)
        'dim cmd as new mysqlcommand("select * from
sells where id  like '%" & pid.text & "%'  order by
description ", con)
        Dim sda As New MySqlDataAdapter(cmd)
        sda.Fill(dt)

        Dim cr As New budgetreport
        cr.SetDataSource(dt)
        'cr.setparametervalue("tp", tp.text)
        'cr.setparametervalue("rc", rc.text)
        'cr.setparametervalue("change", change.text)

FrmReportBenef.CrystalReportViewer1.ReportSource
= cr

FrmReportBenef.CrystalReportViewer1.Refresh()
        cr.Close()
        cr.Dispose()


    End Sub

    Private Sub monreport_Click(sender As Object, e
As EventArgs) Handles monreport.Click
        FrmReportBenef.Show()
        'Dim connect As New
MySqlConnection("Server=localhost;User=root;passw
ord=;database=fpms;")
        'connect.Open()
        Dim dt As New DataTable
        Dim cmd As New MySqlCommand("select * from
beneficiaries_info ", connect)
        'Dim cmd As New MySqlCommand("select * from
sells where id  like '%" & pid.Text & "%'  order by
description ", con)
        Dim sda As New MySqlDataAdapter(cmd)
        sda.Fill(dt)

        Dim cr As New monlistreport
        cr.SetDataSource(dt)
        'cr.SetParameterValue("tp", tp.Text)
        'cr.SetParameterValue("rc", rc.Text)
        'cr.SetParameterValue("change", change.Text)

FrmReportBenef.CrystalReportViewer1.ReportSource
= cr

FrmReportBenef.CrystalReportViewer1.Refresh()
        cr.Close()
        cr.Dispose()
    End Sub
End Class
```

DEVELOPER'S BIODATA

Name: Benjie Galinato Estal
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Religion: Roman Catholic
Citizenship: Filipino
Father's Name: Deceased
Mother's Name: Regenna Estal

EDUCATIONAL BACKGROUND

Elementary: Alburquerque Central Elementary, School
Western, Poblacion, Alburquerque, Bohol
2011-2012

Secondary: San Roque National High School
Eastern Poblacion, Alburquerque, Bohol
2017-2018

Tertiary: Bachelor of Science in Computer Science
Bohol Island State University Bilar Campus,
Zamora, Bilar Bohol
2021-2022

Work Experience: OJT Blend IT tech Company
0747 V.P Inting, Avenue, Bool, Tagbilaran City, Bohol
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DEVELOPER'S BIODATA

Name: Jovelle Simblante Baguhin
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Mother's Name: Vicky Q. Baguhin

EDUCATIONAL BACKGROUND

Elementary: Garcia-Hernandez Central Elementary School
Garcia-Hernandez, Bohol
2007-2008

Secondary: Saint John the Baptist Academy
West Poblacion, Garcia Hernandez, Bohol
2011-2012

Tertiary: Bachelor of Science in Computer Science
Bohol Island State University Bilar Campus,
Zamora, Bilar Bohol

2021-2022 **Work Experience:** OJT
Vice Mayor's Office, LG Unit,
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August-September 2021

DEVELOPER'S BIODATA

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Mother's Name: Flordilize B. Lagunsad

EDUCATIONAL BACKGROUND

Elementary: Alburquerque Central Elementary, School
Western, Poblacion, Alburquerque, Bohol
2011-2012

Secondary: San Roque National High School
Eastern Poblacion, Alburquerque, Bohol
2017-2018

Tertiary: Bachelor of Science in Computer Science
Bohol Island State University Bilar Campus,
Zamora, Bilar Bohol
2021-2022

Work Experience: Bohol Island State University Bilar Campus
Zamora, Bilar, Bohol
August-September 2021

DEVELOPER'S BIODATA

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Citizenship: Filipino
Father's Name: Pedro Solis
Mother's Name: Jilly Solis

EDUCATIONAL BACKGROUND

Elementary: Sagnap Elementary School
Sagnap Loay, Bohol
2011-2012

Secondary: Hinawanan National High School
Hinawanan Loay, Bohol
2017-2018

Tertiary: Bachelor of Science in Computer Science
Bohol Island State University Bilar Campus,
Zamora, Bilar Bohol
2021-2022

Work Experience: OJT - Pharmaceutical Distributor
Riverside, Bilar, Bohol
August-September 2021