

**RECORD MANAGEMENT SYSTEM OF BUREAU OF FIRE PROTECTION
IN BILAR, BOHOL**

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

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**RECORD MANAGEMENT SYSTEM OF BUREAU OF FIRE PROTECTION
IN BILAR, BOHOL**

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

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

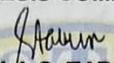
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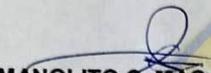
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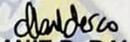
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This thesis entitled "Record Management System of Bureau of Fire Protection in Bilar, Bohol" prepared and submitted by Isabella Adriana A. Salces, Darlene Mae G. Panogalon and Mitch A. Arante in partial fulfillment of the requirements for the degree Bachelor of Science in Computer Science has been examined and recommended for acceptance and approval for oral defense.

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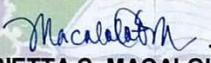

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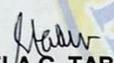

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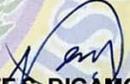

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THE DEVELOPERS

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ABSTRACT

The Bureau of Fire Protection Office is one of a significant unit in any organization. It holds records of its applicants which need to be record. The study aimed to find solutions on the existing difficulties of the featured method of recording. The development of the system is guided by the analysis of the current processes and problems in the bureau of fire protection office. Based on the evaluation conducted using personal interview and document reviews, the following problems were brought out: difficulty in retrieving files, possible loss of records, unsecured information, outdated reports and delayed submission of their monthly reports. Thus, a developed system was designed to improve the present processes of Bureau of Fire Protection Office. The system offers modules such as Recording, Administration, Data Management and Reporting. During the testing and implementation, standard system usability questionnaire was used for evaluation. The results gave positive feedback as to system had improved the record management efficiency and fits the requirements and expectations of the client. Based from the results of the evaluation, the respondents or the users had rate of 6.03 or an "Agree" rating to the system indicating the achievement of individuals expectations particularly on the features such as ease of use, visual clarity, language and its application, in general. With this result, it was concluded that the Record Management System of Bureau of Fire Protection improved the existing manual processes. Thus, it is highly recommended to implement the developed system.

Chapter 1

THE PROBLEM AND ITS SCOPE

Rationale

Nowadays the fact is that the development of the technologies is continuously evolving. Technology is now a body of knowledge wherein we are to creating tools, processing actions and extracting of materials. When we hear the phrase technology, we think of a vast range of thing, and every area of business, education, research and even the arts has its own interpretation of what it means. Every departments today also adopt modern technology in order to differentiate transactions and processing. System have become computerized for excellent ease and accuracy. And every transactions or activities to be done using computer is much more efficient, quick and easier.

The Fire Bureau is responsible for the prevention and suppression of all destructive fires on buildings, houses, and other structures, forest, land transportation vehicles and equipment, ships or vessels docked at piers or wharves or anchored in major seaports, petroleum industry installations, plane crashes and other similar incidents, as well as the enforcement of the Fire Code and other related laws.

The proposed Record Management System of Bureau of Fire Protection in Bilar, Bohol is specifically designed for the benefit of the Bureau of Fire Protection Officials and the applicant for permit. Their current transactions of Bureau of Fire Protection uses 1) Microsoft Word and Microsoft Excel to record their applicants;

2) slow scanning of record; 3) increase number of paper works; 4) slow processing of certification due to the unreliable data; 5) difficult to find who are the expired business permit; 6) increasing number of collections that needs more effort to maintain; 7) lost of collections; and 8) manual reporting. The Bureau of Fire Protection provide the list of Fire Safety Evaluation Clearance, Fire Safety Inspection Certificate Business Permit, Fire Safety Inspection Certificate for Occupancy and Fire Code Fees Report to all the building owners who applies for quality and safety purposes. Bureau of Fire Protection in Bilar, Bohol encountered complexity about the manual record keeping of the applicant. The records are either lost or redundant and the applicants takes much time in applying because of the manual process. To solve the problem, the researchers devised a record management system to keep the record organized and safe. It will also give list to the administrator if client clearances is nearly or already expired.

Literature Background

Based on Article XIV, Section 12 of the Philippine Constitution states that:

“Science and technology are essential for national development and progress. The State shall give priority to research and development, invention, innovation, and their utilization; and to science and technology education, training, and services. It shall support indigenous, appropriate, and self-reliant scientific and technological capabilities, and their application to the country's productive systems and national life”.

The article clearly states that the State shall give priority in adapting science and technology in order to provide more convenience and benefit for people,

especially for those in who work in the government wherein manual processes transactions were still conducted.

Record Management System as designed to provide efficient and accurate recording of records and to lessen the workload of the staff.

The following are the theoretical frameworks of the study:

The first theory of Edgar F. Codd's Rule 7 for Relational Database Management System, which is the higher-level insert, to edit and delete 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 in 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 et al., 1982).

The second theory is the Principles of Automatic, according to Peter J. Denning and Craig Martell. The Principle of Automation covered the efficient computational ways of performing human tasks. It emphasizes that the there is an effective computational way to achieve human tasks. It helps the people perform and convert manual tasks into computerized methods. This automation was used in computation of weighted mean, generation of descriptive rating, and data sortation (Denning et al., 2007).

Some related studies that are available and were used as references. These studies were obtained from the internet. Among the significant studies are:

Record Management by Kevin Smith et al. (2012). Record Management can be defined as a management control of records. Records Management in its broadest sense concerns itself with the records creation distribution maintenance, retention, presentation, retrieval and disposal.

Computerized Record Management System of one National High School in the Philippines by Kurt Phillip P. Danlog et al. (2017). Computerized Record Management System as designed to provide efficient and accurate and precise recording of records, to maintain and secure the student's records and easy retrieval of student records, to lessen the workload.

A Computerized Students' Records Management System A Case Study of Faculty of Science and Technology Kampala International University Western Campus. Computerized students' records management system (CSRMS) is a computer program designed to capture, store, and manage the creation and maintenance of students' records in an organization (Bob John, 2015).

Database Management System (DBMS). This system is a collection of programs that enables you to store, modify and extract information from database. These are many different types of DBMS ranging from small systems that run in personal computers to huge systems that run on mainframes. The terms relational, network, flat and hierarchical all refer to the way a DBMS organizes information internally. The internal organization can affect how quickly and flexibility you can extract information (Beal, 2016).

The existence of these systems will serve as the basis of the developers to improve the present system. It will help and guide the developers on how to improve the current Record System of Bureau of Fire Protection in Bilar, Bohol.

THE PROBLEM

Statement of the Problem

The main problem of the study was to develop a Record Management System of Bureau of Fire Protection in Bilar, Bohol that would help to manage data easily. The study sought to answer the following questions:

What are the present process involved in recording the data and information in Bureau of Fire Protection in Bilar?

What are the needs and problems encountered in the storage and retrieval of the gathered documents?

What could be the possible solutions for the problems encountered?

What is the level of system acceptability as perceived by the target user?

The presented study is to be called the Record Management System of BFP Office in Bilar, Bohol. The Bureau of Fire Protection is developed with the following features:

1. Integrate a networking mechanism to use one centralized server;
2. Design and implement the following modules:
 - 2.1. Acquisition,

2.2. Data management,

2.3. Administration; and

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

Scope and Delimitation

This study aimed for the implementation of record management system that focuses on the convenient storage of data record, reliable of data record, securing the data and more efficient storage of the Bureau of Fire Protection in Bilar, Bohol where it still uses the manual processes. The system to be developed is based on keeping and transferring information of records.

The developed system focused only the following processes.

Network Mechanism. This process is to link, through computer network which serve as the medium for storage, managing and retrieval of information between the head and the staff of the BFP Office.

Acquisition. This module includes operations such as recording new acquisitions, updating grantees data, incorporates a simple search facility, and recording of acquired transactions such as Fire Safety Evaluation Clearance (FSEC), Fire Safety Inspection Certificate (FSIC) for Occupancy and Business Permit, Fire Safety Electrical Clearance, and Fire Drill Certification.

Data Management. This feature updates the information of the transactions and services; the data of applicants is presented in graphical form for effective and efficient transactions of the former records.

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.

Reporting. This would provide the enterprise reports to serve the strategic management of the bureau of fire protection office in Bilar, Bohol. It also involve data visualization like graphical reporting technique such as Fire Safety Evaluation Clearance (FSEC) Report, Fire Safety Inspection Certificate (FSIC) for Occupancy and Business Permit Report, and Fire Code Fees Report.

The study was limited only on the Bureau of Fire Protection in Bilar, Bohol. It could not be used in other offices since the transactions might be different. Users of the system were also limited to the Data Encoder, BFP Personnel and the BFP Head.

Significance of the Study

The study would help the Bureau of Fire Protection in Bilar, Bohol effectively by recording data through a database processes and also it could perform better and more accurately than a manual system.

The proposed study would be beneficial and helpful for the following:

Bureau of Fire Protection Department Head. The head of the BFP office is responsible for signing and approving in the application forms. The head also helps the office personnel for it allows easy viewing, checking and preparing data records.

BFP Personnel. In- charge of collecting data from the BFP head and responsible for recording and managing the application forms.

Data Encoder. The encoder would help to maintain database information and responsible for sorting and processing data.

Researchers. This study would improve the researcher's interpersonal relationship as good communicators through interview. It also enhances their reasoning and analytic abilities, to widen their knowledge in designing and creating system in preparation for their real world of work in the future.

RESEARCH METHODOLOGY

Development Framework

Figure 1 shows the conceptual diagram of the developed system. It represents the model of study that follows the principle of input-process-output. These inputs are coming from the Bureau of Fire Protection records. The output provides record the data and permits.

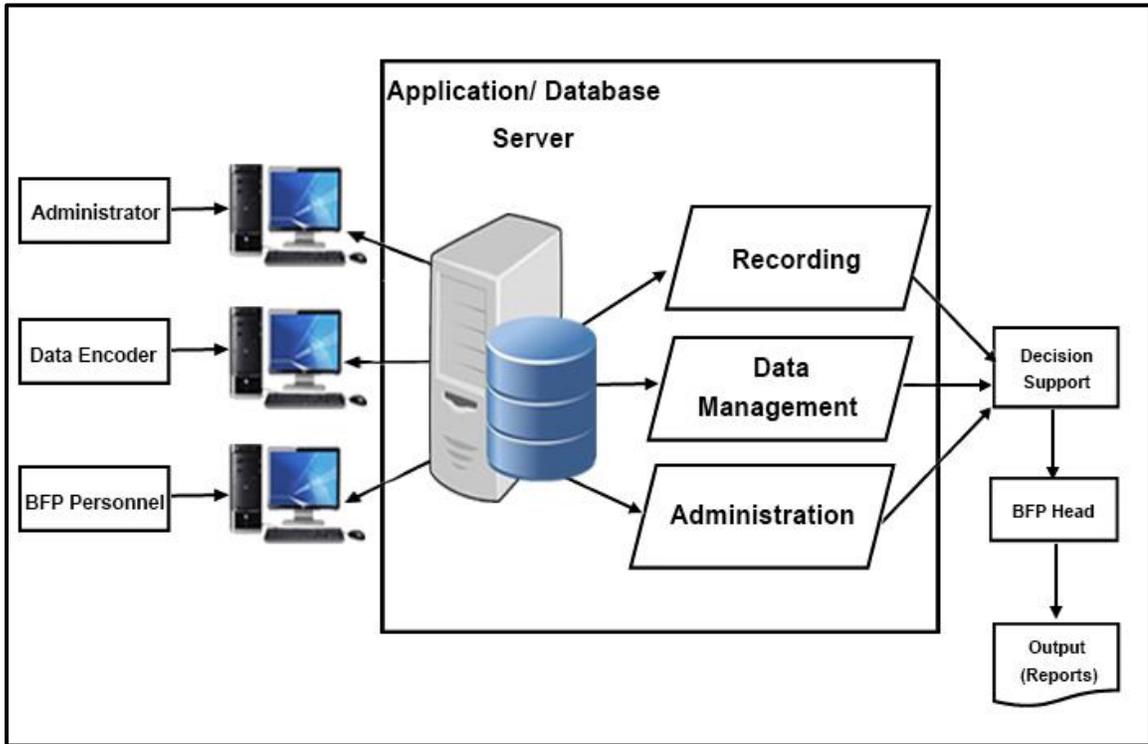


Figure 1. Conceptual Diagram of the Study

Block Diagram

Figure 2 shows the block diagram of the developed system. This diagram represents the developed system of Record Management System of Bureau of Fire Protection in Bilar, Bohol. It shows the input-process-output of the system which demonstrates how the data is being processed in order to gain better output.

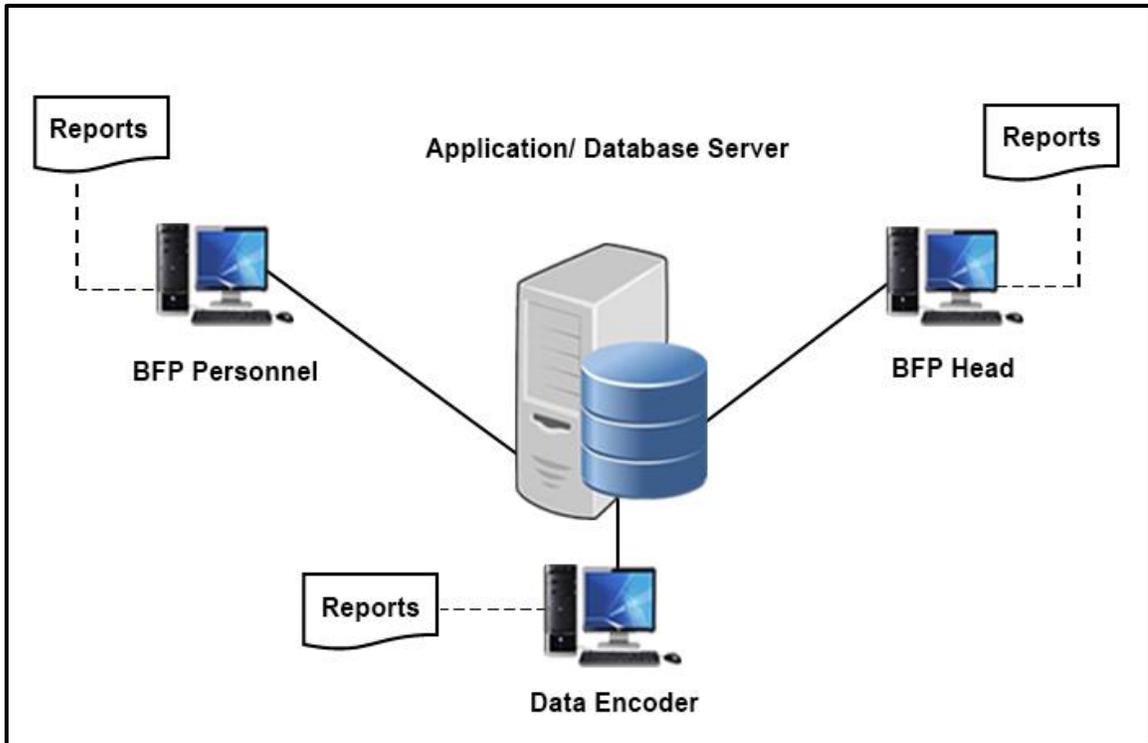


Figure 2. Block Diagram of the Study

Development Model and Approach

The methodology used was the Rapid Application Development (RAD). Rapid Application Development diagram shows how the research and process is being develop from the start of the process until it was been finished. It is easy to use as a methodology model because as you can see from the diagram it was been process step by step so that the problems that might encountered can be polished or be refined. Users also identify whether the process can evolve to reflect the changing organizational requirements to identify improvement. The advantage of RAD model from the other methodologies is that it reduced the development time, it encouraged the customer to give feedback to the prototype system, and the

integration that was been done from the beginning solved a lot of integration issues.

The developers let the users evaluate the design to recognize the strengths and weaknesses of the system. Users also identify whether the process can evolve to reflect the changing organizational requirements to identify improvement. Developers define the prototype together with the additional information provided by the user. The developers make a new prototype that will be evaluated by the user again and again until the final prototype is developed once the user is satisfied. The developers test the developed offline system in terms of security, accuracy, and effectiveness. The developers implement the developed offline system by installing the software to the computer.

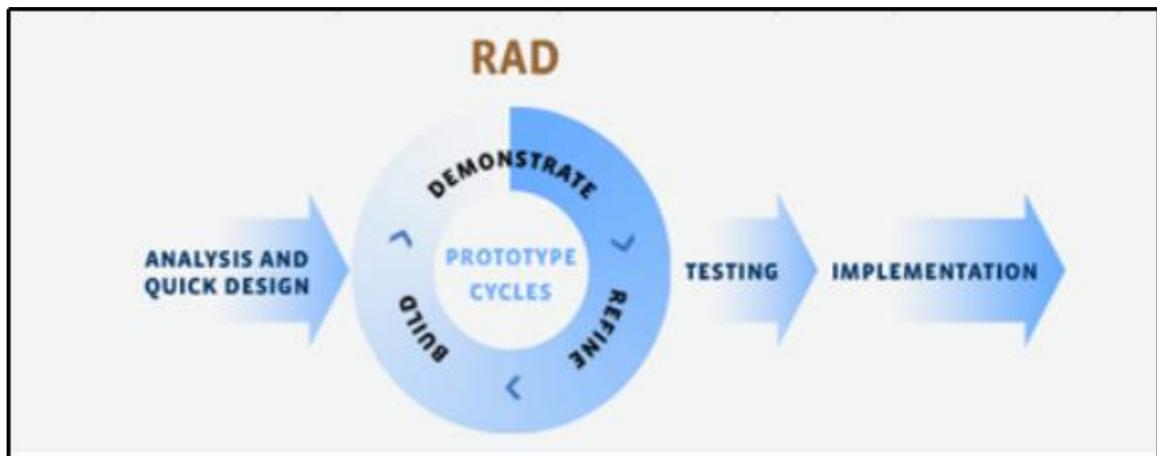


Figure 3. Rapid Application Development (RAD) Diagram.

Adopted from EtonDigital (2012), <http://www.etondigital.com/services/rapid-applicationdevelopment/>

System Development of Tools

The following are the tools used in the development and analysis phase of the Record Management System of Bureau of Fire Protection in Bilar, Bohol.

Visual Studio 2012 (Visual Basic Programming Language) - It is the programming language that the developers used to develop the system. It took part in the Offline Development of the Record Management System of Bureau of Fire Protection. It provides a graphical user interface that allows the developer to drag and drop objects into the program as well as manually write program code. It is also used to design the software development easy and efficient.

WAMP Server - An acronym that stands for Windows, Apache, MySQL, and PHP. It is used to create a database that can store data from the developed system using MySQL.

MySQL Connector/ODBC 5.1 - A computer software from Oracle Corporation. It is the standard means of connecting to any database to help generate reports from the developed system.

Adobe Photoshop CS6 - A software program developed by Adobe that allows users to edit graphics design. It is used as a tool for enhancing and editing the design for the development of the developed system.

Crystal Report - It is a popular windows-based report writer solution that allows a programmer to create reports and dashboard from a variety of data sources with a minimum of written code. It is used in order to generate and view the information from the developed system.

Microsoft Word – It is tools use by the team for editing and revising documents. And also use for creating a documents.

Microsoft Excel – It is a software tool allows the user to organize, format and calculate data with formulas using the spreadsheet. It is also use for creating tables.

Environment and Participants

The study was conducted at the Bureau of Fire Protection in Bilar, Bohol. The respondents of the study were the BFP Head, Data Encoder and the BFP Personnel. A personal interview was conducted with the BFP Personnel in order to gather the exact data needed in the study.

Data Collection

The developers asked permission from the Bureau of Fire Protection to conduct the study. Data was gathered through personal interview using the interview guide question. An actual participation as well as observation on the flow of the activity was done in order to gather more data and information needed in the study. Different documents and reports were reviewed to come up with the design for the forms needed of the developed system including the possible input and output of data for the features to be added.

Functionality evaluation was conducted through system usability testing survey with the target client. It will be done in order to quantify the effectiveness of the developed system. The system usability testing was done by rating according to the system usability questionnaire by Lewis James R. Questions assessed whether the users will be satisfied with the system functionality. There are six

respondents in the system usability. This includes the 1 BFP Head, 2 Data Encoder and 3 BFP Personnel. Table 1 presents the distribution of these respondents.

Table 1

Summary of respondents of the System Usability

Respondents	No. of Respondents
BFP Head	1
Data Encoder	2
BFP Personnel	3
Total	6

Table 2 shows guide used for the interpretation of the results in the system usability.

Table 2

Interpretative Guide of the System Usability

Weight	Range	Description	Interpretation
7	6.4 – 7.0	Strongly Agree	The respondents strongly believe and confident that the system is very usable.
6	5.5 – 6.3	Agree	The respondents believe and confident that the system is usable.
5	4.6 – 5.4	Tend to Agree	The respondents tend to believe that the system is usable.
4	3.7 – 4.5	Neither Agree nor Disagree	The respondents are neutral in trusting that the system is usable.
3	2.8 – 3.6	Tend to Disagree	The respondents tend not to trust that the system is usable.
2	1.9 – 2.7	Disagree	The respondents believe that the system is not usable.
1	1.0 – 1.8	Strongly Disagree	The respondents are strongly confident that the system is not usable.

To come up with the average weighted mean of the web usability, the weighted mean score (WMS) was computed to evaluate/assess the usability of the system as perceived by the respondents using the following formula:

$$\text{WMS} = \frac{1f_1 + 2f_2 + 3f_3 + 4f_4 + 5f_5 + 6f_6 + 7f_7}{n}$$

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

f_6 = frequency of respondents given a rate of 6

f_7 = frequency of respondents given a rate of 7

n = total number of respondents

1,2...7 = constant (rating to the service provide)

OPERATIONAL DEFINITION OF TERMS

The terminologies and acronyms used or mentioned in this study were further defined operationally.

Administrator. Also referred to the BFP head, the management and application for the processes of the office.

BFP Personnel. The user of the system who can only add, update, and search records in fast and efficient way.

Bureau of Fire Protection. The office that is being responsible for the protection of the facilities and structures and rescuing people.

Business Intelligence. The ability of an organization to collect, maintain, and organize knowledge. It includes techniques such as measurement, analytics, reporting/enterprise reporting, collaboration/collaboration platform, knowledge management and support better business decision-making.

Centralized System. One which most communications are routed through one or more major central hubs. Such system allows certain functions to be concentrated in the system's hubs, freeing up resources in the peripheral units.

Database. It is a computer program that stores the collection of data, generally stored and accessed electronically from a computer system.

Data Encoder. The user of the system that is responsible for sorting and processing data. They are much than just data entry clerks. Data encoders enter data, maintain database information and essentially.

Fire Safety Evaluation Clearance. The clients who will avail the services for building permit.

Fire Safety Inspection Certificate. Serve as an assurance that a certain facility, structure or building/ occupancy has been duly inspected.

Record Management System. The title of the study that is being conducted. This system helps the user to record the data of Bureau of Fire Protection.

Records. Refers to the data kept in the Bureau of Fire Protection.

Chapter 2

PRESENTATION OF FINDINGS, ANALYSIS AND INTERPRETATION OF DATA

Existing Operation and Processes

Record Management System of Bureau of Fire Protection in Bilar, Bohol manages the client records, and give notification to the administrator if client clearances is nearly or already expired. All processes in the Bureau of Fire Protection office in charge of the BFP Head to deliver quality service to the applicants. The records are either lost or redundant and the applicants takes much time in applying because of the manual process. In this situation, the office still uses the manual process of recording data in their municipality. We should create the application fast and keep the record organized and safe. These are the following present process that takes place:

A. Logbook Process

The applicants who would like to inquire Fire Safety Evaluation Clearance and Fire Safety Inspection Clearance are asked by the Bureau Fire Protection BFP Personnel for the authority of the requirements. Logbook will be kept in a folder for further verification.

B. Recording Process

The Bureau of Fire Protection Office makes a record data in Microsoft Word and Microsoft Excel containing their information of the applicants, the start of transaction and end of transaction.

C. Transactions

The process of transactions in Bureau of Fire Protection office based on the types of transactions the applicants wanted to avail. To avail the Fire Safety Inspection Clearance for Certificate of Occupancy , the applicants have to comply the requirements endorsement from the Office of the Building Official (OBO), certificate of completion, certified true copy of assessment fee for securing certificate of occupancy from OBO, as-built plan (if necessary), one set of fire safety compliance and commissioning report (FSCCR) (if necessary). To avail the FSIC for Business Permit (New Business), the applicants have to comply certified true copy of valid certificate of occupancy, assessment of business permit fee/tax, Assessment bill from BPLO, affidavit of undertaking that there was no substantial changes made on building/establishment, copy of fire insurance (if necessary). To avail the FSIC for Business Permit (Renewal Business), the applicants have to comply assessment of the business permit fee/tax assessment bill from BPLO, copy of fire insurance (if necessary). One set of fire safety maintenance report (FSMR) (if necessary), fire safety clearance for welding, cutting and other hot work operations (if required). To avail the Fire Safety Evaluation Clearance, the applicants have to comply three complete sets of the following proposed plan, one set of fire safety compliance report (FSCR) (if necessary), one set of cost estimates of the building including labor cost signed and sealed by the designer/contractor duly notarized, fire safety clearance for welding, cutting, and other hot work operations (if required). All of the filled-in intake form are filed in and segregated according to the respective services availed.

D. Generating Reports

At present, based on manual operation for the reports, data are kept in an excel form and in every services folder. The Bureau of Fire Protection also provides the Fire Safety Inspection Certificate and Fire safety Evaluation Clearance to all the building owners who applies for quality and safety purposes.

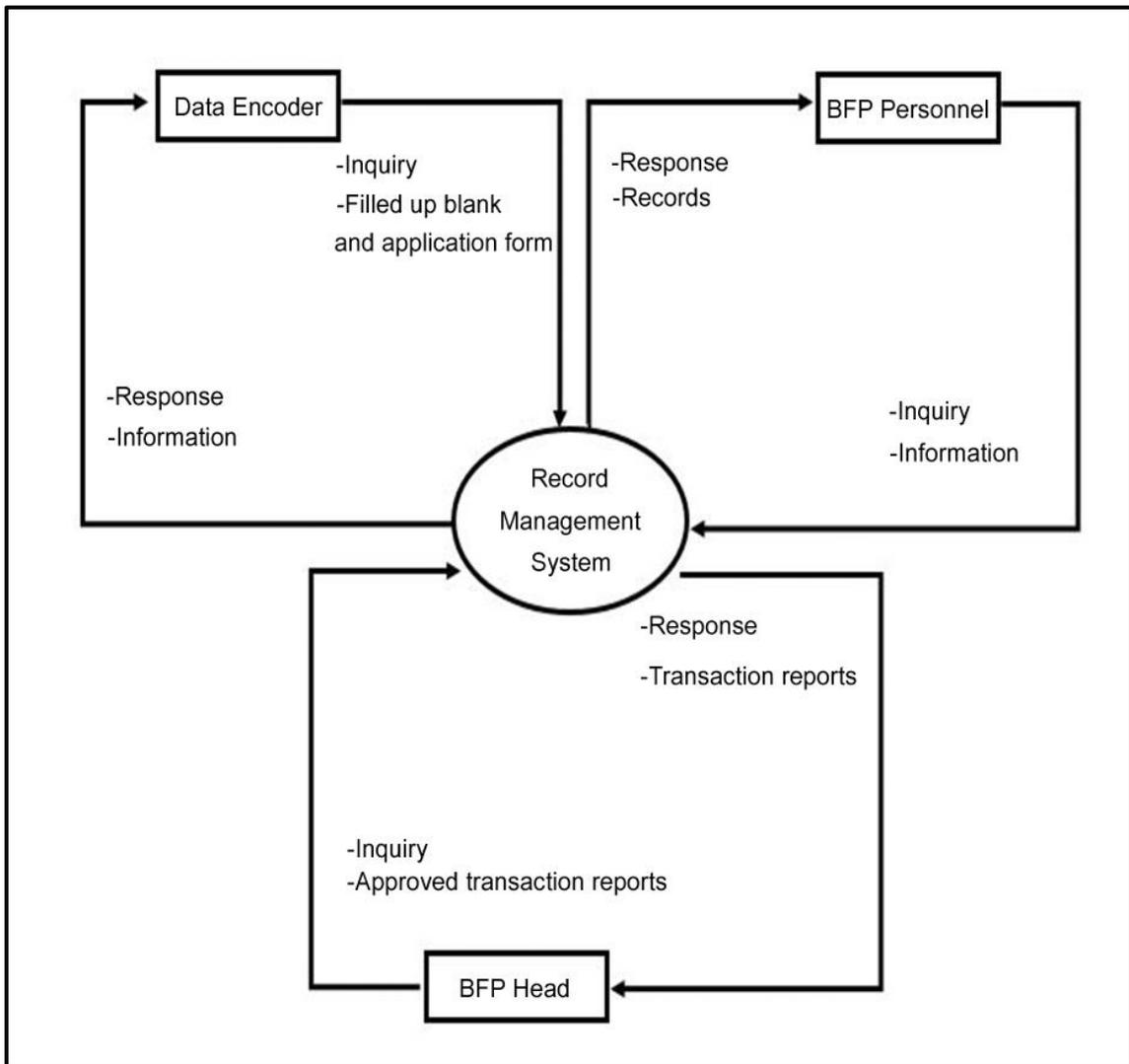


Figure 4. Conceptual Diagram of Present System

Event Specification:

1. Logbook Process
2. Recording Process
3. Transactions
4. Reports Generation

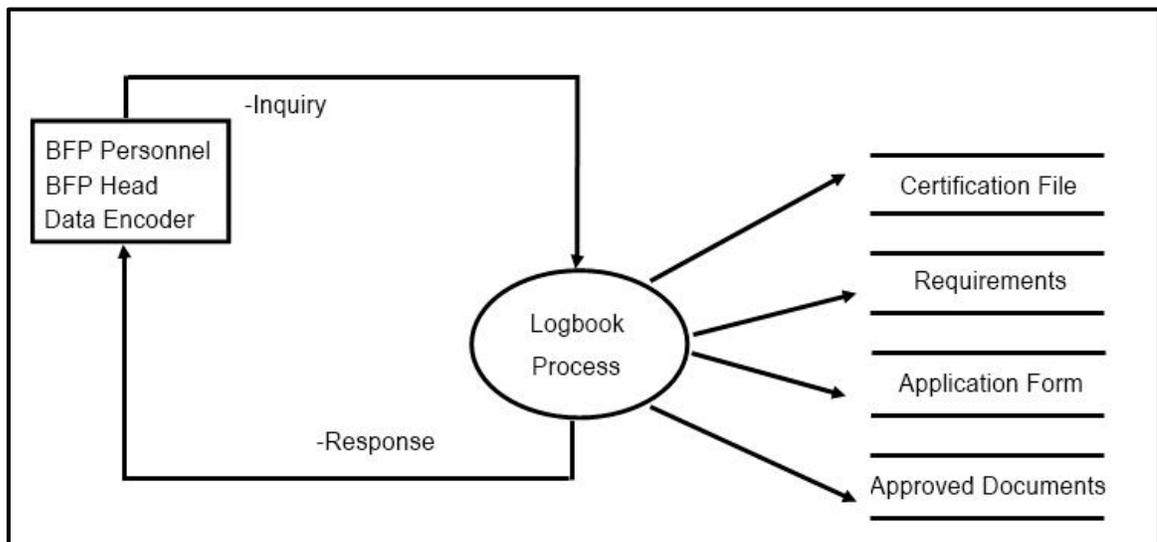


Figure 5. Logbook Process (Event 1)

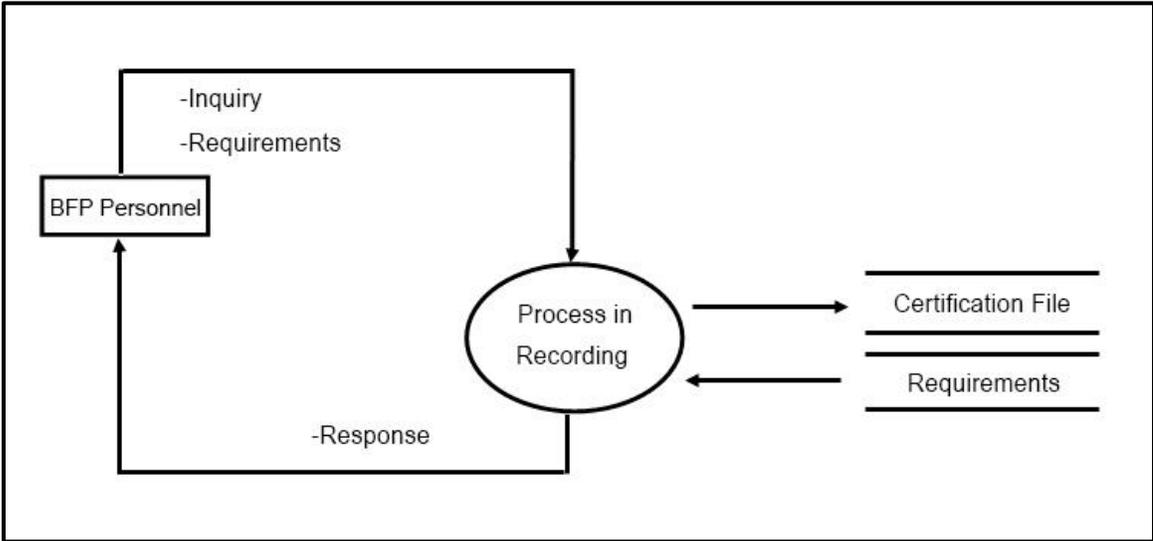


Figure 6. Recording Process (Event 2)

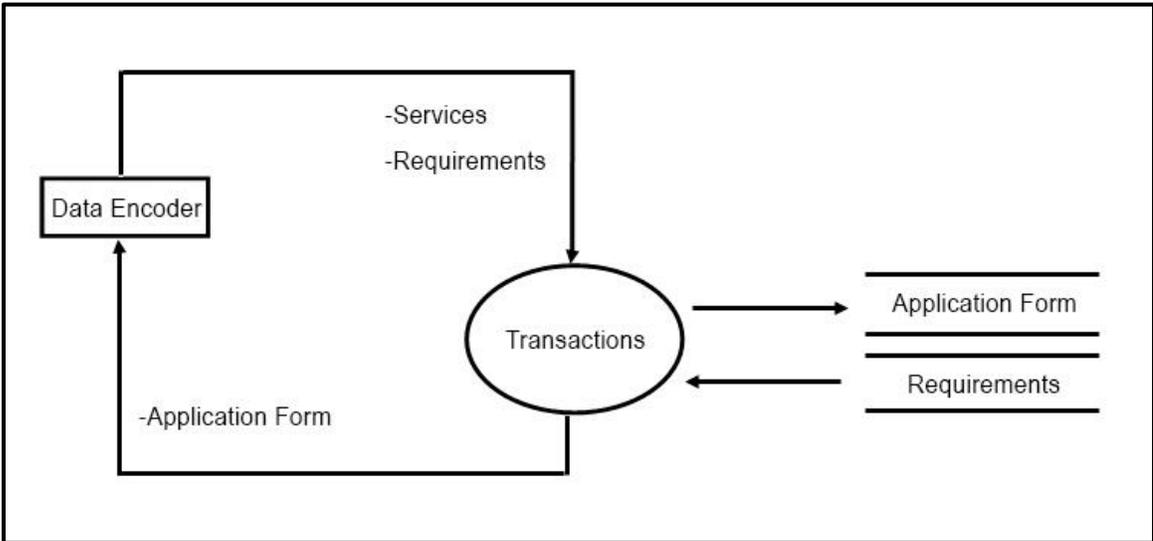


Figure 7. Transactions (Event 3)

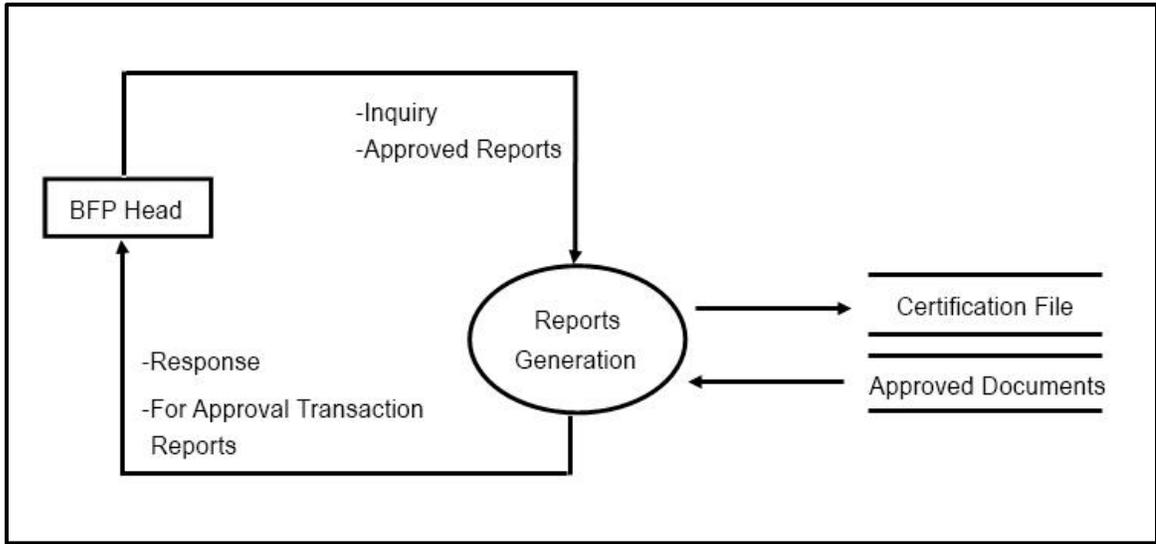


Figure 8. Process in Generating Reports (Event 4)

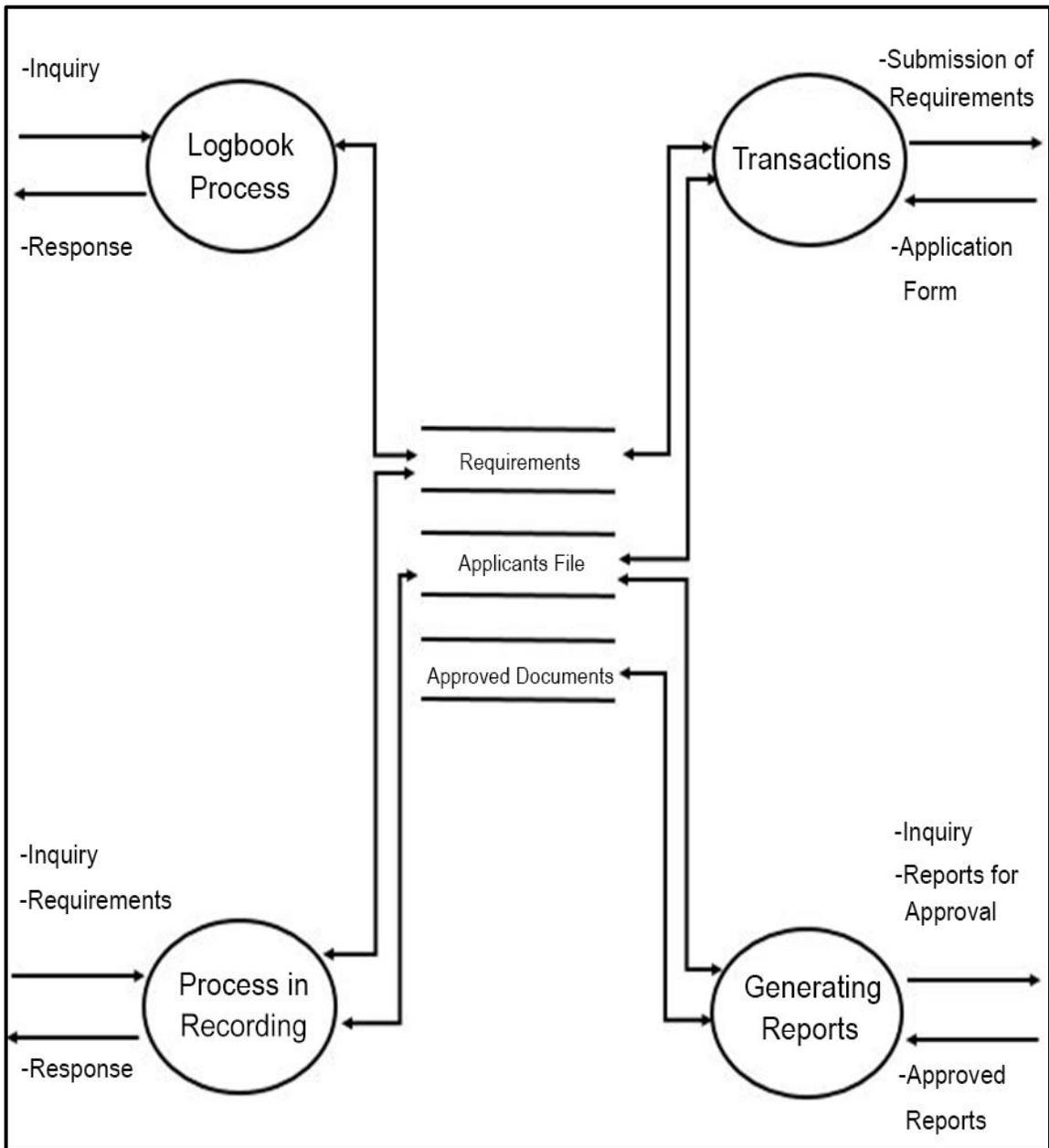


Figure 9. Top Level of the Present System

Needs of the Existing Operation

The present record management system of Bureau of Fire Protection in Bilar, Bohol needs changes in order that finding the applicant's record data will be easily revising the existing system through record management system. Based on the developer's observation, they found out the following needs.

1. Secure database for data and information of BFP in the municipality of Bilar for effective and efficient data management.
2. A record operation to prevent loss and misplacement of data.
3. A secure database of information to avoid unauthorized data modification or editing.
4. Availability of reports in the tabular and graphical method.

Record Management System of Bureau of Fire Protection in Bilar, Bohol

Based on the information gathered from the present system, developers came up with the developed system. Record Management System of Bureau of Fire Protection in Bilar, Bohol utilizes databases which will serve as the primary storage of the system and where all the pertinent documents will be stored. These are the process of the system:

A. Login

Log in is the main module that will determine the authorized user in order to ensure the security of all records and transaction in the system. Username and password are inputted in order to access the system. Users of the system are the BFP Head, Data Encoder and BFP Personnel.

B. Acquisition

For Applicants, the Bureau of Fire Protection office makes a profile record of an applicants in the system containing their Personal Information. After recording all the information, the system can easily view and edit the applicant's profile. Applicants profile provides all the information of the personnel like name of the owner, project title, name of the contractor, type of occupancy/business nature, establishment name, number of storey, and authorized representative.

C. Management

This includes the managing and updates the information of the services and assistance in the BFP Bilar with the use of the data applicants is presented in tabular form for effective and efficient services of the former records.

D. Generating Reports

The system can generate the list of FSIC and FSEC in BFP. The following reports used to be generated provides printable data such as system report, fire safety evaluation clearance, fire safety inspection certificate of occupancy for single and two family dwellings and small general business establishment (new

and renewal), electrical clearances, fire drill certificate, fire incident, and fire code fees.

Use Case Diagram

A use case diagram is a visual representation of the details of a system and its users. It is typically depicted as a graphic representation of interactions between various elements in a system (Stan Gibilisco, 2015). Use case diagrams describe the events that occur in a system and how they flow, but they do not define how those events are implemented.

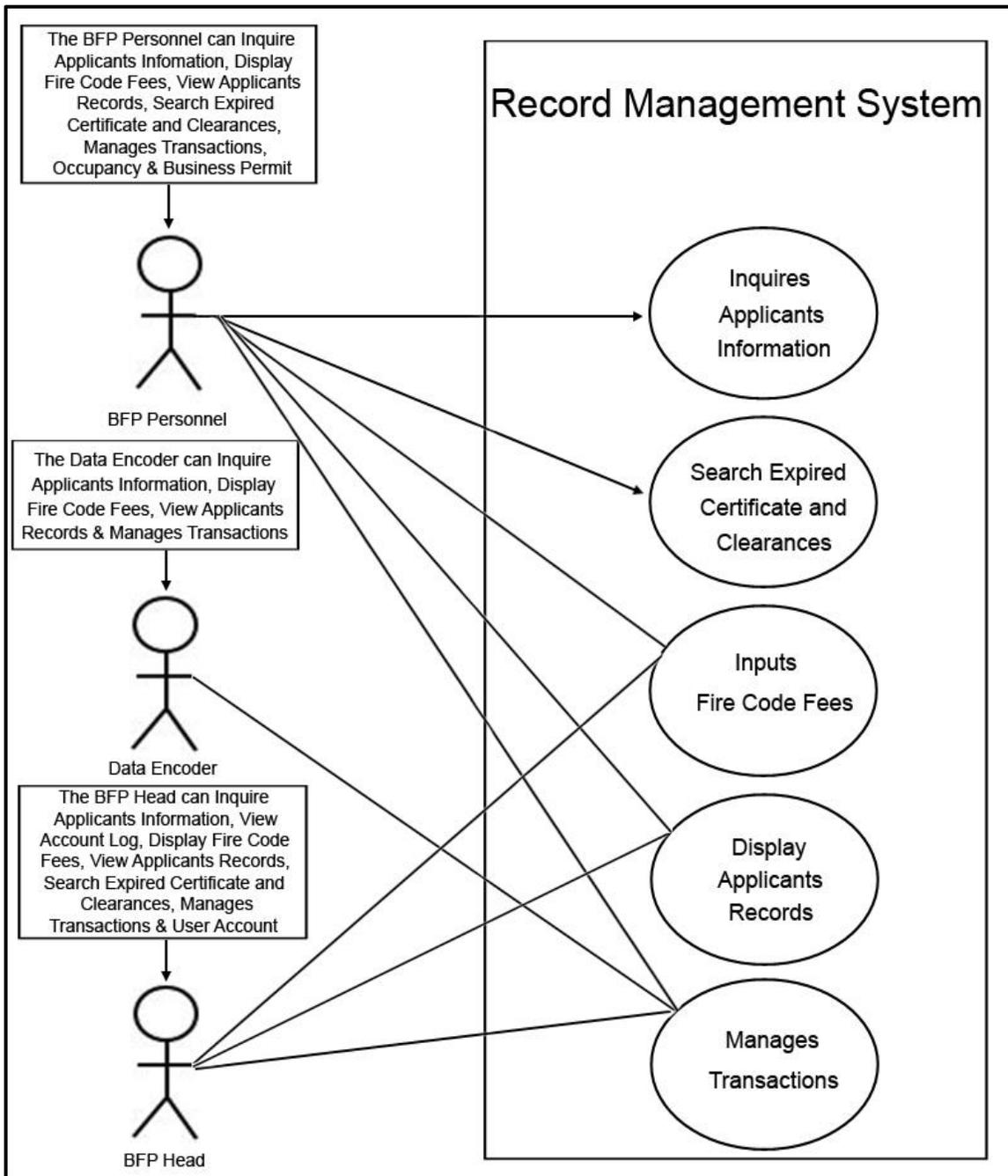


Figure 10. Use Case Diagram of the System

Use Case Narrative

A use case narrative is a text-based explanation of a use case that may include decision trees or other clearly comprehensible notations. The definitions should be provided in the user's language, and thus serve as a vital communication tool between developers and the intended audience. Narratives follow an organized format, typically using a numbered sequence of steps for the main activity accompanied by preconditions, post-conditions, alternative or exception paths, etc. (lgi-global.com).

Use Case 1 Narrative – Inquires Applicants Information

Scope - Record Management System of Bureau of Fire Protection	
Level	User Goal
Goal in Context	To inquires applicants information
Primary Actor	BFP Personnel
Stakeholders	BFP Personnel wants to inquires applicants information
Pre-Conditions	The system must be fully configured appropriate username and password must be obtained.
Triggers	The BFP personnel need to inquire the applicants information
Success Guarantee	Record Management System of Bureau of Fire Protection allows the BFP Personnel to inquire the applicant's information.
Main Success Scenario:	
The BFP Personnel selects the function "FSEC Application Form" from the menu options and record the applicants information	
The system displays a form that could record the applicants information	
The BFP Personnel fills up the form and then click save.	
The system successfully saved or record applicants information the Transaction option in the system.	
Extensions:	None

Use Case 2 Narrative – Search Expired Certificate and Clearances

Scope – Record Management System of Bureau of Fire Protection	
Level	User Goal
Goal in Context	To search expired certificate and clearances
Primary Actor	BFP Personnel
Stakeholders	BFP Personnel want to search the expired certificate and clearances
Pre-condition	The system must be fully configured appropriate username and password must be obtained
Triggers	The BFP personnel decide to search the expired certificate and clearances
Success Guarantee	Record Management System of Bureau of Fire Protection allows the BFP Personnel to search the expired certificate and clearances.
Main Success Scenario:	
The BFP Personnel select the function “Search”	
The system displays the expired certificate and clearances.	
Extensions:	None

Use Case 3 Narrative – Inputs Fire Code Fees

Scope – Record Management System of Bureau of Fire Protection	
Level	User Goal
Goal in Context	To input fire code fees
Primary Actor	BFP Personnel and BFP Head
Stakeholders	BFP Personnel and BFP Head want to input the fire code fees of the applicants
Pre-condition	The system must be fully configured appropriate username and password must be obtained
Triggers	The BFP personnel and BFP Head decide to input the fire code fees of the applicants
Success Guarantee	Record Management System of Bureau of Fire Protection allows the BFP Personnel and BFP Head to input the fire code fees of the applicants
Main Success Scenario:	
The BFP Personnel and BFP Head r select the function “Main” from the menu option to input the fire code fees of the applicants.	
The BFP Personnel and BFP Head type the fire code fees and then click the save button.	
The system will display the fire code fees of the applicants.	
Extensions:	None

Use Case 4 Narrative – Display Applicants Records

Scope – Record Management System of Bureau of Fire Protection	
Level	User Goal
Goal in Context	To display the applicants records
Primary Actor	BFP Personnel and BFP Head
Stakeholders	BFP Personnel and BFP Head want to view the applicants records list
Pre-condition	The system must be fully configured appropriate username and password must be obtained
Triggers	The BFP personnel and BFP Head decide to view the applicants records
Success Guarantee	Record Management System of Bureau of Fire Protection provides the applicant's records.
Main Success Scenario:	
The BFP Personnel and BFP Head select the function "Report"	
The system displays the applicant's records.	
Extensions:	None

Use Case 5 Narrative – Manages Transactions

Scope – Record Management System of Bureau of Fire Protection	
Level	User Goal
Goal in Context	To manages transactions
Primary Actor	BFP Personnel, Data Encoder and BFP Head
Stakeholders	BFP Personnel, Data Encoder and BFP Head wants to manage the transactions of the applicants
Pre-condition	The system must be fully configured appropriate username and password must be obtained
Triggers	The BFP Personnel, Data Encoder and BFP Head need to fill up the textbox provided then click the save button in order to update the transactions of the applicants
Success Guarantee	Record Management System of Bureau of Fire Protection allows the BFP Personnel, Data Encoder and BFP Head to manage the transactions of the applicants.
Main Success Scenario:	
The BFP Personnel, Data Encoder and BFP Head select the function "FSIC Application Form" from the menu options or you can also directly search from the "Transaction" button.	
The system displays an application form.	
The BFP Personnel, Data Encoder and BFP Head type the application form and then click the save button	
The system successfully save the applicants information form.	
Extensions:	None

Database Design

Database design is the process of creating a database data model. This data model includes all of the logical and physical design options, as well as physical storage parameters, that are required to construct a design in a data definition language, which can then be used to establish a database.

System design is an aspect of system progress which serves as building for the system enhances the record management system of bureau of fire protection in Bilar, Bohol, the developers aim a new system which would be used in the Office of the bureau of fire protection in Bilar.

There were some enhancements made to improve the database management of Bureau of Fire Protection in order to meet the client needs. The design's sole objective is to provide a solution to a problem and to assist the end user in quickly retrieving records and producing reports that are critical to the system.

Class Diagram

A class diagram is a diagram that shows the relationships and source code dependencies between the system's classes, as well as their relationships (including inheritance, aggregation, and association) and the classes operations and attributes (Magaret Rouse, 2007).

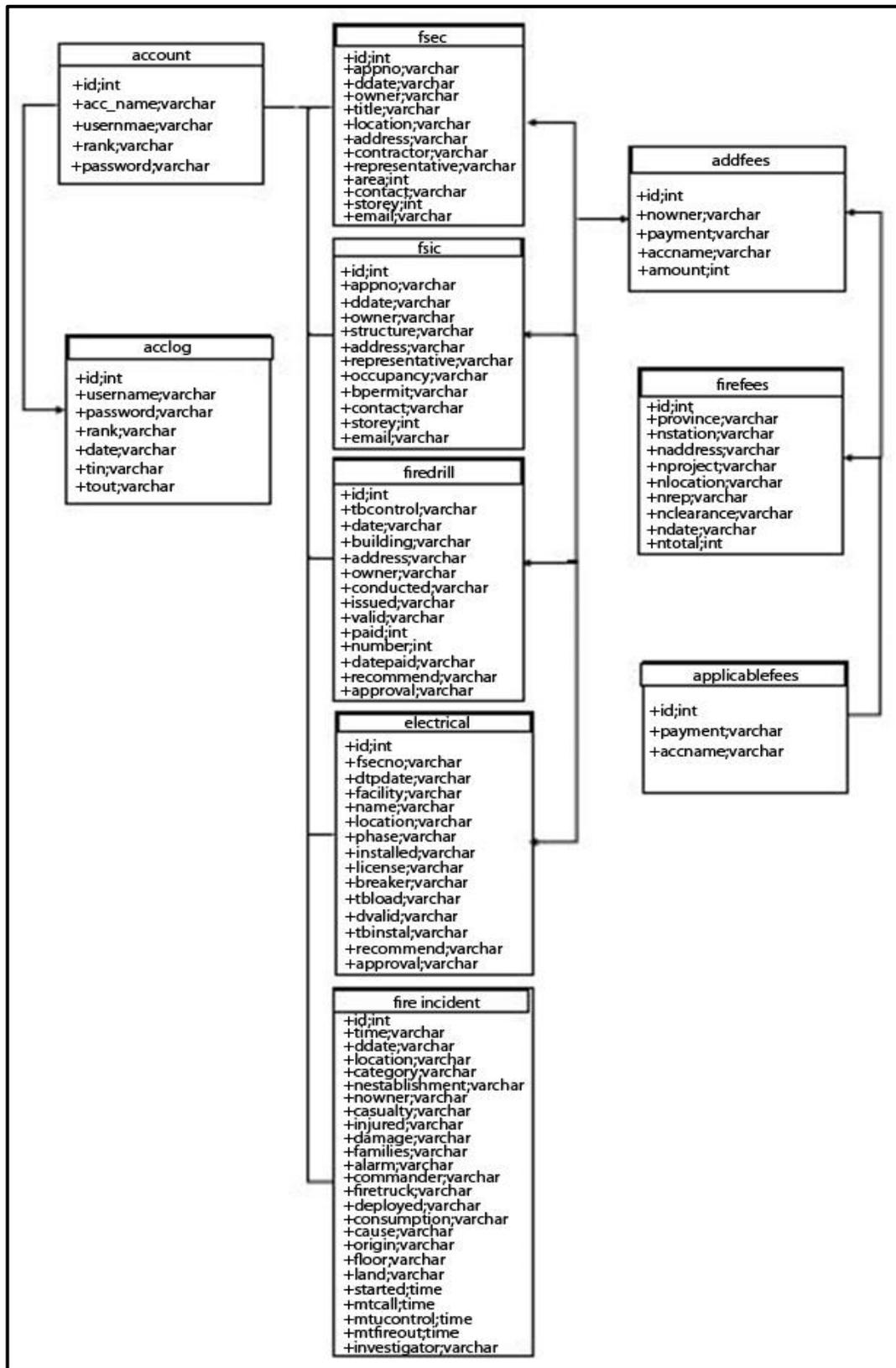


Figure 11. Class Diagram of the System

Data Structure

The database tables listed are used to store information entered into the system, as well as a collection of procedures that aid in searching, sorting, recombination, and other similar tasks.

Table 3

Data Structure for the Account Log In

Field	Field Names	Type	Width	Description
1	id	Int	6	Id
2	username	Varchar	30	Username
3	password	Varchar	30	Password
4	rank	Varchar	10	Rank
5	date	Varchar	15	Date
6	tin	Varchar	10	Time In
7	tout	Varchar	10	Time Out

Table 4

Data Structure for the Account

Field	Field Names	Type	Width	Description
1	id	Int	5	Id
2	acc_name	Varchar	20	Account Name
3	username	Varchar	20	Username
4	rank	Varchar	20	Rank
5	password	Varchar	20	Password

Table 5

Data Structure for the Add Fees

Field	Field Names	Type	Width	Description
1	id	Int	10	Id
2	nowner	Varchar	30	Owner
3	payment	Varchar	80	Payment
4	accname	Varchar	30	Account Name
5	amount	Int	10	Amount

Table 6

Data Structure for the Applicable Fees

Field	Field Names	Type	Width	Description
1	id	Int	11	Id
2	payment	Varchar	80	Payment
3	accname	Varchar	20	Account Name

Table 7

Data Structure for the Fire Safety Electrical Clearance

Field	Field Names	Type	Width	Description
1	id	Int	10	Id
2	fsecno	Varchar	10	FSEC No.
3	dtpdate	Varchar	20	Date
4	facility	Varchar	30	Facility
5	name	Varchar	30	Name
6	location	Varchar	30	Location
7	phase	Varchar	10	Phase
8	installed	Varchar	30	Installed
9	license	Varchar	30	License
10	breaker	Varchar	10	Breaker
11	tload	Varchar	10	Total Connected Load
12	dvalid	Varchar	30	Valid Until
13	tinstal	Varchar	20	Installment by
14	recommend	Varchar	30	Recommend
15	approval	Varchar	30	Approval

Table 8

Data Structure for the Fire Drill

Field	Field Names	Type	Width	Description
1	id	Int	20	Id
2	tbcontrol	Int	10	Control
3	date	Varchar	20	Date
4	building	Varchar	30	Building
5	address	Varchar	30	Address
6	owner	Varchar	30	Owner
7	conducted	Varchar	30	Conducted
8	issued	Varchar	30	Issued
9	valid	Varchar	30	Valid

10	recommend	Varchar	30	Recommend
11	approval	Varchar	30	Approval

Table 9

Data Structure for the Fire Fees

Field	Field Names	Type	Width	Description
1	id	Int	10	Id
2	province	Varchar	30	Province
3	nstation	Varchar	30	Station
4	naddress	Varchar	30	Address
5	nproject	Varchar	30	Project
6	nlocation	Varchar	30	Location
7	nrep	Varchar	30	Rep
8	nclearance	Int	40	Clearance
9	ndate	Varchar	20	Date
10	ntotal	Int	10	Total

Table 10

Data Structure of the Fire Incident

Field	Field Names	Type	Width	Description
1	id	Int	10	Id
2	time	Varchar	10	Time
3	ddate	Varchar	20	Date
4	location	Varchar	30	Location
5	category	Varchar	30	Category
6	nestablishment	Varchar	30	Establishment
7	nowner	Varchar	30	Owner
8	casualty	Varchar	30	Casualty
9	injured	Varchar	30	Injured
10	damage	Varchar	30	Damage
11	families	Varchar	30	Families
12	alarm	Varchar	30	Alarm
13	commander	Varchar	30	Commander
14	firetruck	Varchar	30	Fire Truck
15	deployed	Varchar	30	Deployed
16	consumption	Varchar	30	Consumption
17	cause	Varchar	30	Cause
18	origin	Varchar	30	Origin
19	floor	Varchar	10	Floor
20	land	Varchar	30	Land

21	started	Time		Started
22	mtcall	Time		Call
23	mtarrival	Time		Arrival
24	mtucontrol	Time		Control
25	mtfireout	Time		Fire Out
26	investigator	Varchar	30	Investigator

Table 11

Data Structure for the Fire Safety Evaluation Clearance

Field	Field Names	Type	Width	Description
1	id	Int	10	Id
2	appno	Varchar	10	Application No.
3	ddate	Varchar	20	Date
4	owner	Varchar	30	Owner
5	title	Varchar	30	Title
6	location	Varchar	30	Location
7	address	Varchar	30	Address
8	contractor	Varchar	30	Contractor
9	representative	Varchar	30	Representative
10	area	Int	20	Area
11	contact	Varchar	20	Contact
12	storey	Int	5	Storey
13	email	Varchar	30	Email

Table 12

Data Structure for the Fire Safety Inspection Certificate

Field	Field Names	Type	Width	Description
1	id	Int	5	Id
2	appno	Varchar	9	App No.
3	ddate	Varchar	10	Date
4	owner	Varchar	30	Owner
5	structure	Varchar	30	Structure
6	address	Varchar	30	Address
7	representative	Varchar	30	Representative
8	occupancy	Int	20	Occupancy
9	bpermit	Varchar	30	Permit
10	contact	Int	20	Contact
11	storey	Varchar	5	Storey
12	email	Varchar	20	Email

Program Hierarchy

A program hierarchy is an organizational system in which objects are sorted by priority levels. A box that contains the modules represents each module. The system is made up of 5 tabs that indicate primary components and the activities that the system may perform. Each menu includes submenus as well (Wigmore, 2012).

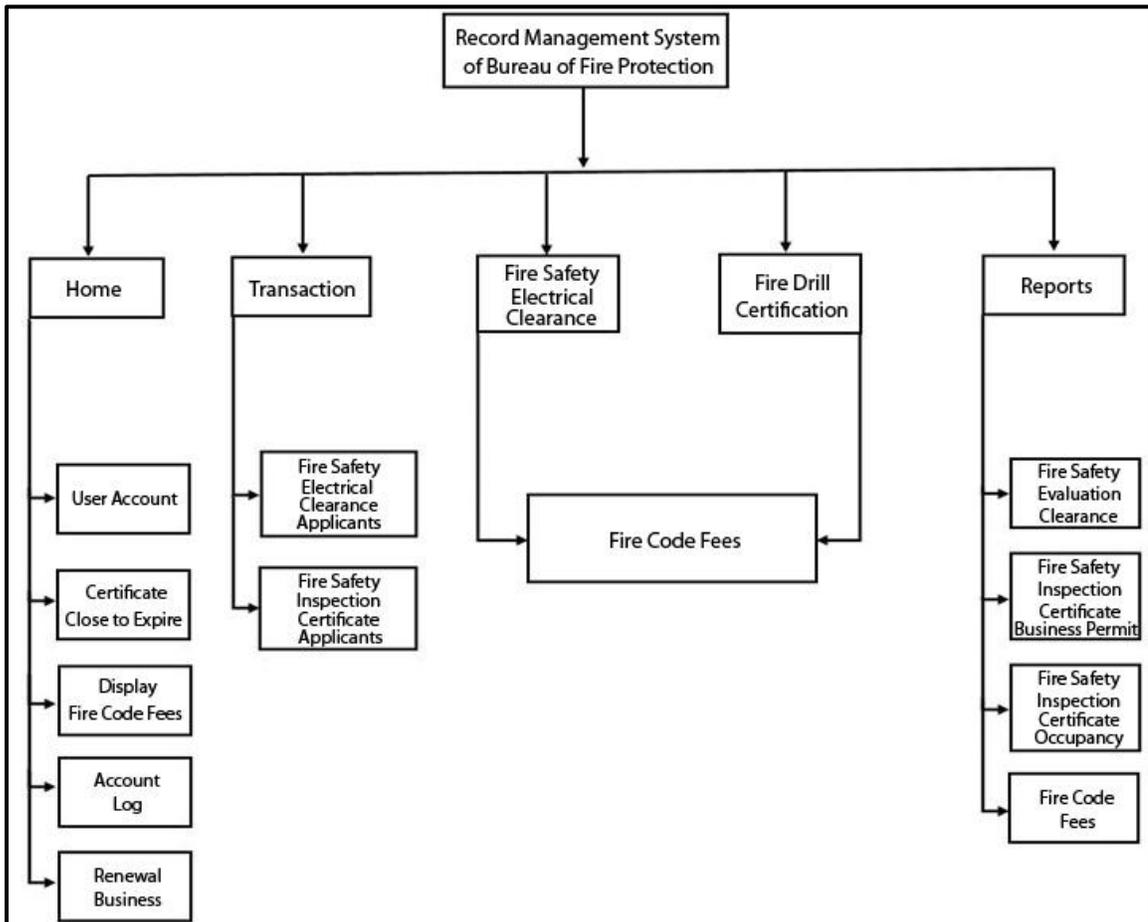


Figure 12. Program Hierarchy

Functional Requirement

The functional requirement was formulated with the use of the prototype in eliciting capture requirement through contrast communication with the Administrator, BFP Personnel and Data Encoder. The functions mentioned are based from the existing standard requirement of Record Management of Bureau of Fire Protection with the approval and coordination from the respondents as follows.

Login Process

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

FREQ 2: Access of the system must have a username and password.

FREQ 3: The administrator of the system must have full access of the system otherwise it must access only the form provided for them.

FREQ 4: The system should have a confirmation of the username and password if it is incorrect.

Recording Process

FREQ 5: The system should allow the Data Encoder to input the applicant's information.

FREQ 6: The system should provide access to applicant's information.

FREQ 7: The system should allow the BFP Personnel and Data Encoder to manage transactions account name.

FREQ 8: The system should manage the submitted data from the manage transactions account name.

FREQ 9: The system should allow the Data Encoder and BFP Personnel to view the displays fire code fees.

FREQ 10: The system should allow the Data Encoder and BFP Personnel to view the inputs fire code fees submitted information.

Data Management Process

FREQ 11: The system should allow the Administrator, BFP Personnel and Data Encoder to view applicant's records by the use of manual suggestion process.

FREQ 12: The system should allow the BFP Personnel and Administrator to view the list of applicant's details.

Process in Reporting

FREQ 13: The system should provide a graphical form all needed reports for the administrations that are ready for printing.

FREQ 14: The system should provide the list of the Fire Safety Evaluation Clearance (FSEC) Report, Fire Safety Inspection Certificate (FSIC) for Occupancy and Business Permit Report, and Fire Code Fees Report.

FREQ 15: The system should provide the graphical report of the applicants.

FREQ 16: The system should allow the Administrator, BFP Personnel and Data Encoder to view the applicant's records.

Non-functional Requirement

A non-functional requirement is one that defines criteria for judging a system's operation rather than specific behaviors. Functional requirements, on the other hand, describe precise behaviors or functions.

The system should be easy to use.

The system should be efficiently fast.

The system should be reliable.

The system should be free from errors.

Test Cases

Test Cases are a set of simple procedures that must be followed to verify a certain application's functionality or feature. It's a set of factors that a tester uses to determine whether or not a software system or one of its features is performing properly. It may take several test cases to determine whether a requirement has been fully met.

These are the scenarios that were tested during acceptance testing. The test case plan is to let the users use the system and follow the instruction in each test case in order to be constructed successful. This test case functions as a set of instructions for using the system.

User Login

Test Case 1

Module: Security Log in

Log in with correct inputs

Instruction on the login form, input correct username, and password then select the level you want to choose.

Then click the “Login” button.

Expected results:

A confirmation that will welcome the user

You can access the system

Clean up: click “ok” button to close modules

Home

Test Case 2

Module: Recording

User Account

Instruction:

Go to “Home” Sidebar Menu

Select “User Account” in the submenu option.

Fill up the Manage Account.

You can save the form in this menu

Click the “Save” button

Expected results:

Manage Account added successfully.

Clean Up: Click “close” button to close the pop-up message.

Test Case 3

Module: Recording

Close to Expire FSEC

Instruction:

Go to “Home” Sidebar Menu

Select “Close to Expire FSIC” in the submenu option.

You can search the form in this menu

Expected results:

Search Close To Expire FSIC successfully.

Clean Up: Click “Close” button to close the pop-up message.

Test Case 4

Module: Recording

Display Fire Code Fees

Instruction:

Go to “Home” Sidebar Menu

Select “Display Fire Code Fees” in the submenu option.

Display payment of fire code fees

Click the “Close” button

Expected results:

Display payment of fire code fees successfully.

Clean Up: Click “close” button to close the pop-up message.

Test Case 5

Module: Recording

Account Log

Instruction:

Go to “Home” Sidebar Menu

Select “Account Log” in the submenu option.

Display account log

You can print the account log in this menu

Click the “Close” button

Expected results:

Print the Account Log successfully.

Clean Up: Click “close” button to close the pop-up message.

Transaction

Test Case 6

Module: Recording

FSEC Application Form

Instruction:

Go to “Transaction” Sidebar Menu

Select “FSEC Application Form” in the submenu option.

Fill up the FSEC Applicant’s Form.

You can also search, save, update and even print the FSEC application form in this menu and also click the fire code fees then fill- up the form

Click the “Save” button

Click the “Print Receipt” button

Expected results:

FSEC application form and Fire Code Fees added successfully.

Clean Up: Click “Close” button to close the pop-up message.

Test Case 7

Module: Recording

FSIC Application Form

Instruction:

Go to “Transaction” in Sidebar Menu

Select “FSIC Application Form” in the submenu option.

Fill up the FSIC Application Form.

You can also search, save, update and even print the FSIC application form in this menu also click the fire code fees then fill- up the form

Click the “Save” button.

Click the “Print Receipt” button

Expected results:

FSIC application form and Fire Code Fees form added successfully.

Clean Up: Click “Close” button to close the pop-up message.

Fire Safety Electrical Clearance

Test Case 8

Module: Recording

Instruction:

Go to “Fire Safety Electrical Clearance” in Sidebar Menu

Fill up the Fire Safety Electrical Clearance form.

You can also search, save, update and even print the Fire Safety Electrical Clearance in this menu also click the fire code fees then fill- up the form

Click the “Save” button.

Click the “Print Clearance” button

Expected results:

Fire Safety Electrical Clearance and Fire Code Fees form added successfully.

Clean Up: Click “Close” button to close the pop-up message.

Fire Drill Certification

Test Case 9

Module: Recording

Instruction:

Go to “Fire Drill Certification” in Sidebar Menu

Fill up the Fire Drill Certification form.

You can also search, save, update and even print the Fire Drill Certification in this menu also click the fire code fees then fill- up the form

Click the “Save” button.

Click the “Print Certificate” button

Expected results:

Fire Drill Certification and Fire Code Fees added successfully.

Clean Up: Click “Close” button to close the pop-up message.

Fire Incident

Test Case 10

Module: Recording

Instruction:

Go to “Fire Incident” in Sidebar Menu

Fill up the Fire Incident form.

You can also save the form and click the fire incident list

Click the Fire Incident List

You can “Print” the fire incident list

Click the “Save” button.

Expected results:

Fire Incident Form and Fire Incident List added successfully.

Clean Up: Click “Close” button to close the pop-up message.

Reports

Test Case 11

Module: Reports

Instruction:

On the main form click “Report” then select the desired button you want to open whether FSEC, FSIC Business Permit, FSIC Occupancy and Fire Code Fees report then click the search box or search button.

Expected results:

It should be successfully displayed reports that are ready for printing.

Clean Up: Click “exit” to close.

Technical Requirement

Appropriate selection of hardware and software components as well as the identification of people involved in the operation are essential for usage so that the system can be used to its fullest capacity.

The hardware component refers to the physical part of the computer processing unit (CPU). This includes the tower casing, microprocessor, hard disk, RAM, UPS, monitor, mouse, and keyboard. However, there were only three (3) components, which basically facilitate the processing of data. These components are the microprocessor, hard disk drive (HDD), and Random Access Memory (RAM). Thus, these components were just specified in the presentation.

The program that the computer machine can read and execute with the necessary instructions is referred to as software. It is a series of instructions that the program converts into a machine-readable format so that it may be modified; also, the software generates human-readable output.

Peopleware is the users who would operate the programs installed in the computers. The users should be capable of operation the system to have an effective result in processing information.

Minimum Hardware Specifications

This covers the minimum hardware specifications of the computer for the system to function properly as intended and expected. The following specifications are considered based on their availability in the market and what most computer package system offers.

Components	Specification
Microprocessor	AMD A8-6410 APU 2.00 GHz
Hard Disk Drive	280 Gigabytes
Random Access Memory	8 Gigabytes

Minimum Software Specifications

The Record Management System of Bureau of Fire Protection in Bilar, Bohol requires various software to function properly. These programs are listed below, along with their corresponding specifications. The presented specifications were based on the specifications for the computer units used in the system's development.

Specification
Offline: Runs on Windows 7,8, & 10 32 & 64 bit operating system Microsoft. Net Framework 6.6.5

Economic Performance Evaluation

The economic performance of the Record Management System of Bureau of Fire Protection in Bilar, Bohol was evaluated in terms of initial investment and annual operating cost. The initial investment is the amount required by the client prior to the commencement of the operation and implementation of the system. The yearly operational cost, on the other hand, is the total amount necessary in the first year of deployment. This comprises expenses such as office supplies, utilities, system maintenance, and other such costs. 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 requires a total amount of P10, 568.00 for the first year of implementation.

The estimated amount would provide an idea to the client whether to adopt the record management system of bureau of fire protection or not.

Table 14

Initial Investment and Annual Operating Cost

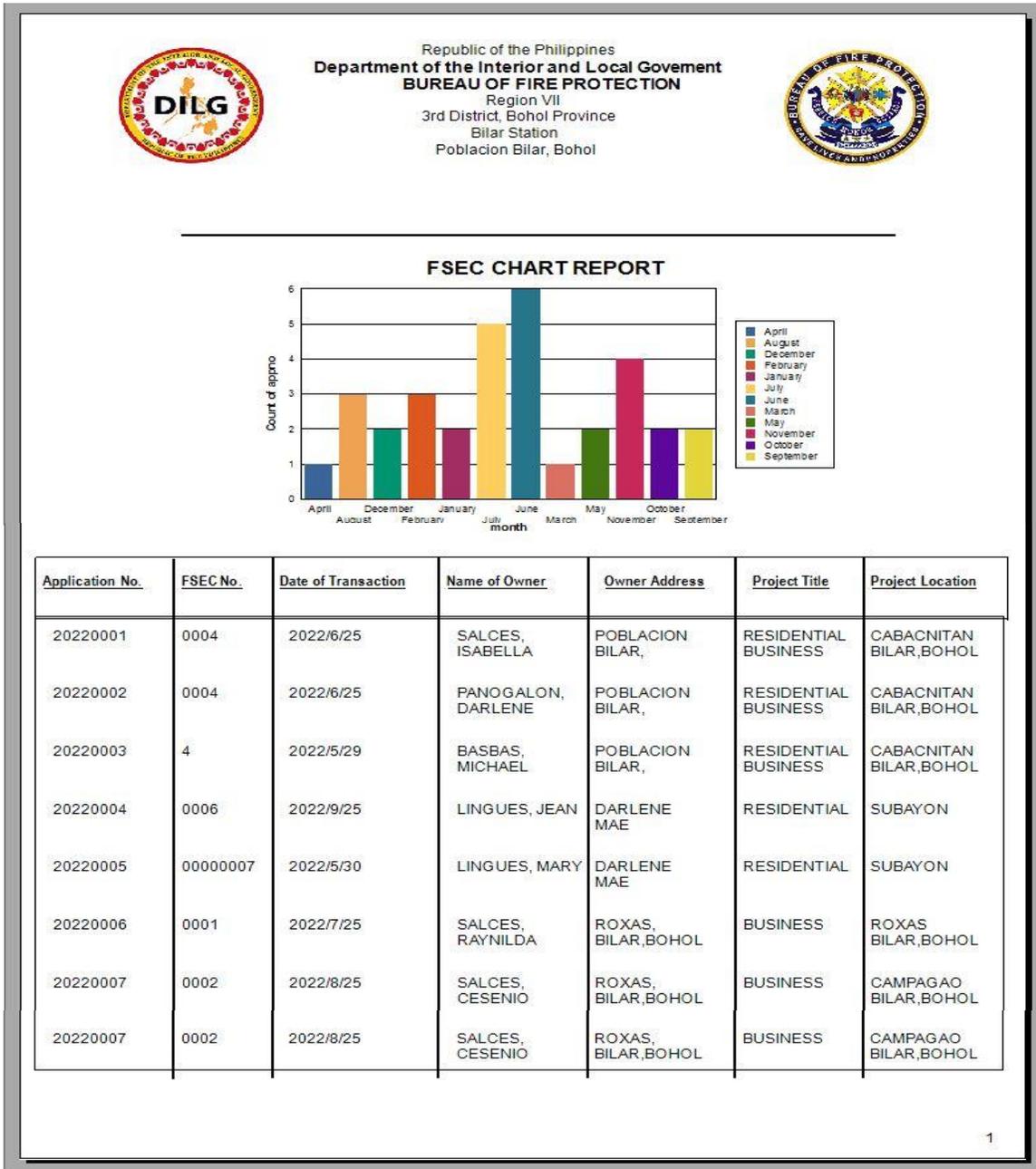
Items	Qty	Unit	Unit Price	Total
Initial Investment				
A.1. Hardware				
Desktop Computer	2	Set	₱ 30,000.00	₱ 60,000.00
Printer	1	Unit	₱ 8,000.00	₱ 8,000.00
Sub-total				₱ 68,000.00
A.2. Software				
Software	1	Lot	₱ 10,000.00	₱ 10,000.00
Software Licensing	1	Lot	₱ 8,000.00	₱ 8,000.00
Software Installation	1	Lot	₱ 1,000.00	₱ 1,000.00
Sub-Total				₱ 19,000.00
Total Initial Investment Cost				₱ 87,000.00
Annual Operating Cost				
B.1. Office Supplies				
Bond paper	5	Reams	₱ 156.00	₱ 780.00
Folder	6	Pieces	₱ 6.00	₱ 36.00
Fastener	6	Pieces	₱ 2.00	₱ 12.00
Printer Ink Cyan	1	Piece	₱ 245.00	₱ 245.00
Magenta	1	Piece	₱ 245.00	₱ 245.00
Yellow	1	Piece	₱ 245.00	₱ 245.00
Black	1	Piece	₱ 245.00	₱ 245.00
Sub-Total				₱ 1,808.00
B.2. Utilities				
Electricity	12	Months	₱ 230.00	₱ 2,760.00
B.3. General Services				
System Maintenance	4	Quarters	₱ 1,500.00	₱ 6,000.00
Sub-total				₱ 8,760.00
Total Annual Operating Cost				₱ 10,568.00

Business Intelligence Integration

It seeks to assist business strategies and decision-making with a solution that elevates business intelligence reporting (BI) to new heights and ensures that the relevant data is available. The system employs enterprise reporting, which is a sort of business intelligence reporting that is graphical. Business intelligence was explicitly included into the query and reporting component of the system. All the reports below are dynamic and will update in real time if there is any transaction to be done by the users. Each report is created by connecting multiple tables in the database's connection. This ensures the accuracy and consistency of data in the report.

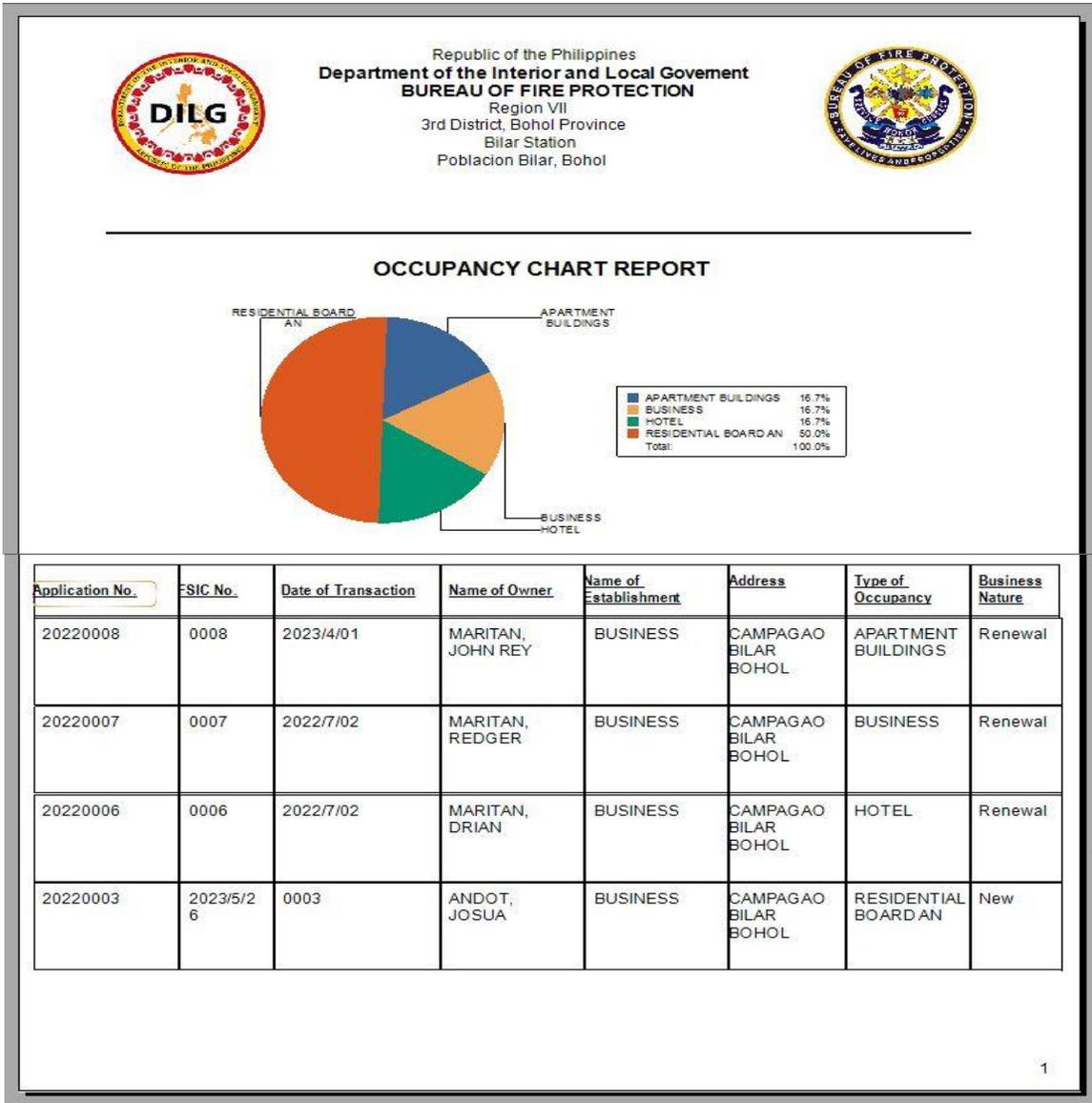
The previews show graphical representation of collected data with business intelligence capability. These figures were derived from information provided by the client and entered into the system. It covers areas such as report showing the fire safety evaluation clearance, fire safety inspection certificate occupancy, fire safety inspection certificate business permit and fire code fees.

Preview 1 shows the report of Fire Safety Evaluation Clearance (FSEC).



Preview 1. Fire Safety Evaluation Clearance Graphical Report

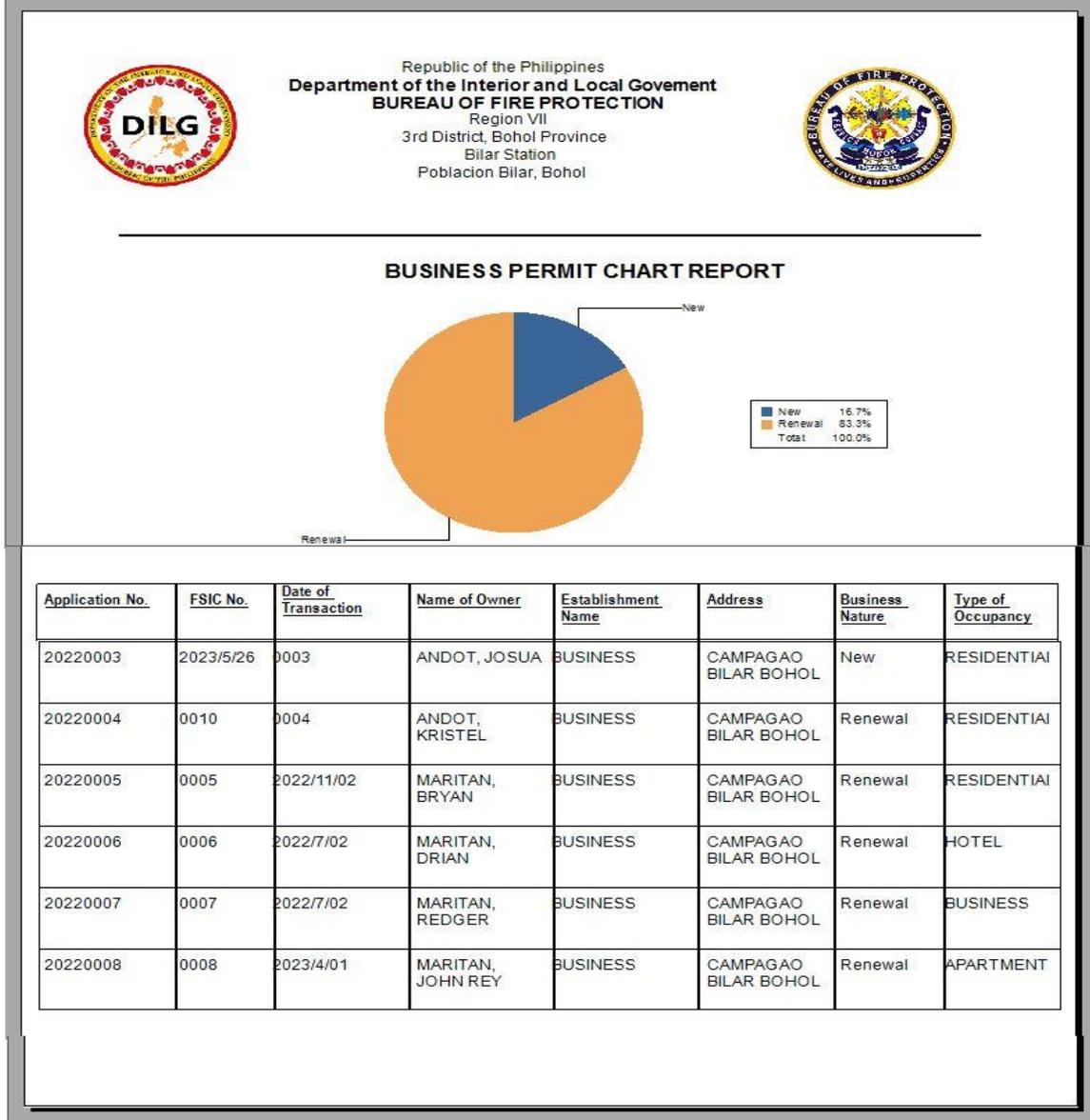
Preview 2 shows the report of Fire Safety Inspection Certificate (FSIC) Occupancy.



Preview 2. Fire Safety Inspection Certificate Occupancy Graphical Report

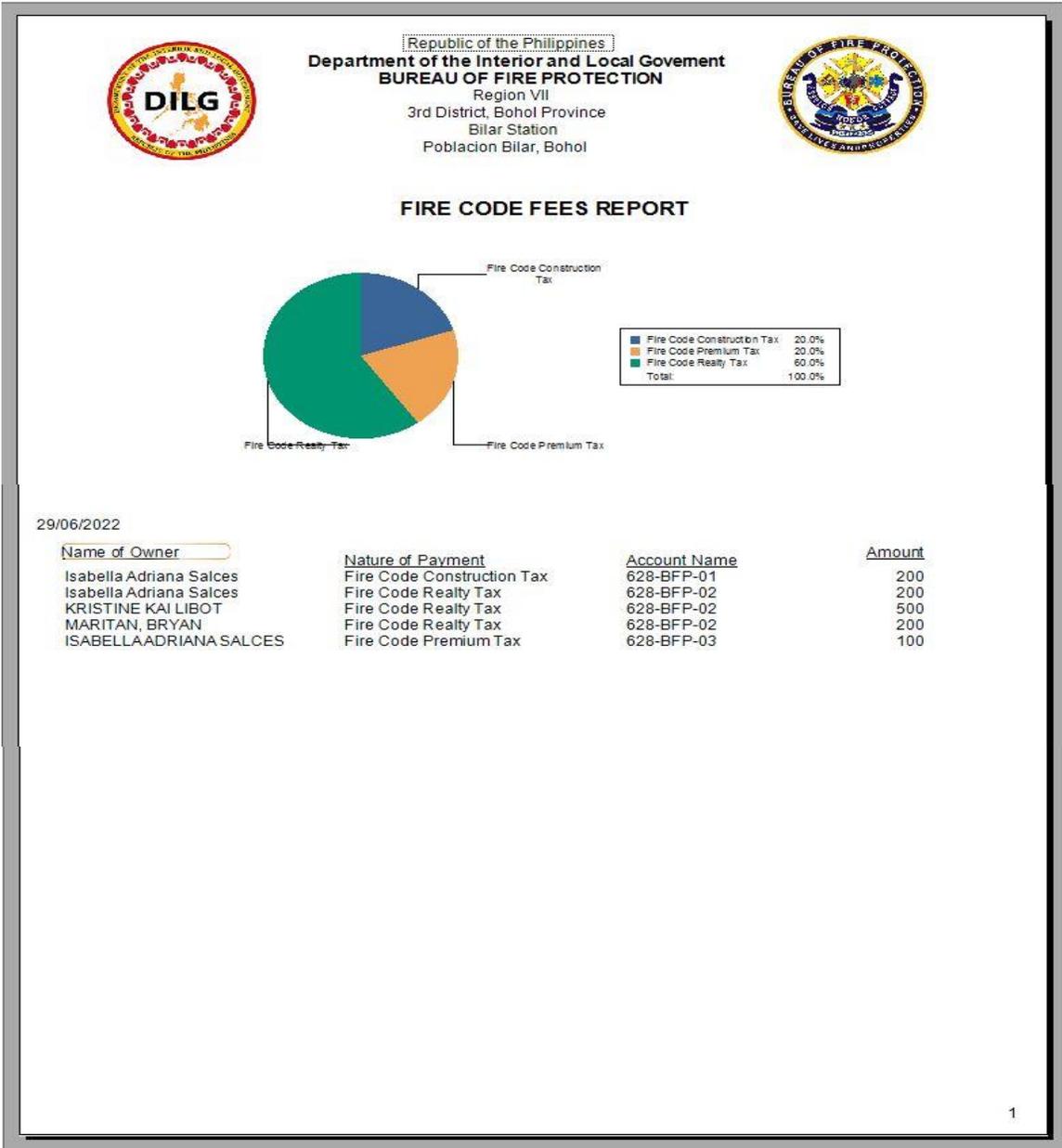
Preview 3 shows the report of Fire Safety Inspection Certificate (FSIC)

Business Permit.



Preview 3. Fire Safety Inspection Certificate Business Permit Graphical Report

Preview 4 shows the report of Fire Code Fees.

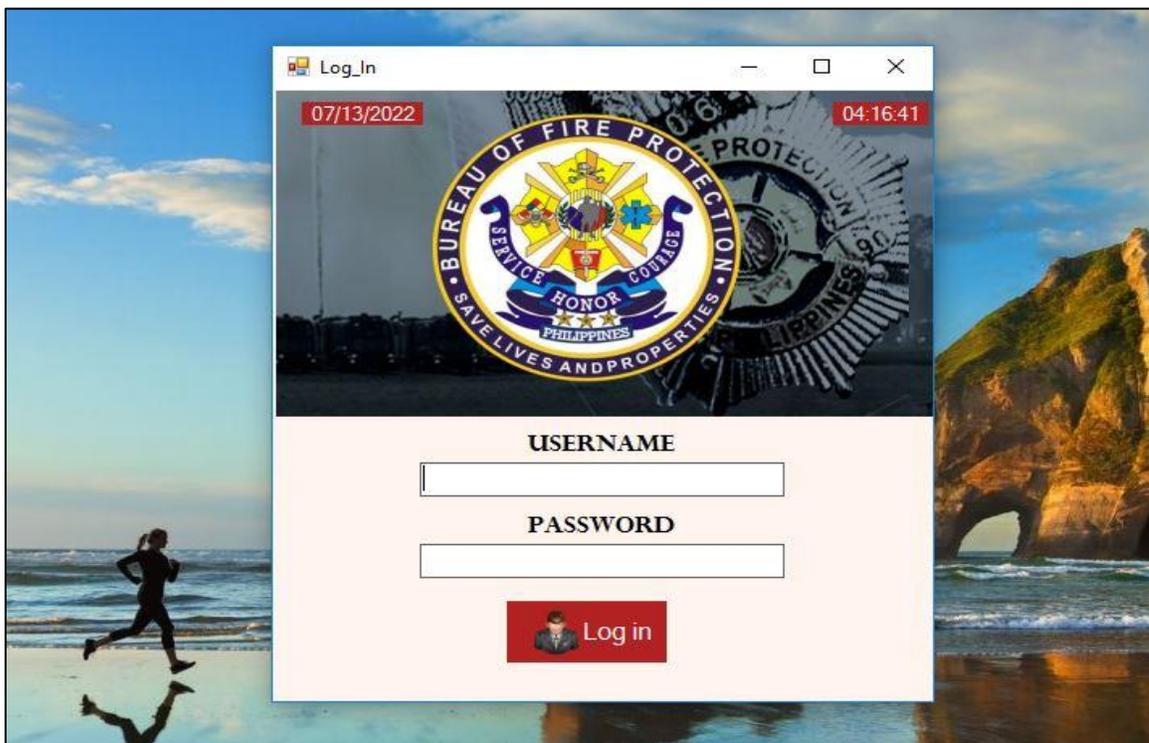


Preview 4. Fire Code Fees Graphical Report

Screen Layout

The system's user friendliness is measured in numerous ways, including the screen layout. It should be constructed in such a way that users can navigate the system quickly and easily, with a clear understanding of the work at hand.

Preview 5 shows the login page.



Preview 5. Login Page

Preview 6 shows the main page.



Preview 6. Main Page

Preview 7 shows the home page.



Preview 7. Home Page

Preview 8 shows the fire safety evaluation application clearance.

**RECORD MANAGEMENT SYSTEM
OF BILAR CENTRAL FIRE STATION BILAR, BOHOL**

07/13/2022
04:23:03 Log-out

FIRE SAFETY EVALUATION APPLICATION CLEARANCE

APPLICATION NUMBER: 236 DATE: 13/07/2022 Fire Code Fees

FSEC NO.: 0022 AUTHORIZED REPRESENTATIVE: NONE Save

PROJECT OWNER: SALCES, ISABELLA ADRIANA A. TOTAL FLOOR AREA (M2): 0 Update

PROJECT TITLE: BUSINESS CONTACT NUMBER: 09345766789 Close

PROJECT LOCATION: ZAMORA, BILAR, BOHOL NO. OF STOREY: 2

OWNER ADDRESS: CAMPAGAO BILAR, BOHOL EMAIL ADDRESS: NONE

NAME OF CONTRACTOR/ GENERAL CONTRACTOR: NONE

Search: _____ Print Application

Application Number	Date	Project Owner	Project Title	Project Location	Owner Address	Name of Contractor	Authorized Representative	Total Floor Area	Contact Number
250	2021/2/1	ACEBUICHE, JE...	RESIDENTIAL B...	CABACNITAN BI...	POBLACION BIL...	NONE	NONE	0	09345766789
07-051377	2021/1/25	ADLAON, KRIST...	RESIDENTIAL B...	CABACNITAN BI...	POBLACION BIL...	NONE	NONE	0	09345766789
277	2021/2/11	ANCOG, WARN...	RESIDENTIAL B...	CANSUMBOL BI...	CAMBIGSI BILA...	NONE	NONE	0	09345766789
271	2021/2/10	ANNABELLE, LIM	RESIDENTIAL B...	CABACNITAN BI...	BUGANG NORT...	NONE	NONE	0	09345766789
20220020	2022/10/01	BUCAG, MIL JANE	BUSINESS	ZAMORA, BILAR...	CAMPAAGO BIL...	NONE	NONE	0	09345766789
20220016	2022/8/01	COMPOC, JESICA	RESIDENTIAL B...	CANSUMBOL BI...	SUBAYON BILA...	NONE	NONE	0	09345766789
212	2021/01/25	DAGOLDOL, EL...	RESIDENTIAL B...	CABACNITAN BI...	POBLACION BIL...	NONE	NONE	0	09345766789

Preview 8. Fire Safety Evaluation Application Clearance

Preview 9 shows the print out of fire safety evaluation clearance application form.

BUREAU OF FIRE PROTECTION
Region VII
3rd District, Provincial Office
Bilar Station
Poblacion, Bilar, Bohol

FSEC

APPLICATION NUMBER
236

FIRE SAFETY EVALUATION CLEARANCE APPLICATION FORM

Project Owner : SALCES, ISABELLA ADRIANA A.

Project Title : BUSINESS

Project Location : ZAMORA, BILAR, BOHOL Contact Number : 09345766789

Owner Address : CAMPAGAO BILAR, BOHOL No. of Storey : 2

Name of Contractor/
General Contractor : NONE Email Address : NONE

Authorize
Representative : NONE

Total Floor Area (m2) : 0

I Herby certify the correctness of the information provided above and the completeness of the attached documents .

Preview 9. Print out Fire Safety Evaluation Clearance Application Form

Preview 10 shows the fire safety inspection certificate application form.

Application Number	Date	Name Owner	Establishment Name	Exact Address	Authorized Representative	Type of Occupancy	Business Permit	Contact Number	No. of Storey
251	2021/2/02	ADLAON, KRIST...	RESIDENTIAL B...	OWAC, BILAR	NONE	RESIDENTIAL B...		09511285631	0
20220003	0003	ANDOT, JOSUA ...	BUSINESS	CAMPAGAO BIL...	ISABELLA ADRI...	RESIDENTIAL B...	New	09126344582	1
20220004	0004	ANDOT, KRISTEL	BUSINESS	CAMPAGAO BIL...	ISABELLA ADRI...	RESIDENTIAL B...	Renewal	09126344582	1
142	2021/1/18	ARAUSA, CHAR...	BOARDING HO...	POBLACION, BIL...	NONE	DORMITORIES		09435729456	0

Preview 10. Fire Safety Inspection Certificate Application Form

Preview 11 shows the print out of fire safety inspection certificate application form.

BUREAU OF FIRE PROTECTION
Region VII
3rd District, Provincial Office
Bilar Station
Poblacion, Bilar, Bohol

FSIC
APPLICATION NUMBER
142

FIRE SAFETY INSPECTION CERTIFICATE APPLICATION FORM

Name of Owner : SALCES, ISABELLA ADRIANA A.
 Building/Facility/Structure/
 Business/Establishment Name : BOARDING HOUSE Valid Until : 13/07/2022
 Exact Address : POBLACION, BILAR Contact No. : 09435729456
 Authorized Representative : NONE No. of Storey : 0
 Type of Occupancy : DORMITORIES Email Address : NONE
 Business Nature : Renewal

I Herby certify the correctness of the information provided above and the completeness of the attached documents

Preview 11. Print Out Fire Safety Inspection Certificate Application Form

Preview 12 shows the fire safety electrical clearance.

RECORD MANAGEMENT SYSTEM OF BILAR CENTRAL FIRE STATION BILAR, BOHOL

07/13/2022 04:43:57 Log-out

Fire Safety Electrical Clearance

FSEC No. R : 00000002 Fire Code Fees

Date : 13/07/2022

Name of Building / Structure / Facility : Dormitory Voltage : 12

Name of Owner : ISABELLA ADRIANA SALCES Kind of Installation : Voltage

Location : CAMPAGAO, BILAR, BOHOL Total Connected Load (KVA) : 3

No. of Phase : 3 VALID UNTIL : 13/07/2022

Installed By : REMINI ARON

PRC License Number : 4235

Main Circuit Breaker (AT) : NONE

RECOMMEND APPROVAL : F01 KAI LIBOT

APPROVAL : SF04 RAUL COSARE

Buttons: Save, Update, Close

FSEC No.	Date	Name of Building/Structure/	Name of Owner
00000001	2022/5/20	BIUSIENS	ARANTE, MIC
00000006	2022/7/02	DORMITORY	ARANTE, MIT
00000004	2022/5/22	CONSTRUCTIO...	BELLE DRAN
00000007	2022/7/02	CONSTRUCTIO...	BELLE DRAN
00000003	2022/5/20	BUSINESS	DARLENE MA
00000002	2022/5/22	Dormitory	ISABELLA ADI
00000002	2022/7/13	Dormitory	ISABELLA ADI
00000005	2022/5/27	BFP OFFICE	MARY JANE L

Preview 12. Fire Safety Electrical Clearance

Preview 13 shows the print out of fire safety electrical clearance application form.

Report1

SAP CRYSTAL REPORTS*

Republic of the Philippines
Department of the Interior and Local Government
BUREAU OF FIRE PROTECTION
 Region VII
 3rd District, Bohol Province
 Bilal Station
 Poblacion Bilal, Bohol

FSEC NO. 00000002 DATE: 13/07/2022

FIRE SAFETY CLEARANCE
(ELECTRICAL CLEARANCE)

TO WHOM IT MAY CONCERN:

By virtue of the provisions of RA 9514 otherwise known as the "Fire Code of the Philippines of 2008" and its Revised Implementing Rules and Regulations (RIRR), this Clearance is hereby issued to :

Name of Building/Structure/Facility : Dormitory

Name of Owner : ISABELLA ADRIANAS

Location : CAMPAGAO, BILAR, B

Kind of Installation : Voltage Voltage : 12 No. of Phase : 3

Total Connected Load : 3 (KVA) Main Circuit Breaker : NONE (AT)

Installed By : REMINI ARON PRC License Number : 4235 Valid Until : 13/07/2022

Current Page No.: 1 Total Page No.: 1+ Zoom Factor: 100%

Preview 13. Print Out Fire Safety Electrical Clearance

Preview 14 shows the fire drill certification.

RECORD MANAGEMENT SYSTEM OF BILAR CENTRAL FIRE STATION BILAR, BOHOL

07/13/2022 04:46:49 Log-out

Fire Drill Certification

Control No.: 00000002

Name of Building / Structure / Facility: BUSINESS

Name of Owner/Company: ISABELLA ADRIANA SALCES

Address: POBLACION BILAR,BOHOL

Date: 13/07/2022

Date Conducted: 13/07/2022

DATE ISSUED: 13/07/2022

VALID UNTIL: 13/07/2022

RECOMMEND APPROVAL : F01 KAI LIBOT

APPROVAL : SFO4 RAUL COSARE

Buttons: Save, Update, Close, Fire Code Fees

Control No.	Date	Name of Building/Structure/Address	Name of Owner/Company	Date Conducted	Issued	Valid Until	Recommend Approval	Approved
00000002	2022/5/21	BUSINESS POBLACION BILAR, BOHOL	ISABELLA ADRIANA SALCES	2022/5/21	2022/5/21	2022/5/21	F01 KAI LIBOT	SFO4 RAUL COSARE
00000001	2022/3/24	DORMITORY CAMPAGAO BILAR, BOHOL	LESLIE FAY SALCES	2022/2/01	2022/3/24	2022/3/24	SFO1 KAI LIBOT	SFO4 RAUL COSARE
00000079	2022/5/12	RESIDENTIAL CAMPAGAO BILAR, BOHOL	MARY JANE LINARAN	2022/5/30	2022/5/30	2022/5/30	TYU	TY

Preview 14. Fire Drill Certification

Preview 15 shows the print out of fire drill certification application form.

Republic of the Philippines
Department of the Interior and Local Government
BUREAU OF FIRE PROTECTION
Region VII
3rd District, Bohol
Bureau of Fire Protection Bilar Station
Poblacion Bilar, Bohol

CONTROL NO. 00000002 DATE: 13/07/2022

CERTIFICATION

TO WHOM IT MAY CONCERN:

This is to certify that a **FIRE DRILL** has been conducted at **BUSINESS**
(Name of Building/Structure/Facility)
on **13/07/2022** located at **POBLACION BILAR,BOHOL**
(Date) (Address)
owned by **ISABELLA ADRIANA SALCES**
(Name of Owner/Company)

pursuant to Rule 10, Chapter 2, Division 21 of the Revised Implementing Rules and Regulations (RRR) of RA 9514 otherwise known as the "Fire Code of the Philippine of 2008".

Issued this **13/07/2022** This certification is valid until **13/07/2022**

Current Page No.: 1 Total Page No.: 1 Zoom Factor: 100%

Preview 15. Print Out Fire Drill Certification

Preview 16 shows the search fire incident.

The screenshot shows a web application window titled "SearchFireIncident". At the top, there is a red header with the text "Fire Incident List". Below the header, there is a search input field and a "Print" button. The main content is a table with the following data:

	Date	Location	Category	Name of Establishment	Name of Owner	Ground Commander	Cause of Fire
▶	2022/6/19	CAMPAGAO, BIL...	RESIDENTIAL	N/A	BELLA SALCES	KAI LIBOT	MATCHES
	2022/7/13	CAMPAGAO BIL...	RESIDENTIAL	NONE	ISABELLA ADRI...	FOI KAI LIBOT	CHILDREN I
	2022/3/21	CAMPAGAO, BIL...	RESIDENTIAL	N/A	ISABELLA ADRI...	SFO4 RAUL CO...	CHILD PLAY
	2022/6/03	SUBAYON	NONE	RESIDENTIAL	MARY JANE LIN...	A	IRO
	2022/1/12	PUROK 3 BRGY ...	RESIDENTIAL	NONE	RODOLFO M. U...	SFO4 RAUL CO...	CHILD PLA
	2022/1/21	PUROK 3, BRGY...	RESIDENTIAL	N/A	RODOLFO M. U...	SFO4 RAUL CO...	CHILD PLAY

At the bottom of the table, it says "Total : 6".

Preview 16. Search Fire Incident List

Preview 17 shows the fire incident

The screenshot shows a web application interface for the "RECORD MANAGEMENT SYSTEM OF BILAR CENTRAL FIRE STATION BILAR, BOHOL". The date is 07/13/2022 and the time is 04:52:14. The user is logged out. The main content is a form titled "Residential Fire Incident". The form has the following fields:

- Time: 09:00:00
- Date: 13/07/2022
- Location: CAMPAGAO BILAR, BOHOL
- Category: RESIDENTIAL
- Name of Establishment: NONE
- Name of Owner: ISABELLA ADRIANA A. SALCES
- Casualty/Facilities: NONE
- Injured: 1
- Estimated Damage: 15000
- No. of Affected Families: 1
- Alarm Status: 1ST ALARM
- Ground Commander: FOI KAI LIBOT
- No. of Firetruck responded: 2
- No. of Personnel Deployed: 2
- Estimated Gas Consumption: 1500
- Cause of Fire: CHILDREN PLAYING MATCH
- Origin of Fire: MATTRESS
- Floor Area: 1
- Land Area: NONE
- Time Started: 08:00:00
- Time of Call: 08:00:03
- Time of Arrival: 08:00:09
- Time Under Control: 08:00:10
- Time of Fire Out: 08:00:11
- Name of Investigator: RAUL COSARE

At the bottom of the form, there are "Save" and "Close" buttons.

Preview 17. Fire Incident Form Page

Preview 18 shows the fire code fees.

Fire Code Fees

Name of Establishment /Project: RESIDENTIAL BUILDING
 Location: CAMPAGAO, BILAR, BOHOL
 Name of Owner/Representative: SALCES, ISABELLA ADRIANA A.

Fire Safety Clearance Applying for:
 Fire Safety Evaluation Clearance Fire Safety Inspection Certificate

Fire Code Fees

Search Applicable

Date: 13/07/2022

NATURE OF PAYMENT: Fire Code Construction Tax
 ACCOUNT CODE: 628-BFP-01
 CODE AMOUNT: 1000 **Add**

Order Payment Information 70 **Add Applicable Fees**

Name of Representative	Payment	Account Code	Amount
SALCES, ISABE...	Fire Code Procee...	628-BFP-05	1000

Total Amount: 1000
 Cash Rendered: 1500 **Calculate**
 Change: 500

Print
Save **Close**

Preview 18. Fire Code Fees Form

Preview 19 shows the fire code fees receipt.

Report1

SAP CRYSTAL REPORTS®

Main Report

Republic of the Philippines
 Department of the Interior and Local Government
BUREAU OF FIRE PROTECTION
 Region VII
 3rd District, Bohol Province
 Bilar Station
 Poblacion Bilar, Bohol

NAME	DATE	PAYMENT	ACCOUNT CODE	AMOUNT
SALCES, ISABELLA ADRIANA A.	13/07/2022	Fire Code Proceeds Tax	628-BFP-05	1,000

Preview 19. Fire Code Fees Receipt

Testing and Evaluation

Testing and assessment were carried out to verify the system's functionality, notably in terms of providing desired output, processing time/period, volume of data handled, and proper reaction to user inputs. The usability of the system was assessed in this study in order to identify its technical performance as perceived by the target users.

Software testing is a method of determining whether software is performing as expected, such as producing the desired output, working quickly enough, and responding appropriately to user inputs. It's also a process of determining how good the software's intended objective have been accomplished. The survey was done with 6 respondents composed of BFP Head, BFP Personnel and Data Encoder.

System Usability

This was done to determine the level of system acceptability as perceived by the target users. Based on the result from the survey, the respondents gave a general rating of 6.03 with an interpretation of "Agree". The result generally indicates that the system is easy to use effective, informative, and easy to understand. Specifically, the expectations of the respondents as to functions and capabilities had been achieved by the system. Moreover, the system has a clear organization of information; the content is very comprehensive, with the good user interface and ease of use.

Table 13

System Usability Assessment Result

Criteria for System Usability	Weighted Mean	Interpretation
1. Overall, I am satisfied with how easy it is to use this system.	6.3	Agree
2. It was simple to use this system.	6.3	Agree
3. I can effectively complete my work using this system.	6.1	Agree
4. I am able to complete my work quickly using this system.	6	Agree
5. I am able to efficiently complete my work using this system.	6	Agree
6. I feel comfortable using this system.	6.1	Agree
7. It was easy to learn to use this system.	6.3	Agree
8. I believe I became productive quickly using this system.	6.3	Agree
9. The system gives error messages that clearly tell me how to fix problems.	5.5	Agree
10. Whenever I make a mistake using the system, I recover easily and quickly.	5.8	Agree
11. The information (such as online help, on-screen messages, and other documentation) provided with this system is clear.	5.8	Agree
12. It is easy to find the information I needed.	6	Agree
13. The information provided for the system is easy to understand.	6.3	Agree
14. The information is effective in helping me complete the tasks and scenarios.	6.1	Agree
15. The organization of information on the system screens is clear.	5.8	Agree
16. The interface of this system is pleasant.	6.1	Agree
17. I like using the interface of this system.	5.8	Agree
18. This system has all the functions and capabilities I expect it to have.	5.6	Agree
19. Overall, I am satisfied with this system.	6	Strongly Agree
AVERAGE WEIGHTED MEAN	6.03	Agree

Chapter 3

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Summary of Findings

Based on the results, the developers found out that the Bureau of Fire Protection Office uses the manual method. Furthermore, the workplace used Microsoft Excel to record data entry and data information requirements. The developers came up with a solution that secures the applicants data and information to prevent loss and misplacement of files, ease of access, and timely generation of graphical and tabular reports, which leads to slow retrieval of records.

Based on the identified needs, a record management system was developed with the following modules: network mechanism, acquisition, data management, administration and reporting. The developed system was pilot tested and evaluated in terms of system usability questionnaire. The average weighted mean of the system usability questionnaire is 6.03 which is interpreted as "Agree". The interpretation means that the respondents believed and confident that the system is usable.

Conclusions

Based on the findings of the study, the developers had concluded the following: the relevant establishment's bureau of fire protection lacks a system, and the conventional technique of record keeping and retrieval is inefficient. With

the evaluation conducted using interview, document review, and observation of the different processes of the present system and system usability using the system usability questionnaire with the result interpreted as agree that the system meets the expectations of the client. As a result, the Bureau of Fire Protection's Record Management System has enhanced record management efficiency and meets the client's needs and expectations. Adoption of the system requires minimal investment and incurs a low operational cost.

Recommendations

Based on the observations during implementation and on the aforementioned conclusions, the developers have recommended the following for efficient record management, smooth system adoption & operation and for the future development.

The concerned establishment must adopt the new develop system to improve record management and to identify possible system bugs and errors.

Training and orientation seminar must be conducted to the target users to familiarize and be oriented with the features and operation of the newly developed system.

Regular system maintenance must be done to ensure the security of records and reliability of the system.

To ensure security and data loss, back-up files in any available flash drive or disk.

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APPENDICES

APPENDIX A

Letter of Intent



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



March 28, 2022

SFO4 RAUL D. COSARE
Bureau of Fire Protection Bilar-Station
Bilar, Bohol

Sir:

Good day!

We, the 4th Year Students of Bachelor of Science in Computer Science of Bohol Island State University Bilar Campus will conduct a System Development project (Thesis) as requirements for graduation for the degree of Bachelor of Science in Computer Science.

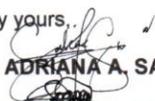
In this regard, we would like to ask your good office to allow us to conduct system study base on the recording system.

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

We anticipate your favorable response regarding this matter.

Thank you very much and more power!

Respectfully yours,


ISABELLA ADRIANA A. SALCES


DARLENE MAE G. PANOGALON

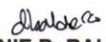

MITCH A. ARANTE
Researchers

Noted:

RENANTE S. DIGAMON, PhD
Subject/Instructor

Recommended by:

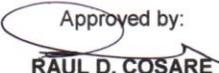
SHEILA G. TABUNO
Chairperson, DCoS


DANIE D. BALDESCO
Thesis Adviser

Endorsed by:

ARLEN B. GUDMALIN, PhD
Dean, CTAS

Approved by:


RAUL D. COSARE

SFO4, Bureau of Fire Protection Bilar-Station

Letter of Implementation



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



May 23, 2022

SFO4 RAUL D. COSARE
Bureau of Fire Protection Bilar - Station
Poblacion, Bilar, Bohol

Sir:

Greetings!

It is our pleasure to inform you that the system "RECORD MANAGEMENT SYSTEM OF BUREAU OF FIRE PROTECTION IN BILAR, BOHOL" is now in its final phase. With this, we would like to conduct benchmarking activities as part of implementation.

This will be conducted on May 23, 2022 in your office at any time of your convenience. This activity will allow you to assess our developed system and give feedback as well.

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

May the good Lord continually bless you and your office.

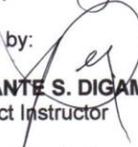
Thank you very much and more power!

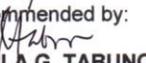
Respectfully yours,

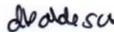

ISABELLA ADRIANA A. SALCES


DARLENE MAE G. PANO GALON


MITCH A. ARANTE
Researchers

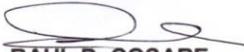
Noted by:

RENANTE S. DIGAMON, PhD
Subject Instructor

Recommended by:

SHEILA G. TABUNO
Chairperson, DCoS


DANIE D. BALDESCO
Thesis Adviser

Endorsed by:

ARLEN B. GUDMALIN, PhD
Dean, CTAS

Approved by:

RAUL D. COSARE
SFO4, Bureau of Fire Protection Bilar-Station

Letter of Questionnaire Distribution and Implementation

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

May 23, 2022

SFO4 Raul D. Cosare
Bureau of Fire Protection Bilar-Station
Bilar, Bohol

Sir:

Good day!

It is my pleasure to inform you that the system application "Record Management System of Bureau of Fire Protection in Bilar, Bohol is now in its final phase. With this, we would like to conduct benchmarking activities as part of the implementation.

This will be conducted on May 23, 2022, in your office at any time of your convenience. This activity will allow you to access our developed system and give feedback as well.

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

May God Bless you always!

Thank you and more power!

Truly yours,

Researchers

APPENDIX B

System Usability Questionnaire

Instructions:

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

Rating Scale:

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

Criteria for System Usability	Rating	Comment
Overall, I am satisfied with how easy it is to use this system. It was simple to use this system. I can effectively complete my work using this system. I am able to complete my work quickly using this system. I am able to efficiently complete my work using this system. I feel comfortable using this system. It was easy to learn to use this system. I believe I became productive quickly using this system. The system gives error messages that clearly tell me how to fix problems. Whenever I make a mistake using the system, I recover easily and quickly. The information (such as online help, on-screen messages, and other documentation) provided with this system is clear. It is easy to find the information I needed.		

\\

The information provided for the system is easy to understand.
The information is effective in helping me complete the tasks and scenarios.
The organization of information on the system screens is clear.
The interface of this system is pleasant.
I like using the interface of this system.
This system has all the functions and capabilities I expect it to have.
Overall, I am satisfied with this system.

Please list three things you liked most about this system software.

- 1.
- 2.
- 3.

Please list three things you liked least about this system software:

- 1.
- 2.
- 3.

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

Interview Guide Questions

What are the procedures in collecting data?

What are the data that need to be collected in the present system?

Where these information are recorded?

How these records are being kept and retrieved?

How are these procedures being done?

How do reports are being done in the present system?

How can we help in handling the data in the survey?

How will the recording of data be done?

How will the present system be improved to overcome the identified
problems?

Can we develop a system that can help to improve the management of your
records?

What is the level of the system usability as perceived by target users?

APPENDIX C

User's Manual

Administration Process

Accessing the system

Steps:

Login

Input "Username"

Input "Password"

Click "Log in" button to continue

Recording Process

Adding Application Form of the Applicants

Steps:

Select the "Transaction" button on the main menu then select "FSEC and FSIC Application Form" on the sub menu

Input the information of the applicant's

Click "Save"

Successfully added the information of the applicant's.

Edit/Update

Steps:

Select the "Transaction" button on the main menu then select "FSEC and FSIC Application Form" on the sub menu

Input the information you want to update.

Click “Update”

Successfully updated applicant.

Adding the Fire Safety Electrical Clearance

Steps:

Select the “Fire Safety Electrical Clearance” button on the main menu

Input the information of the applicants

Click “Save”

Successfully added the fire safety electrical clearance information of the applicants.

Edit/Update

Steps:

1. Select the “Fire Safety Electrical Clearance” button on the main menu

2. Input the information you want to update.

3. Click “Update”

4. Successfully updated applicant.

e. Adding Fire Drill Certification

Steps:

1. Select the “Fire Drill Certification” button on the main menu

2. Input the information of the applicants
3. Click "Save"
4. Successfully added the fire drill certification of the applicants.

Edit/Update

Steps:

1. Select the "Fire Drill Certification" button on the main menu
2. Input the information you want to update.
3. Click "Update"
4. Successfully updated applicant.

f. Adding Fire Incident

Steps:

1. Select the "Fire Incident" button on the main menu
2. Input the information of the applicants
3. Click "Save"
4. Successfully added the fire incident form of the applicants.

Report

System Report

Steps:

Select the "Report" button on the main menu then choose "Concessionaire's List click "Load" then "Generate Report".

Displays the Concessionaire's list.

Select the "Report" button on the main menu then choose "Fire Code Fees" then click "Generate Report".

Displays the Fire Code Fees Report.

Select the "Report" button on the main menu then choose "Fire Safety Evaluation Clearance" then click "Generate Report".

Displays the Fire Safety Evaluation Clearance.

Select the "Report" button on the main menu then choose "FSIC Business Permit" then click "Generate Report".

Displays the FSIC Business Permit.

Select the "Report" button on the main menu then choose "FSIC Occupancy" then click "Generate Report".

Displays the FSIC Occupancy.

APPENDIX D

Source Code

```
Imports MySql.Data.MySqlClient
Public Class FSEC_Application_Clearance
    Dim n As String
    Dim m As String
    Private Sub dgview_CellMouseClicked(sender As Object, e As
DataGridViewCellMouseEventArgs)
        If dgview1.RowCount = 0 Then
            MsgBox("Invalid Command!", MsgBoxStyle.Information, "System
Checked")
            Return
        End If
    End Sub
End Class
Sub clr()
    appno.Text = Nothing
    ddate.Text = Nothing
    owner2.Text = Nothing
    title.Text = Nothing
    location1.Text = Nothing
    address.Text = Nothing
    contractor.Text = Nothing
    representative.Text = Nothing
    area.Text = Nothing
    contact.Text = Nothing
    storey.Text = Nothing
    email.Text = Nothing
    fsecno.Text = Nothing
    appno.Focus()
End Sub
Sub fsecapplicants()
    Dim lt As String = "select appno as 'Application Number' , ddate as
'Date', owner as 'Project Owner', title as 'Project Title', location as
'Project Location',address as 'Owner Address',contractor as 'Name of
Contractor', representative as 'Authorized Representative', area as 'Total
Floor Area', contact as 'Contact Number', storey as 'No. of Storey', email as
'Email Address', fsecno as 'FSEC No.' from fsec where owner like '%" &
tsearch.Text & "%' order by owner"
    Dim da As New MySqlDataAdapter(lt, con)
        con.Open()
        Dim dt As New DataTable
        da.Fill(dt)
        da.Dispose()
        dgview1.DataSource = dt
        con.Close()
    End Sub
    Private Sub tsearch_TextChanged(sender As Object, e As EventArgs) Handles
tsearch.TextChanged
        fsecapplicants()
    End Sub
    Private Sub Button1_Click_2(sender As Object, e As EventArgs) Handles
Button1.Click
```

```

If owner2.Text = "" Then
    MsgBox("Enter Owner", MsgBoxStyle.Exclamation)

ElseIf contact.Text = "" Then
    MsgBox("Enter Contact Number", MsgBoxStyle.Exclamation)

ElseIf appno.Text = "" Then
    MsgBox("Enter Application Number", MsgBoxStyle.Exclamation)

ElseIf fsecno.Text = "" Then
    MsgBox("Enter FSEC No.", MsgBoxStyle.Exclamation)

ElseIf address.Text = "" Then
    MsgBox("Enter Address", MsgBoxStyle.Exclamation)
Else
    Dim s As String = "insert into
fsec(appno,ddate,owner,title,location,address,contractor,representative,area,c
ontact,storey,email,fsecno,month,year) values ('" & appno.Text & "','" &
ddate.Value.ToString("yyyy/M/dd") & "','" & _
owner2.Text & "','" & title.Text & "','" & location1.Text & "','" &
address.Text & "','" & contractor.Text & "','" & _
representative.Text & "','" & area.Text & "','" & contact.Text & "','" &
storey.Text & "','" & email.Text & "','" & fsecno.Text & "','" & m & "','" &
& n & "'"")"
    Dim cmd As New MySqlCommand(s, con)
    con.Open()
    cmd.ExecuteNonQuery()
    MsgBox("Successfully Save!", MsgBoxStyle.Information, "System
Checked")
    con.Close()
    clr()
End If
End Sub
Private Sub Button3_Click_1(sender As Object, e As EventArgs) Handles
Button3.Click
    Me.Close()
End Sub
Private Sub dgview1_CellMouseDoubleClick(sender As Object, e As
DataGridViewCellMouseEventArgs) Handles dgview1.CellMouseDoubleClick
    appno.Text = dgview1.SelectedCells(0).Value
    owner2.Text = dgview1.SelectedCells(2).Value
    title.Text = dgview1.SelectedCells(3).Value
    location1.Text = dgview1.SelectedCells(4).Value
    address.Text = dgview1.SelectedCells(5).Value
    contractor.Text = dgview1.SelectedCells(6).Value
    representative.Text = dgview1.SelectedCells(7).Value
    area.Text = dgview1.SelectedCells(8).Value
    contact.Text = dgview1.SelectedCells(9).Value
    storey.Text = dgview1.SelectedCells(10).Value
    email.Text = dgview1.SelectedCells(11).Value
    fsecno.Text = dgview1.SelectedCells(12).Value
End Sub
Private Sub Button2_Click(sender As Object, e As EventArgs) Handles
Button2.Click

```

```

        Dim s As String = "Update fsec set owner='" & owner2.Text &
"',title='" & title.Text & _
        "',location='" & location1.Text & "', address='" &
address.Text & "',contractor='" & contractor.Text & _
        "',representative='" & representative.Text &
"',area='" & area.Text & "',contact='" & contact.Text & "', storey='" &
storey.Text & "', email='" & email.Text & "' where appno = '" & appno.Text &
""

        Dim cmd As New MySqlCommand(s, con)
        con.Open()
        cmd.ExecuteNonQuery()
        MsgBox("Updated Successfully!", MsgBoxStyle.Information, "System
Checked")
        con.Close()
        fsecapplicants()
        clr()
    End Sub
    Private Sub FSEC_Application_Clearance_Load(sender As Object, e As
EventArgs) Handles MyBase.Load
        Timer1.Enabled = True
        fsecapplicants()
    End Sub
    Private Sub Button5_Click(sender As Object, e As EventArgs) Handles
Button5.Click
        Evaluation_Clearance.Show()
    End Sub
    Private Sub Button4_Click(sender As Object, e As EventArgs) Handles
Button4.Click
        Report1.Show()
        Dim cr As New fsec1
        cr.SetParameterValue("appno", appno.Text)
        cr.SetParameterValue("owner2", owner2.Text)
        cr.SetParameterValue("title", title.Text)
        cr.SetParameterValue("location1", location1.Text)
        cr.SetParameterValue("address", address.Text)
        cr.SetParameterValue("contractor", contractor.Text)
        cr.SetParameterValue("ddate", ddate.Text)
        cr.SetParameterValue("representative", representative.Text)
        cr.SetParameterValue("area", area.Text) cr.SetParameterValue("contact",
contact.Text) cr.SetParameterValue("storey", storey.Text)
        cr.SetParameterValue("email", email.Text)
        Report1.CrystalReportViewer1.ReportSource = cr
        Report1.CrystalReportViewer1.Refresh()
        cr.Close()
        cr.Dispose()
    End Su
    Private Sub appno_KeyPress(sender As Object, e As KeyPressEventArgs)
Handles appno.KeyPress
        If Asc(e.KeyChar) <> 8 Then
            If Asc(e.KeyChar) < 48 Or Asc(e.KeyChar) > 57 Then
                e.Handled = True
            End If
        End If
    End Sub

```

```

    Private Sub contact_KeyPress(sender As Object, e As KeyPressEventArgs)
Handles contact.KeyPress
        If Asc(e.KeyChar) <> 8 Then
            If Asc(e.KeyChar) < 48 Or Asc(e.KeyChar) > 57 Then
                e.Handled = True
            End If
        End If
    End Sub

    Private Sub appno_MaskInputRejected(sender As Object, e As
MaskInputRejectedEventArgs) Handles appno.MaskInputRejected

    End Sub

    Private Sub MaskedTextBox1_KeyPress(sender As Object, e As
KeyPressEventArgs)

    End Sub

    Private Sub fsecno_MaskInputRejected(sender As Object, e As
MaskInputRejectedEventArgs)

    End Sub

    Private Sub fsecno_KeyPress(sender As Object, e As KeyPressEventArgs)
Handles fsecno.KeyPress
        If Asc(e.KeyChar) <> 8 Then
            If Asc(e.KeyChar) < 48 Or Asc(e.KeyChar) > 57 Then
                e.Handled = True
            End If
        End If
    End Sub

    Private Sub owner2_TextChanged(sender As Object, e As EventArgs) Handles
owner2.TextChanged

    End Sub

    Private Sub Timer1_Tick(sender As Object, e As EventArgs) Handles
Timer1.Tick
        n = Date.Now.ToString(" yyyy")
        m = Date.Now.ToString(" MMMM")
    End Sub

    Private Sub dgview1_CellContentClick(sender As Object, e As
DataGridViewCellEventArgs) Handles dgview1.CellContentClick

    End Sub
End Class

Imports MySql.Data.MySqlClient
Public Class FSIC_Application_Certificate

    Dim n As String
    Dim m As String

```

```

Dim business As String
Sub clr()
    appno.Text = Nothing
    ddate.Text = Nothing
    owner1.Text = Nothing
    ComboBox1.Text = Nothing
    address.Text = Nothing
    representative.Text = Nothing
    contact.Text = Nothing
    storey.Text = Nothing
    email.Text = Nothing
    btnoccupancy.Text = Nothing
    business = Nothing
    fsicno.Text = Nothing
    appno.Focus()
End Sub

Sub fsicapplicants()
    Dim lt As String = "select appno as 'Application Number' , ddate as
'Date', owner as 'Name Owner', structure as 'Establishment Name', address as
'Exact Address',representative as 'Authorized Representative',occupancy as
'Type of Occupancy', bpermit as 'Business Permit', contact as 'Contact
Number', storey as 'No. of Storey', email as 'Email Address', dvalid as 'Valid
Until', fsicno as 'FSIC No.', dateissued as 'Date Issued' from fsic where
owner like '%" & tsearch.Text & "%' order by owner"
    Dim da As New MySqlDataAdapter(lt, con)
    con.Open()
    Dim dt As New DataTable
    da.Fill(dt)
    da.Dispose()
    dgview1.DataSource = dt
    con.Close()
End Sub
Private Sub Button1_Click_1(sender As Object, e As EventArgs) Handles
Button1.Click
    If owner1.Text = "" Then
        MsgBox("Enter Owner", MsgBoxStyle.Exclamation)

    ElseIf contact.Text = "" Then
        MsgBox("Enter Contact Number", MsgBoxStyle.Exclamation)

    ElseIf appno.Text = "" Then
        MsgBox("Enter Application Number", MsgBoxStyle.Exclamation)

    ElseIf fsicno.Text = "" Then
        MsgBox("Enter FSEC No.", MsgBoxStyle.Exclamation)

    ElseIf address.Text = "" Then
        MsgBox("Enter Address", MsgBoxStyle.Exclamation)
    Else
        Dim s As String = "insert into
fsic(appno,ddate,owner,structure,address,representative,occupancy,bpermit,cont
act,storey,email,dvalid,fsicno,dateissued,month,year) values ('" & appno.Text
& "','" & ddate.Value.ToString("yyyy/M/dd") & "','" & _

```

```

        owner1.Text & "', '" & ComboBox1.Text
& "', '" & address.Text & "', '" & representative.Text & "', '" &
btnoccupancy.Text & "', '" & business & "', '" & contact.Text & "', '" &
storey.Text & "', '" & email.Text & "', '" & dvalid.Value.ToString("yyyy/M/dd")
& "', '" & fsicno.Text & "', '" & dateissued.Value.ToString("yyyy/M/dd") & "',
"' & m & "', '" & n & "'")
        Dim cmd As New MySqlCommand(s, con)
        con.Open()
        cmd.ExecuteNonQuery()
        MsgBox("Successfully Save!", MsgBoxStyle.Information, "System
Checked")
        con.Close()
        clr()
    End If
End Sub
Private Sub Button3_Click_1(sender As Object, e As EventArgs) Handles
Button3.Click
    Me.Close()
End Sub
Private Sub tsearch_TextChanged_1(sender As Object, e As EventArgs)
Handles tsearch.TextChanged
    fsicapplicants()
End Sub
Private Sub Label2_Click(sender As Object, e As EventArgs) Handles
Label2.Click
End Sub
Private Sub FSIC_Application_Certificate_Load(sender As Object, e As
EventArgs) Handles MyBase.Load
    fsicapplicants()
End Sub
Private Sub Button2_Click_1(sender As Object, e As EventArgs) Handles
Button2.Click
    Dim s As String = "Update fsic set owner='" & owner1.Text &
"',structure='" & ComboBox1.Text & "',address='" & address.Text & _
        "',representative='" & representative.Text & "',
occupancy='" & btnoccupancy.Text & "', bpermit='" & business & _
        "',contact='" & contact.Text & "',storey='" &
storey.Text & "',email='" & email.Text & "',fsicno='" & fsicno.Text & "' where
appno = '" & appno.Text & "'"
    Dim cmd As New MySqlCommand(s, con)
    con.Open()
    cmd.ExecuteNonQuery()
    MsgBox("Updated Successfully!", MsgBoxStyle.Information, "System
Checked")
    con.Close()
    fsicapplicants()
    clr()
End Sub
Private Sub dgview1_CellMouseDoubleClick(sender As Object, e As
DataGridViewCellMouseEventArgs) Handles dgview1.CellMouseDoubleClick
    appno.Text = dgview1.SelectedCells(0).Value
    owner1.Text = dgview1.SelectedCells(2).Value
    ComboBox1.Text = dgview1.SelectedCells(3).Value
    address.Text = dgview1.SelectedCells(4).Value
    representative.Text = dgview1.SelectedCells(5).Value

```

```

        btnoccupancy.Text = dgview1.SelectedCells(6).Value
        business = dgview1.SelectedCells(7).Value
        contact.Text = dgview1.SelectedCells(8).Value
        storey.Text = dgview1.SelectedCells(9).Value
        email.Text = dgview1.SelectedCells(10).Value
        fsicno.Text = dgview1.SelectedCells(12).Value
    End Sub
    Private Sub dgview1_CellContentClick(sender As Object, e As
DataGridViewCellEventArgs) Handles dgview1.CellContentClick
    End Sub
    Private Sub Button5_Click(sender As Object, e As EventArgs) Handles
Button5.Click
        Evaluation_Clearance.Show()
    End Sub
    Private Sub Button4_Click(sender As Object, e As EventArgs) Handles
Button4.Click
        Report1.Show()
        Dim cr As New fsic1
        cr.SetParameterValue("appno", appno.Text)
        cr.SetParameterValue("owner1", owner1.Text)
        cr.SetParameterValue("TextBox1", ComboBox1.Text)
        cr.SetParameterValue("address", address.Text)
        cr.SetParameterValue("representative", representative.Text)
        cr.SetParameterValue("contact", contact.Text)
        cr.SetParameterValue("storey", storey.Text)
        cr.SetParameterValue("email", email.Text)
        cr.SetParameterValue("dvalid", dvalid.Text)
        cr.SetParameterValue("btnoccupancy", btnoccupancy.Text)
        cr.SetParameterValue("btnpermit", business)
        Report1.CrystalReportViewer1.ReportSource = cr
        Report1.CrystalReportViewer1.Refresh()
        cr.Close()
        cr.Dispose()
    End Sub
    Private Sub Panel2_Paint(sender As Object, e As PaintEventArgs) Handles
Panel2.Paint
    End Sub
    Private Sub appno_KeyPress(sender As Object, e As KeyPressEventArgs)
Handles appno.KeyPress
        If Asc(e.KeyChar) <> 8 Then
            If Asc(e.KeyChar) < 48 Or Asc(e.KeyChar) > 57 Then
                e.Handled = True
            End If
        End If
    End Sub
    Private Sub MaskedTextBox1_MaskInputRejected(sender As Object, e As
MaskInputRejectedEventArgs)
    End Sub
    Private Sub MaskedTextBox1_KeyPress(sender As Object, e As
KeyPressEventArgs)
        If Asc(e.KeyChar) <> 8 Then
            If Asc(e.KeyChar) < 48 Or Asc(e.KeyChar) > 57 Then
                e.Handled = True
            End If
        End If
    End Sub

```

```

    End Sub
    Private Sub contact_KeyPress(sender As Object, e As KeyPressEventArgs)
Handles contact.KeyPress
        If Asc(e.KeyChar) <> 8 Then
            If Asc(e.KeyChar) < 48 Or Asc(e.KeyChar) > 57 Then
                e.Handled = True
            End If
        End If
    End Sub

    Private Sub TextBox2_KeyPress(sender As Object, e As KeyPressEventArgs)
Handles fsicno.KeyPress
        If Asc(e.KeyChar) <> 8 Then
            If Asc(e.KeyChar) < 48 Or Asc(e.KeyChar) > 57 Then
                e.Handled = True
            End If
        End If
    End Sub
    Private Sub Timer1_Tick(sender As Object, e As EventArgs) Handles
Timer1.Tick
        n = Date.Now.ToString(" yyyy")
        m = Date.Now.ToString(" MMMM")
    End Sub
    Private Sub contact_TextChanged(sender As Object, e As EventArgs) Handles
contact.TextChanged
    End Sub
    Private Sub CheckBox1_CheckedChanged(sender As Object, e As EventArgs)
Handles CheckBox1.CheckedChanged
        business = "New"
    End Sub
    Private Sub CheckBox2_CheckedChanged(sender As Object, e As EventArgs)
Handles CheckBox2.CheckedChanged
        business = "Renewal"
    End Sub
End Class

Imports MySql.Data.MySqlClient

Public Class Electrical_Clearance
    Dim n As String
    Dim m As String
    Sub clr()
        fsecno.Text = Nothing
        dtpdata.Text = Nothing
        facility.Text = Nothing
        name2.Text = Nothing
        location2.Text = Nothing
        phase.Text = Nothing
        installed.Text = Nothing
        license.Text = Nothing
        breaker.Text = Nothing
        nect1.Text = Nothing
        dtpvalid.Text = Nothing
        ComboBox1.Text = Nothing
        volt.Text = Nothing
    End Sub
End Class

```

```

        recommend.Text = Nothing
        approval.Text = Nothing
        fsecno.Focus()
    End Sub
    Sub electrical()
        Dim lt As String = "select fsecno as 'FSEC No.' ,dtpdate as 'Date',
        facility as 'Name of Building/Structure/Facility', name as 'Name of Owner',
        location as 'Location',phase as 'No. of Phase',installed as 'Installed By',
        license as 'PRC License Number', breaker as 'Main Circuit Breaker', tblead as
        'Total Connected Load', dvalid as 'Valid Until', tbinstal as 'Kind of
        Installation',volt as 'Voltage', recommend as 'Recommend Approval', approval
        as 'Approved' from electrical where name like '%" & tsearch.Text & "%' order
        by name"
        Dim da As New MySqlConnection(con)

        con.Open()
        Dim dt As New DataTable
        da.Fill(dt)
        da.Dispose()
        dgvview1.DataSource = dt
        con.Close()

    End Sub

    Private Sub Button3_Click(sender As Object, e As EventArgs) Handles
    Button3.Click
        Me.Close()
    End Sub

    Private Sub Button2_Click(sender As Object, e As EventArgs) Handles
    Button2.Click
        Dim s As String = "Update electrical set facility='" & facility.Text &
        "',name='" & name2.Text & _
            "',location='" & location2.Text & "', phase='" &
        phase.Text & "',installed='" & installed.Text & _
            "',license='" & license.Text & "',breaker='" &
        breaker.Text & "',tbinstal='" & ComboBox1.SelectedItem & "', volt='" &
        volt.Text & "', tblead='" & nect1.Text & "', recommend='" & recommend.Text &
        "', approval='" & approval.Text & "' where fsecno = '" & fsecno.Text & "'"
        Dim cmd As New MySqlCommand(s, con)
        con.Open()
        cmd.ExecuteNonQuery()
        MsgBox("Updated Successfully!", MsgBoxStyle.Information, "System
        Checked")
        con.Close()
        electrical()
    clr()
    End Sub
    Private Sub btnsave_Click(sender As Object, e As EventArgs) Handles
    btnsave.Click
        If name2.Text = "" Then
            MsgBox("Enter Name", MsgBoxStyle.Exclamation)

        ElseIf location2.Text = "" Then
            MsgBox("Enter Location", MsgBoxStyle.Exclamation)
        End If
    End Sub

```

```

ElseIf facility.Text = "" Then
    MsgBox("Enter Facility", MsgBoxStyle.Exclamation)
Else
    Dim s As String = "insert into
electrical(fsecno,dtptime,facility,name,location,phase,installed,license,breaker,tbload,dvalid,tbinstal,volt,recommend,approval,month,year) values (' &
fsecno.Text & ',' & dtptime.Value.ToString("yyyy/M/dd") & ',' &
facility.Text & ',' & name2.Text & ',' & location2.Text & ',' &
phase.Text & ',' & installed.Text & ',' & license.Text & ',' &
breaker.Text & ',' & nect1.Text & ',' &
dtpvalid.Value.ToString("yyyy/M/dd") & ',' & ComboBox1.SelectedItem & ',' &
volt.Text & ',' & recommend.Text & ',' & approval.Text & ',' & m
& ',' & n & ''")
    Dim cmd As New MySqlCommand(s, con)
    con.Open()
    cmd.ExecuteNonQuery()
    MsgBox("Successfully Save!", MsgBoxStyle.Information, "System
Checked")
    con.Close()
    clr()
End If
End Sub
Private Sub tsearch_TextChanged(sender As Object, e As EventArgs) Handles
tsearch.TextChanged
    electrical()
End Sub
Private Sub Panel1_Paint(sender As Object, e As PaintEventArgs) Handles
Panel1.Paint
End Sub
Private Sub dgview1_CellMouseDoubleClick(sender As Object, e As
DataGridViewCellEventArgs) Handles dgview1.CellMouseDoubleClick
    fsecno.Text = dgview1.SelectedCells(0).Value
    facility.Text = dgview1.SelectedCells(2).Value
    name2.Text = dgview1.SelectedCells(3).Value
    location2.Text = dgview1.SelectedCells(4).Value
    phase.Text = dgview1.SelectedCells(5).Value
    installed.Text = dgview1.SelectedCells(6).Value
    license.Text = dgview1.SelectedCells(7).Value
    breaker.Text = dgview1.SelectedCells(8).Value
    ComboBox1.SelectedItem = dgview1.SelectedCells(11).Value
    nect1.Text = dgview1.SelectedCells(9).Value
    volt.Text = dgview1.SelectedCells(12).Value
    recommend.Text = dgview1.SelectedCells(13).Value
    approval.Text = dgview1.SelectedCells(14).Value
End Sub
Private Sub dgview1_CellContentClick(sender As Object, e As
DataGridViewCellEventArgs) Handles dgview1.CellContentClick
End Sub
Private Sub Button4_Click(sender As Object, e As EventArgs) Handles
Button4.Click
    Report1.Show()
    Dim cr As New electrical
    cr.SetParameterValue("fsecno", fsecno.Text)
    cr.SetParameterValue("dtptime", dtptime.Text)

```

```

        cr.SetParameterValue("facility", facility.Text)
        cr.SetParameterValue("name2", name2.Text)
    cr.SetParameterValue("location2", location2.Text)
        cr.SetParameterValue("phase", phase.Text)
    cr.SetParameterValue("installed", installed.Text)
        cr.SetParameterValue("license", license.Text)
        cr.SetParameterValue("breaker", breaker.Text)
    cr.SetParameterValue("ComboBox1", ComboBox1.Text)
        cr.SetParameterValue("volt", volt.Text)
        cr.SetParameterValue("nect1", nect1.Text)
        cr.SetParameterValue("dtpvalid", dtpvalid.Text)
        cr.SetParameterValue("recommend", recommend.Text)
    cr.SetParameterValue("approval", approval.Text)
        Report1.CrystalReportViewer1.ReportSource = cr
        Report1.CrystalReportViewer1.Refresh()
        cr.Close()
        cr.Dispose()
    End Sub
    Private Sub Timer1_Tick(sender As Object, e As EventArgs) Handles
Timer1.Tick
        n = Date.Now.ToString(" yyyy")
        m = Date.Now.ToString(" MMMM")
    End Sub
    Private Sub Electrical_Clearance_Load(sender As Object, e As EventArgs)
Handles MyBase.Load
        Timer1.Enabled = True
        electrical()
    End Sub

    Private Sub Button1_Click(sender As Object, e As EventArgs) Handles
Button1.Click
        Evaluation_Clearance.Show()
    End Sub
    Private Sub fsecno_TextChanged(sender As Object, e As EventArgs) Handles
fsecno.TextChanged
    End Sub
    Private Sub fsecno_KeyPress(sender As Object, e As KeyPressEventArgs)
Handles fsecno.KeyPress
        If Asc(e.KeyChar) <> 8 Then
            If Asc(e.KeyChar) < 48 Or Asc(e.KeyChar) > 57 Then
                e.Handled = True
            End If
        End If
    End Sub
End Class

Imports MySql.Data.MySqlClient
Public Class Fire_Drill_Certification
    Sub clr()
        control.Text = Nothing
        dtpdate.Text = Nothing
        building.Text = Nothing
        address.Text = Nothing
        company.Text = Nothing
        dtpconducted.Text = Nothing
    End Sub
End Class

```

```

        dtpissued.Text = Nothing
        dtpvalid.Text = Nothing
        approval.Text = Nothing
        control.Focus()
    End Sub
    Sub firedrill()
        Dim lt As String = "select tbcontrol as 'Control No.', date as
'Date', building as 'Name of Building/Structure/Facility', address as
'Address', owner as 'Name of Owner/Company',conducted as 'Date
Conducted',issued as 'Issued',valid as 'Valid Until', recommend as 'Recommend
Approval', approval as 'Approved' from firedrill where owner like '%" &
tsearch.Text & "%' order by owner"
        Dim da As New MySqlDataAdapter(lt, con)
        con.Open()
        Dim dt As New DataTable
        da.Fill(dt)
        da.Dispose()
        dgview1.DataSource = dt
        con.Close()
    End Sub
    Private Sub Button1_Click_2(sender As Object, e As EventArgs) Handles
btnsave.Click
        If control.Text = "" Then
            MsgBox("Enter Control No.", MsgBoxStyle.Exclamation)

        ElseIf address.Text = "" Then
            MsgBox("Enter Address", MsgBoxStyle.Exclamation)

        ElseIf company.Text = "" Then
            MsgBox("Enter FSEC No.", MsgBoxStyle.Exclamation)
        Else
            Dim s As String = "insert into
firedrill(tbcontrol,date,building,address,owner,conducted,issued,valid,recomme
nd,approval) values ('" & control.Text & "', '" &
dtpdate.Value.ToString("yyyy/M/dd") & "', '" & _
                building.Text & "', '" &
address.Text & "', '" & company.Text & "', '" &
dtpconducted.Value.ToString("yyyy/M/dd") & "', '" &
dtpissued.Value.ToString("yyyy/M/dd") & "', '" & _
dtpvalid.Value.ToString("yyyy/M/dd") & "', '" & recommend.Text & "', '" &
approval.Text & "')"
            Dim cmd As New MySqlCommand(s, con)
            con.Open()
            cmd.ExecuteNonQuery()
            MsgBox("Successfully Save!", MsgBoxStyle.Information, "System
Checked")
            con.Close()
            clr()
        End If
    End Sub
    Private Sub tsearch_TextChanged(sender As Object, e As EventArgs) Handles
tsearch.TextChanged
        firedrill()
    End Sub

```

```

    Private Sub dgview1_CellMouseDoubleClick(sender As Object, e As
DataGridViewCellEventArgs) Handles dgview1.CellMouseDoubleClick
        control.Text = dgview1.SelectedCells(0).Value
        building.Text = dgview1.SelectedCells(2).Value
        address.Text = dgview1.SelectedCells(3).Value
        company.Text = dgview1.SelectedCells(4).Value
        recommend.Text = dgview1.SelectedCells(8).Value
        approval.Text = dgview1.SelectedCells(9).Value
    End Sub
    Private Sub dgview1_CellContentClick(sender As Object, e As
DataGridViewCellEventArgs) Handles dgview1.CellContentClick
    End Sub
    Private Sub Button2_Click(sender As Object, e As EventArgs) Handles
Button2.Click
        Dim s As String = "Update firedrill set building='" & building.Text &
"',address='" & address.Text & "',owner='" & company.Text & _
        "',recommend='" & recommend.Text & "',approval='" &
approval.Text & "' where tbcontrol = '" & control.Text & "'"
        Dim cmd As New MySqlCommand(s, con)
        con.Open()
        cmd.ExecuteNonQuery()
        MsgBox("Updated Successfully!", MsgBoxStyle.Information, "System
Checked")
        con.Close()
        firedrill()

        clr()
    End Sub
    Private Sub Button3_Click_1(sender As Object, e As EventArgs) Handles
Button3.Click
        Me.Close()
    End Sub
    Private Sub Button1_Click(sender As Object, e As EventArgs) Handles
Button1.Click
        Evaluation_Clearance.Show()
    End Sub
    Private Sub Button4_Click(sender As Object, e As EventArgs) Handles
Button4.Click
        Report1.Show(
            Dim cr As New drillcert
            cr.SetParameterValue("control", control.Text)
            cr.SetParameterValue("building", building.Text)
            cr.SetParameterValue("company", company.Text
            cr.SetParameterValue("address", address.Text)
            cr.SetParameterValue("dtpdate", dtpdate.Text)
            cr.SetParameterValue("dtpconducted", dtpconducted.Text)
            cr.SetParameterValue("dtpissued", dtpissued.Text)
            cr.SetParameterValue("dtpvalid", dtpvalid.Text)
            cr.SetParameterValue("recommend", recommend.Text)
            cr.SetParameterValue("approval", approval.Text)
            Report1.CrystalReportViewer1.ReportSource = cr
            Report1.CrystalReportViewer1.Refresh()
            cr.Close()
            cr.Dispose()
        End Sub

```

```

    Private Sub control_TextChanged(sender As Object, e As EventArgs) Handles
control.TextChanged
    End Sub
    Private Sub control_KeyPress(sender As Object, e As KeyPressEventArgs)
Handles control.KeyPress
    If Asc(e.KeyChar) <> 8 Then
        If Asc(e.KeyChar) < 48 Or Asc(e.KeyChar) > 57 Then
            e.Handled = True
        End If
    End If
    End Sub
    Private Sub Fire_Drill_Certification_Load(sender As Object, e As
EventArgs) Handles MyBase.Load
    firedrill()
    End Sub
    Private Sub Panel1_Paint(sender As Object, e As PaintEventArgs) Handles
Panel1.Paint
    End Sub
End Class

Imports MySql.Data.MySqlClient
Public Class filterdata
    Dim con As New
MySqlConnection("Server=localhost;User=root;password=;database=dbrecord;")
    Private Sub filterdata_Load(sender As Object, e As EventArgs) Handles
MyBase.Load
    FilterData("")
    End Sub
    Public Sub FilterData(valueToSearch As String)
    Dim searchQuery As String = "SELECT * FROM fsic WHERE
CONCAT(apno,ddate,owner,structure,address,representative,occupancy,bpermit,co
ntact,storey,email,dvalid,fsicno,dateissued)like '%" & valueToSearch & "%'"
    Dim command As New MySqlCommand(searchQuery, con)
    Dim adapter As New MySqlDataAdapter(command)
    Dim table As New DataTable()
    adapter.Fill(table)
    DataGridView1.DataSource = table
    End Sub
    Private Sub Button1_Click(sender As Object, e As EventArgs) Handles
Button1.Click
    FilterData(TextBox1.Text)
    End Sub
    Private Sub TextBox1_TextChanged(sender As Object, e As EventArgs) Handles
TextBox1.TextChanged
    FilterData(TextBox1.Text)
    End Sub
    Private Sub DataGridView1_CellContentClick(sender As Object, e As
DataGridViewCellEventArgs) Handles DataGridView1.CellContentClick
    End Sub
    Private Sub GroupBox1_Enter(sender As Object, e As EventArgs) Handles
GroupBox1.Enter
    End Sub
End Class

Imports MySql.Data.MySqlClient

```

```

Public Class Report
    Dim daGEJJ As New MySqlConnection()
    Dim dsGEJJ As New DataSet()

    Private Sub RadioButton3_CheckedChanged(sender As Object, e As EventArgs)
    End Sub
    Private Sub Button2_Click(sender As Object, e As EventArgs) Handles
Button2.Click
        If (
            occupancymonth.Checked = True
        ) Then
            fsicoccupymonthreport()
            Return
        End If
        If (
            occupancyyear.Checked = True
        ) Then
            fsicoccupyyearreport()
            Return
        End If
    End Sub
    Sub fsicoccupymonthreport()
        Me.Show()
        dsGEJJ.Clear()
        Try
            With con
                If .State = ConnectionState.Open Then .Close()
                con.Open()
            End With
            Catch ex As MySqlException
                MsgBox(ex.ToString)
            End Try
            Try
                Dim qr As String = ("select * from fsic order by occupancy ")
                daGEJJ.SelectCommand = New MySqlCommand(qr, con)
                Dim cb As MySqlCommandBuilder = New MySqlCommandBuilder(daGEJJ)
                daGEJJ.Fill(dsGEJJ, "fsic")
                daGEJJ.Dispose()
            Catch ex As MySqlException
                MsgBox(ex.ToString)
            Finally
                con.Close()
            End Try
            Dim objRpt As New fsicoccupancy 'report name'
            objRpt.SetDataSource(dsGEJJ.Tables("fsic"))
            CrystalReportViewer1.ReportSource = objRpt
            CrystalReportViewer1.RefreshReport()
        End Sub

        Sub fsicoccupyyearreport()
            Me.Show()
            dsGEJJ.Clear()
            Try
                With con
                    If .State = ConnectionState.Open Then .Close()
                End With
            Catch ex As MySqlException
                MsgBox(ex.ToString)
            End Try
        End Sub
    End Class

```

```

        con.Open()
    End With
Catch ex As MySqlException
    MsgBox(ex.ToString)
End Try
Try
    Dim qr As String = ("select * from fsic order by occupancy ")
    daGEJJ.SelectCommand = New MySqlCommand(qr, con)

    Dim cb As MySqlCommandBuilder = New MySqlCommandBuilder(daGEJJ)
    daGEJJ.Fill(dsGEJJ, "fsic")
    daGEJJ.Dispose()
Catch ex As MySqlException
    MsgBox(ex.ToString)
Finally
    con.Close()
End Try
Dim objRpt As New fsicoccupancyYearly 'report name'
objRpt.SetDataSource(dsGEJJ.Tables("fsic"))
CrystalReportViewer1.ReportSource = objRpt
CrystalReportViewer1.RefreshReport()
End Sub
Private Sub Button5_Click(sender As Object, e As EventArgs) Handles
Button5.Click
    If (
        permitmonth.Checked = True
    ) Then
        fsicpermitmonth()
        Return
    End If
    If (
        permityear.Checked = True
    ) Then
        fsicpermityear()
        Return
    End If
End Sub
Sub fsicpermitmonth()
    Me.Show()
    dsGEJJ.Clear()
    Try
        With con
            If .State = ConnectionState.Open Then .Close()
            con.Open()
        End With
    Catch ex As MySqlException
        MsgBox(ex.ToString)
    End Try
    Try
        Dim qr As String = ("select * from fsic order by bpermit ")
        daGEJJ.SelectCommand = New MySqlCommand(qr, con)
        Dim cb As MySqlCommandBuilder = New MySqlCommandBuilder(daGEJJ)
        daGEJJ.Fill(dsGEJJ, "fsic")
        daGEJJ.Dispose()
    Catch ex As MySqlException

```

```

        MsgBox(ex.ToString)
    Finally
        con.Close()
    End Try
    Dim objRpt As New fsicpermit 'report name'
    objRpt.SetDataSource(dsGEJJ.Tables("fsic"))
    CrystalReportViewer1.ReportSource = objRpt
    CrystalReportViewer1.RefreshReport()

End Sub
Sub fsicpermyear()
    Me.Show()
    dsGEJJ.Clear()
    Try
        With con
            If .State = ConnectionState.Open Then .Close()

            con.Open()
        End With
    Catch ex As MySqlException
        MsgBox(ex.ToString)
    End Try
    Try
        Dim qr As String = ("select * from fsic order by bpermit ")
        daGEJJ.SelectCommand = New MySqlCommand(qr, con)
        Dim cb As MySqlCommandBuilder = New MySqlCommandBuilder(daGEJJ)
        daGEJJ.Fill(dsGEJJ, "fsic")
        daGEJJ.Dispose()
    Catch ex As MySqlException
        MsgBox(ex.ToString)
    Finally
        con.Close()
    End Try
    Dim objRpt As New fsicpermitYearly 'report name'
    objRpt.SetDataSource(dsGEJJ.Tables("fsic"))
    CrystalReportViewer1.ReportSource = objRpt
    CrystalReportViewer1.RefreshReport()
End Sub
Private Sub Button3_Click(sender As Object, e As EventArgs) Handles
Button3.Click
    If (
        feesmonth.Checked = True
    ) Then
        firefeesmonth()
        Return
    End If
    If (
        feesyear.Checked = True
    ) Then
        firefeesyear()
        Return
    End If
End Sub
Sub firefeesmonth()
    Me.Show()

```

```

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

        con.Open()
    End With
Catch ex As MySqlException
    MsgBox(ex.ToString)
End Try
Try
    Dim qr As String = ("select * from addfees order by accname ")
    daGEJJ.SelectCommand = New MySqlCommand(qr, con)

    Dim cb As MySqlCommandBuilder = New MySqlCommandBuilder(daGEJJ)
    daGEJJ.Fill(dsGEJJ, "addfees")
    daGEJJ.Dispose()
Catch ex As MySqlException
    MsgBox(ex.ToString)
Finally
    con.Close()
End Try
Dim objRpt As New codefees 'report name'
objRpt.SetDataSource(dsGEJJ.Tables("addfees"))
CrystalReportViewer1.ReportSource = objRpt
CrystalReportViewer1.RefreshReport()
End Sub
Sub firefeesyear()
    Me.Show()
    dsGEJJ.Clear()
    Try
        With con
            If .State = ConnectionState.Open Then .Close()
            con.Open()
        End With
    Catch ex As MySqlException
        MsgBox(ex.ToString)
    End Try
    Try
        Dim qr As String = ("select * from addfees order by accname ")
        daGEJJ.SelectCommand = New MySqlCommand(qr, con)
        Dim cb As MySqlCommandBuilder = New MySqlCommandBuilder(daGEJJ)
        daGEJJ.Fill(dsGEJJ, "addfees")
        daGEJJ.Dispose()
    Catch ex As MySqlException
        MsgBox(ex.ToString)
    Finally
        con.Close()
    End Try
    Dim objRpt As New codefeesYearly 'report name'
    objRpt.SetDataSource(dsGEJJ.Tables("addfees"))
    CrystalReportViewer1.ReportSource = objRpt
    CrystalReportViewer1.RefreshReport()
End Sub

```

```

Private Sub Button1_Click(sender As Object, e As EventArgs) Handles
Button1.Click
    If (
        fsecmonth.Checked = True
    ) Then
        fsecmonthreport()
        Return
    End If
    If (
        fsecyear.Checked = True
    ) Then
        fsecyearreport()
        Return
    End If
End Sub
Sub fsecmonthreport()
    Me.Show()

    dsGEJJ.Clear()
    Try
        With con
            If .State = ConnectionState.Open Then .Close()
            con.Open()
        End With
    Catch ex As MySqlException
        MsgBox(ex.ToString)
    End Try
    Try
        Dim qr As String = ("select * from fsec order by appno ")
        daGEJJ.SelectCommand = New MySqlCommand(qr, con)
        Dim cb As MySqlCommandBuilder = New MySqlCommandBuilder(daGEJJ)
        daGEJJ.Fill(dsGEJJ, "fsec")
        daGEJJ.Dispose()
    Catch ex As MySqlException
        MsgBox(ex.ToString)
    Finally
        con.Close()
    End Try
    Dim objRpt As New fsecreport 'report name'
objRpt.SetDataSource(dsGEJJ.Tables("fsec"))
    CrystalReportViewer1.ReportSource = objRpt
CrystalReportViewer1.RefreshReport()
End Sub
Sub fsecyearreport()
    Me.Show()
    dsGEJJ.Clear()
    Try
        With con
            If .State = ConnectionState.Open Then .Close()
            con.Open()
        End With
    Catch ex As MySqlException
        MsgBox(ex.ToString)
    End Try
    Try

```

```

    Dim qr As String = ("select * from fsec order by appno ")
    daGEJJ.SelectCommand = New MySqlCommand(qr, con)

    Dim cb As MySqlCommandBuilder = New MySqlCommandBuilder(daGEJJ)
    daGEJJ.Fill(dsGEJJ, "fsec")
    daGEJJ.Dispose()
Catch ex As MySqlException
    MsgBox(ex.ToString)
Finally
    con.Close()
End Try
Dim objRpt As New fsecyearly 'report name'
objRpt.SetDataSource(dsGEJJ.Tables("fsec"))
CrystalReportViewer1.ReportSource = objRpt
CrystalReportViewer1.RefreshReport()
End Sub
Private Sub CrystalReportViewer1_Load(sender As Object, e As EventArgs)
Handles CrystalReportViewer1.Load
End Sub
Private Sub RadioButton1_CheckedChanged(sender As Object, e As EventArgs)
Handles fsecmonth.CheckedChanged

End Sub

Private Sub RadioButton2_CheckedChanged(sender As Object, e As EventArgs)
Handles fsecyear.CheckedChanged
End Sub
Private Sub RadioButton4_CheckedChanged(sender As Object, e As EventArgs)
Handles occupancymonth.CheckedChanged
End Sub
Private Sub Panel1_Paint(sender As Object, e As PaintEventArgs) Handles
Panel1.Paint
End Sub
End Class

```

DEVELOPER'S BIODATA

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: 2017 - 2018
Tertiary : Bohol Island State University- Bilar Campus
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Elementary : Batuan Central Elementary School
: Poblacion Sur Batuan, Bohol
: 2011 - 2012
Secondary : Bilar National High School
: Yanaya, Bilar, Bohol
: 2017 – 2018
Tertiary : Bohol Island State University- Bilar Campus
: Zamora, Bilar, Bohol
: Present
Degree Earned : Bachelor of Science in Computer Science
Worked Experience : On the Job Training
: BISU Bilar Campus
: Zamora, Bilar, Bohol
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