

**A PROPOSED COMPUTER LABORATORY MANAGEMENT SYSTEM FOR
PAMANTASAN NG LUNGSOD NG MARIKINA (GREENHEIGHTS CAMPUS)**

**A Capstone Project
Presented to the Faculty of
Pamantasan ng Lungsod ng Marikina
College of Information Technology**

**In Partial Fulfillment of the
Requirements for the Degree of
Bachelor of Science in Information Technology**

**Almeida, Jessy Lotte Jaine N.
Rodas, Ronilyn F.**

**March 2019
DEDICATION**

This capstone project is dedicated to our instructor Sir Crisanto Sarmiento who had been

guiding and supporting us throughout this study. To our panelists Renjun Orain, Mylene Alvaran, thank you for believing us and accepting our study. Also to our beloved parents who have always loved us unconditionally. We are truly grateful to have you both in our lives.

To our dear friends, brothers and sisters, classmates and colleagues, thank you for the understanding and encouragement in lots of our hard times.

Thank you God for guiding us and giving us strength when we needed it the most.

This study is only a beginning of our journey.

Executive Summary

In today's generation, there's no doubt that computers have become part of our daily lives. The tasks we do every day are getting faster and easier because of this, as the technology is getting more advanced. As a result, people are now getting reliant on their computers and as they use it more often, they may expect greater demands on the system. There's no wonder why the use of computers became popular because it makes the learning process a lot simpler and efficient. Unlike decades ago, students had to go to the library to research their lessons in class. Now with the advantage of having internet connection, we can easily find things we want to know through searching.

Now, the society recognized the necessity to adapt and teach technology to students as part of education. It is essential for every school to have computer laboratories that provide tools that can improve skills and knowledge. Using the multimedia tools, students can watch videos, presentations and other programs for school works. In fact, there's more to explore in a computer -- from typing to learning graphic design, saving files and coding in HTML. Indeed, learning to use the computer properly is important especially in school.

On the other hand, a poorly supervised computer laboratory may encounter threats of unwanted activities. There is a lab technician assigned for computer laboratories to maintain the computer in a good condition. A lab technician has to check the availability of the

computers for each class that enters the computer lab. Also, he has responsibility to ensure the security in the computer laboratory.

Table of Contents

| | |
|--|------------|
| I. Introduction..... | 1 |
| Purpose and Description | 2 |
| Objectives..... | 3 |
| Scope and Limitation | 4 |
| II. Review of Related Literature..... | 5 |
| Technical Background..... | 7 |
| Implementation Work..... | 8 |
| Technical Terms..... | 10 |
| Methodology | 13 |
| Requirement Analysis..... | 14 |
| | 18 |
| | 18 |
| | 18 |
| | 18 |
| Requirement Documentation..... | 19 |
| Design Software..... | 21 |
| Development and Testing | 22 |
| Description of Prototype | 23 |
| | 39 |
| Implementation Plan..... | 40 |
| V.Appendices..... | 41 |
| I. Relevance Source Codes | 42 |
| Flowchart..... | 183 |
| Screen Layout | 188 |
| USER’S GUIDE | 206 |

Pamantasan ng Lungsod ng Marikina Introduction

I. Introduction

Project Context

As we lived in a modern world where technology is growing and advancing, it is essential to educate the youth to computer literacy. Many schools and universities support computer laboratory operations that introduce the use of computer software and hardware

to their students. Each computer has an interactive educational tool that can be accessed by the students and can apply to their studies. However, there's always a lab technician assigned in every computer laboratory in school. A lab technician has the task to check and test the materials before students occupy the seats. They are also responsible to watch the computer laboratory every time the occupants enter and leave and this has a purpose to ensure security. In addition, they also have a task to assist the students for the damage and malfunctions of the computers, do the troubleshooting and ensure that there is no technical problems.

The Pamantasan ng Lungsod ng Marikina was the first city government-funded university in Marikina spearheaded by Mayor Marides C. Fernando, Cong. Marcelino Teodoro, and Dr. Jerome Mendoza, established on June 2003 with objective to provide quality but affordable territory education to the residence of Marikina by Ordinance No.015 Series of 2003. In fact, enrollment in 2003 successively increased to 1,424 total number students. For year 2012-2013, it has a total number of 6,051 enrollees. The university eventually offered new courses such as BS Information Technology. Soon after, PLMar established two computer laboratories in 2012 with a maximum of 50 computers each. On June 2014, PLMar expanded and opened new campus located at SSS Village, Marikina City. Recently, the University opened another three computer laboratories in SSS campus. Therefore, there are two lab technicians to ensure the security of the computers in two campuses. In their current system of computer laboratory in Pamantasan ng Lungsod ng Marikina are the student can enter and access the computer even without the instructor's consent or it can be they are not schedule in the computer laboratory. In the current system

Computer Laboratory Management System for **1 of 209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Introduction

of the computer laboratory of PLMar, anyone can enter and use computer even without the instructor's consent. There's no existing software that restrict the usage of computers. The proposed Computer Laboratory Management System for Pamantasan ng Lungsod ng Marikina is a centralized management for computers that has suitable time allocation to every class that enters in the computer laboratory. The system is capable of limiting the

hours session when a student logged in a computer and automatically close student's access when the session is over. Therefore, this will benefit both faculty and students because the system ensures the security regarding with the class schedules in the computer laboratory.

Purpose and Description

The project mainly discussed the roles of computer laboratories in schools and the importance of implementing a management system that will provide a solution with the usage of computers. Once it is developed, the system can monitor the students log in and out. In addition, the person who operates the system can assign occupants according to the availability of their schedule.

The Computer Laboratory Management System has the following capabilities: 1. Allow each student to register account with their designated class schedules. 2. Once the student is logged in, the system will automatically count the time session. 3. Maximize the use of computers depending on class schedules. Only the scheduled class is allowed to enter the computer laboratory and use the computer.

4. Avoid dealing with the seat-in students who use the PC when he's not on his schedule in the computer lab.

5. Provides the record of class who logged in and out of the system as this can be use as future reference.

However, the system must have met the demands and standards for it to become reliable and efficient. A good quality that satisfies the user is an important goal in developing a

system. This will be the key to success for the development of the system and presumably apply the software quality characteristics of ISO 9126.

The following are the characteristics of good quality software according to the objective standard of the ISO 9126:

- Functionality – Are the required functions available in the system? •

Reliability- How reliable is the system?

- Usability- How easy to use this system?
- Efficiency- How efficient is the system?
- Maintainability-Is the system easy to modify?
- Portability- Is the system easy to transfer?

ISO 9126:

- Providing a functional system that allows the student to create account for the system so they can have access to the PC.
 - Allowing the operator to give time session for the student once logged in to the system. •
- Providing user-friendly interface that is simple and easy to use.
- Secure all the data that was saved in the computer. Only the students who created an account on the system can access their own files.
 - Maximize the use of the computers by scheduling the class that are allowed to enter in the computer laboratory on a certain time and date.
 - Providing the capability to monitor the student that log in and out of the system.

Objectives

The section contains specific objectives of Computer Laboratory Management System for the usage of computers by managing class schedules.

There were four primary objectives of the proposed system.

- To validate the user if he has class schedule in the computer laboratory on that day. •
- To manage the time schedule of student and professor in computer laboratory. • To add a computer laboratory information.

Computer Laboratory Management System for **3** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Introduction

- To view and generate reports including log history and log attempt.

Scope and Limitation

This project discusses the effectiveness of having a management system for the

computer laboratory that would lessen the time consuming of turning off all computers and get rid using computers if not scheduled in a certain time.

These are the following scopes of the system:

- The system has the capability to handle class schedules in the computer lab. The admin can be the lab technician. He/she can add and update subject information to be scheduled in the computer laboratory.
- The system has the capability to authorize viewing the log history and log attempts.
- The system has the capability to set time session by its designated subject schedule for every student who access the PC in the computer lab.
- When logged in to the system, the time session is running. Before the session is over, there will be a message box that reminds the student to save his/her files in every 10 minutes, 5 minutes and 1 minute remaining.
- The system has the capability to lock the account of a user if not using the PC and also enter his account if using the PC again.
- The system will restrict the unauthorized user who attempt to use the computer when he is not on his designated class in the computer lab.

These are the following limitations of the system:

- The system is not capable to extend the class hours.
- The system is not capable to have grading sub system for the students.
- The system is not capable to auto-save the files that are not saved once the session stopped

Computer Laboratory Management System for 4 of 209 Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Review of Related Literature

II. Review of Related Literature

Different kind of references such as documentation, books and articles about the studies

and implementation of computer laboratory management system can be found online. These references discussed the effectiveness of having a management system in the computer laboratory.

Foreign Study

According to the study of The Computer Laboratory Time Management System, the author cited that the system provides a centralized management for workstations, which are managed by the system administrator. It enables suitable time allocation to students based on demand for practical activities by allowing only authorized users with valid username and password to share the few available computer facilities. The benefits that CLTMS provides include; limiting hours when a student can/cannot logon a computer, limiting how long an eligible student can use a computer by allocating them specific time on weekly basis, automatically closing a student's session when the time is out, recording user statistics like used and remaining hours, remote computer management by the system administrator, authentication and providing security options to protect time settings from unauthorized access.

Local Studies

According to the study of the Computer Laboratory in Samar College, the objective of computer laboratory management system is to develop a system that would handle the management and monitoring of the computer laboratory. A system that would lessen the unmannered use of computers, time consuming of turning off all computers, get rid of using computers if not in a schedule.

According in Computer Rental System is a system software that provides a wide variety of applications and services that could offer to a customer which is the client that

Computer Laboratory Management System for **5** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Review of Related Literature

is primarily used in doing research and anything that the internet could give. It has been design to use in an Internet Café or a Computer Shop for PC rental and it has a process of

user account for them to login, log out and have a monitor of usage of time they use. It also shows the amount of payment depending on the duration of time the customer used to be computed.

According to IJRISE, computer Lab monitoring system is used to build up and improve the management system for computer labs. The purpose of development included in this project is to retrieve the original management system with a computerized system. Nowadays, teachers are required to maintain the practical using the lab manual & currently the students do the login to the different computers which one is available in the lab, drawback of this the proper database of completion of practical's is not maintain, which is not easy for the inspectorate to check it and terminate the program. Hence, this application will be built where student can write their purpose of using of lab, at the same time maintain the record computerized using the lab monitoring system. The student data will be stored in a database where it will be view and manage by the administrator, also another attribute added like news updates and view student feedback again system will be monitor. The student practical record stored in database.

Nowadays, teachers are required to maintain the practical using the lab manual and currently the students do the login to different computers which one is available in the lab, at the same time maintain the record computerized using the lab monitoring system. The student data will be stored in a database where it will be view and manage by the authorized personnel.

By all means, as said on the different research studies, management system in the computer lab is mainly for security purposes. To handle and manage the computer laboratory in the schools to be managed by the admin which must be a lab technician.

Computer Laboratory Management System for **6 of 209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina III. Technical Background

III. Technical Background

This chapter presents the technical background to this study. Throughout, the discussion will be concerned with the fundamental ideas of having Computer Laboratory Monitoring System in specific workplace such as schools.

What is Client-Server and the function of it?

Client-Server is design for end-user to access and transfer a file, music, documents and other files that can transfer to central computer, called server. It is also, the connection between the hardware devices and server to a specific function. The client server can monitor and view the entire task you do in every PC. It also creates a security that the unauthorized person cannot access to networks.

Every system has own function that can perform in specific way. So, the functions of Computer Laboratory Management System are the following:

- 1) The client will make a request to get something from the server so the end-user will get the files from the server or vice versa. Then the server will take the request and make sure that the request is valid because it is included in security purposes.
- 2) The end-user will send a file to the server to print the documents or to mail it. 3) The server can change the protocol's settings and server's files because the server has authorization in specific network.
- 4) And also, the server can delete, add, and rename a file.
- 5) Through network, the server can check each end-user doing, files and status of client.

The importance of Computer Laboratory Management System is it can access the client to server or vice versa. The system can control the entire computer (end-user) by restriction or limiting the usage of the computer. Furthermore, it also needs to ensure that the information and the files are accurate for the reason that if the other end-user request for the files, the server itself needs to response to the request and give the files if needed. The client server is authorized to restrict the unauthorized person to use the computer.

The benefits of having a Computer Laboratory Management System in specific place are the following:

- The log history can keep the record the users who logged in and out of the system.

- The admin will manage the schedule for each class that will occupy the computer laboratory.
- The system will notify the student if the time session is about to end.
- The system can restrict the unauthorized person who attempts to use the computer.

Implementation Work

This section describes the support software, materials, equipment, and facilities required for the implementation, as well as the personnel requirements and training necessary for the implementation. The information provided in this section is not site-specific. If there are additional support requirements not covered by the subsequent sections, others may be added as needed.

• Hardware, Software, Facilities, and Materials

In this section, list support software, materials, equipment, and facilities required for the implementation.

• Hardware

This section provides a list of support equipment and includes all hardware used for testing time implementation.

- ☐ Monitor
- ☐ Keyboard
- ☐ AVR
- ☐ System Unit
- ☐ Switch
- ☐ Router
- ☐ LAN Cable
- ☐ HDD()
- ☐ CPU Processor(Quad Core or Above)

- Software

This section provides a list of software and databases required to support the implementation. Identify the software by name, code, or acronym. Identify any software used to facilitate the implementation process.

- Windows Server 2008

- Is a server operating system developed by Microsoft, which build into Windows Server 2003. The researcher used this to embedded the proposed system.

- Antivirus (Avast)

- The Avast Antivirus product can provide computer security, firewall, browser security etc. The researcher use this Antivirus for better secure while the system is in the stage of testing

- Microsoft Visual Basic (VB.net) 2012

- It is a multi-paradigm, object-oriented programming language, implemented on the .NET Framework. The researchers used this to develop the program or the system.

- Microsoft SQL Server 2008 R2

- MySQL is an open source relational database management system (RDBMS) based on Structured Query Language (SQL). By using this database, the researchers can save all the data and records. It can also organize the data.
-

Personnel

This section describes personnel requirements and any known or proposed staffing requirements, if appropriate. For the implementation, identify them and their roles in the implementation.

- Admin (Lab Technician)

- The person who operate and maintain the proposed system in Computer Laboratory. □ Professor

- The person who handle the proposed system in the computer laboratory

Computer Laboratory Management System for **9** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina III. Technical Background

How the proposed system works?

1. Get the schedule of each class that has a subject schedule in the computer laboratory. 2. After adding the schedule in the system, the admin will create account for students and professor.
3. Once the student accessed his account based on his schedule, time session will start to count. The system can be able to limit the usage of PC depending on the designated subject class.
4. There is a message box that tells the user the time is about to end. The message box will appear in 10 minutes, 5 minutes and 1 minute that will reminds the student to save his work before the session stopped.
5. Unauthorized user cannot use the system if he is not scheduled to use the PC.
6. In the database, these are the things needed to be secure:
 - The accounts for the students, professor and admin
 - The schedule for subject or course in computer laboratory

Technical Terms

- Computer - A computer is a device that accepts information (in the form of digitalized data) and manipulates it for some result based on a program or sequence of instructions on how the data is to be processed.
- Unwanted Activities - doing bad things when using computer.
- Maintain - to fix the problem; not encounter some bugs or virus
- Technology - machinery and equipment developed from the application of scientific knowledge.
- Laboratory technician - are skilled workers that work with complex systems or perform highly technical mechanical or diagnostic tests in medical or scientific laboratories. Depending on the field, technicians may work independently or under the direction of a

professional.

Computer Laboratory Management System for **10 of 209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina III. Technical Background

- Management system - is the framework of policies, processes and procedures used by an organization to ensure that it can fulfill all the tasks required to achieve its objectives. •
- Computer laboratory - is a space which provides computer services to a defined community.
- Functional system - consists of a set of functions and a set of operations that are applied to the functions.
- Log In and out -
a username and password that allows a person to log in to a computer system, network, mobile device, or user account.
- System Administrator - system administrator who monitors system health, monitors and allocates system resources like disk space, performs backups, provides user access, manages user accounts, monitors system security and performs many other functions.
- Database - is a collection of information that is organized so that it can be easily accessed, managed and updated
- Security - is to secure the information in intruders
- Client server - A client-server network is designed for end-users, called clients, to access resources such as files, songs, video collections, or some other service from a central computer called a server. A server's sole purpose is to do what its name implies - serve its clients!
- Network - is a set of computers connected together for the purpose of sharing resources.
The most common resource shared today is connection to the Internet.
- Graphic Design - is the process of visual communication and problem-solving using one or more of typography, photography and illustration.
- Multimedia - is content that uses a combination of different content forms such as text, audio, images, animations, video and interactive content.
- HTML HyperText Markup Language (HTML) - is the standard markup language for creating web pages and web applications.

- Interface - A user interface, consisting of the set of dials, knobs, operating system commands, graphical display formats, and other devices provided by a computer or a program to allow the user to communicate and use the computer or program.

Computer Laboratory Management System for **11** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina III. Technical Background

- Prototype – a first, typical or preliminary model of something, especially a machine, from which other forms are developed or copied.
- Module – each of a set of standardized parts or independent units that can be used to construct a more complex structure, such as an item of furniture or a building
- Software – the programs and other operating information used by a computer.
- Methodology – a system of methods used in a particular area of study or activity.
- Design Software – Software design is a process to transform user requirements into some suitable form, which helps the programmer in software coding and implementation.
- Implementation Plan – An implementation plan breaks each strategy into identifiable steps, assigns each step to one or more people and suggests when each step will be completed

Computer Laboratory Management System for **12 of 209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina IV. Methodology

IV. Methodology

The researchers choose Agile Methodology because it is very realistic development approach. Whenever there's some changes, the agile method can go back to baseline and it should ongoing whatever it takes. The method must have interaction between the client, project manager, programmer and the other members. Since then, the researchers compare the Agile method and the iterative method. The researchers observe every detail differences of iterative and agile method. The similarity of these methods is it can go back to the desired stage and change all over again. But the difference of these method is: The Iterative Method is a repetition incarnate. It means when there's changes in the

baseline all the work probably changes all over again, until the project is correctly. There's no specific due date at all. While in Agile Method there's always a specific time and date to finish the proposed project. When the client requests to add on, it should be granted and the project must ongoing.

The Phases of Agile Methodology are the following:

- Stage 1: Plan > In planning, the researchers should plan what will be GUI of the proposed system, the functionality of the proposed system and it should also be applicable to the client
- Stage 2: Design > In designing interfaces, it should be relevant and applicable to the client. The design of the system should be user-friendly so the client and client's workers can easily understand the process of the system.
- Step 3: Develop > On developing a system, it should be one by one according to the objective, for example the student has only 3 attempts regarding to logging out. The developers must always take a look and do the objective.
- Step 4: Test > On testing, the system should be test inside and out of the client and other researchers. If there is not applicable or something to change the developer can debug immediately.
- Step 5: Evaluate > On evaluating, the client and adviser need to evaluate the researchers' proposed system.
- Step 6: Meet > On meeting the client, the researchers should do the objective he wants in the system. And also it should be check by Project Manager and Adviser.

Computer Laboratory Management System for **13** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina IV. Methodology

Since this method is depending heavily in the customer interaction. The project can head the wrong way if the client is not clear on the direction she or he wants to go.

Requirement Analysis

In the manual transaction process of the computer laboratory, there is no automated system that records the logs of every class that enters the computer laboratory. Students can use the computers without even permission including seat-in students that has not scheduled in the computer laboratory. This is the reason why there is a problem in

the availability of the computers.

The Computer Laboratory Management System is designed and developed to manage the availability of the computers in the computer laboratory. This is to ensure that the occupants in the class are in the right scheduled to use the computer laboratory. As for the fact that the system has automated logs, the problem that deals with the countability of the occupants has now a solution.

- Record Log Book – Occupants in the computer lab uses log book to record the in and out. •
- Daily Time Record (DTR) – Lab technician and professor in the computer lab uses daily time record to keep their time in and time out.
- NetSupport – Professor in the computer lab uses NetSupport to control the PCs screen remotely.

Computer Laboratory Management System for **14** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina IV. Methodology

This is the **data flow diagram** (DFD) of the proposed system.

PROFESSOR

The professor uses
NetSupport to remote
access each students'

The students uses the
computer lab for their
subjects.

COMPUTER
PCs.

TRADITIONAL

STUDENT ADMIN

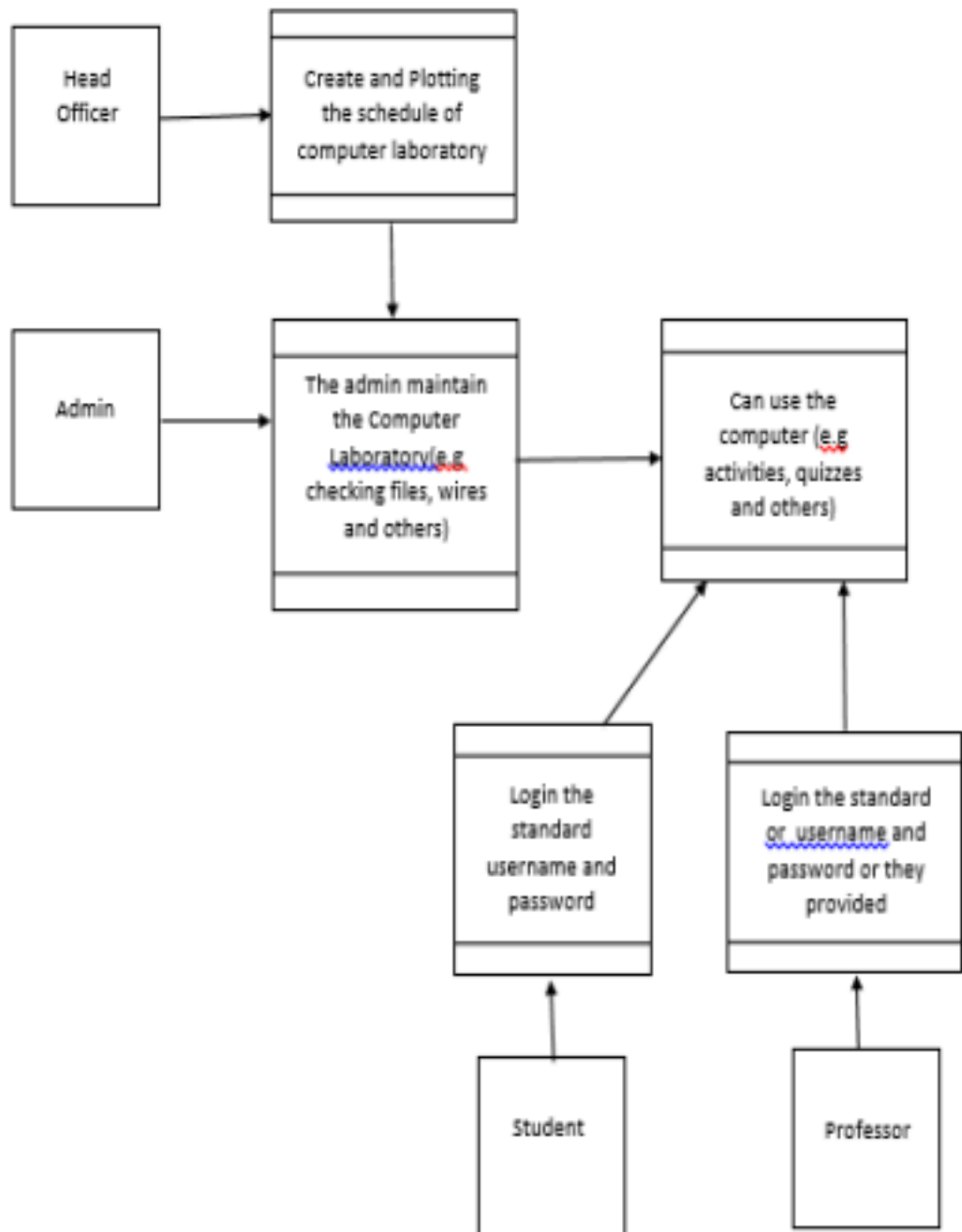
MANAGEMENT
SYSTEM

computer lab physically such
as networking,
troubleshooting.

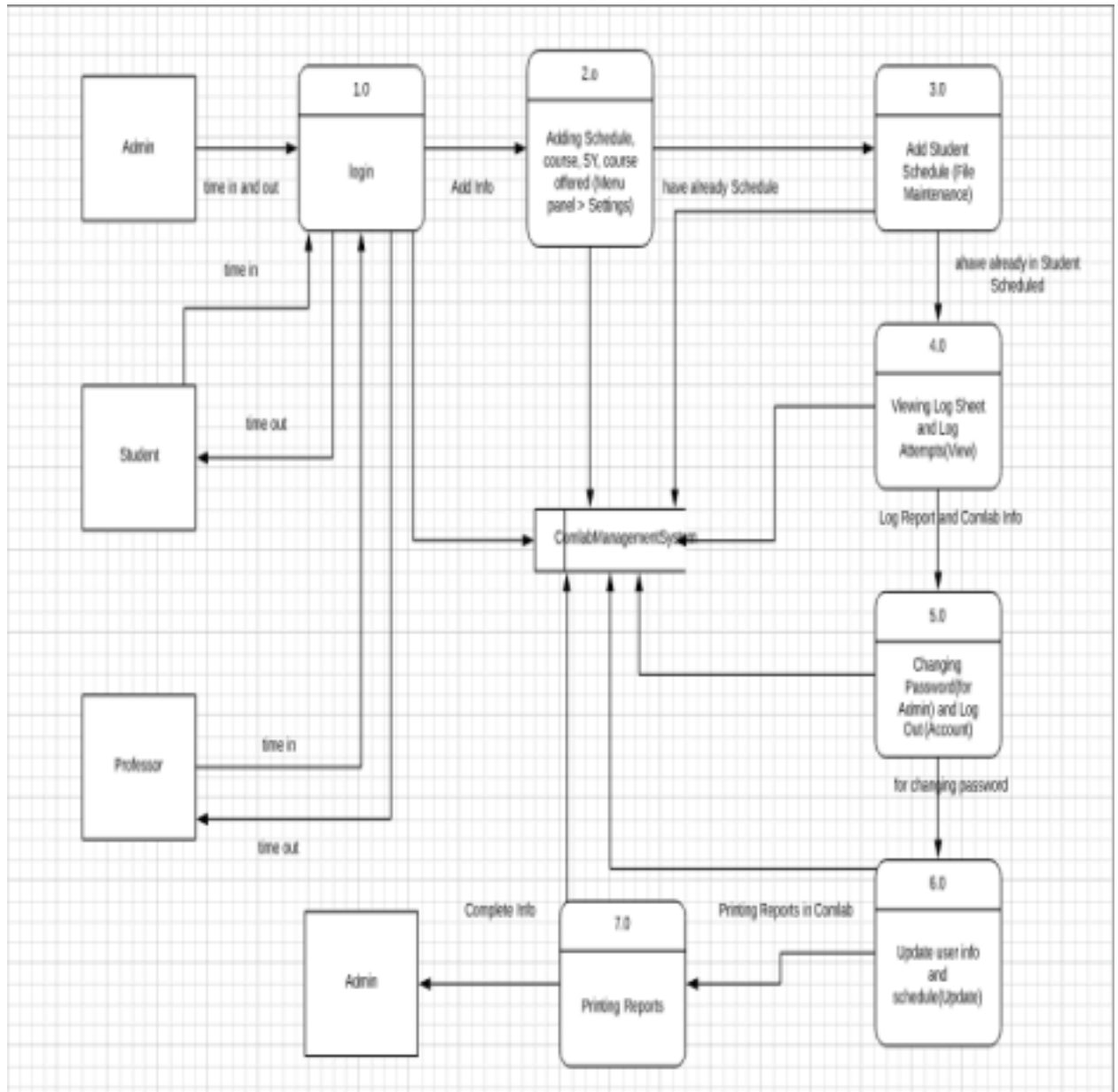
The head officer creates the
schedule in
computer laboratory.

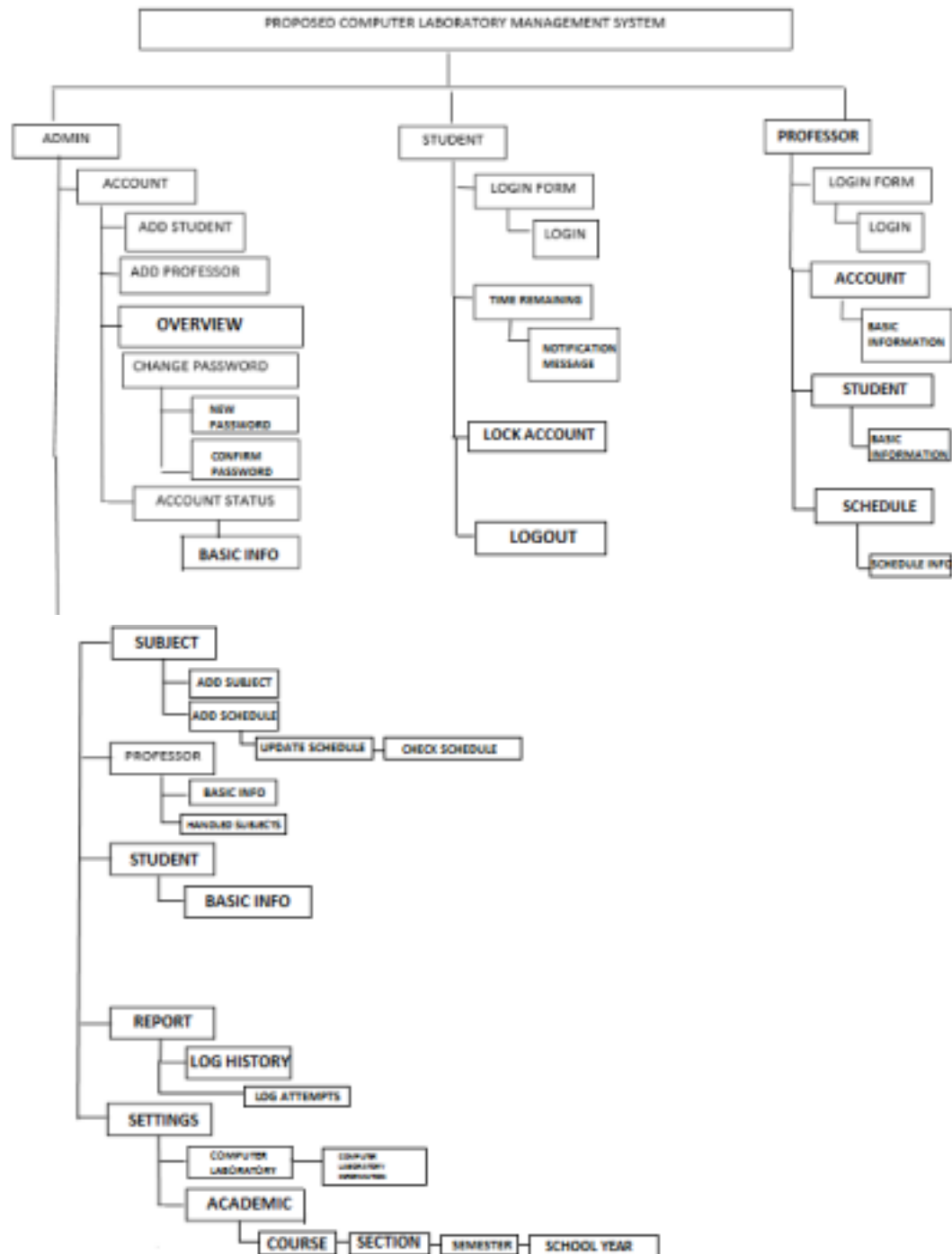
HEAD
OFFICER
The admin manage the

Data Flow Diagram Level 1



Pamantasan ng Lungsod ng Marikina IV. Methodology





Requirement Documentation

In this chapter, the requirement documentation is the establishment between the client and the researchers what is needed to do.

- Admin Account Login Module

This module will allow the system to authenticate admin user.

- Student Account Login Module

This module will allow the system to authenticate student user.

- Professor Account Login Module

This module will allow the system to authenticate professor user.

- Admin Module

- Admin Account Login Module

- This module will allow the system to authenticate admin user.

- Dashboard Module

- This module will allow the admin to view the PC and user status if online or offline.

- Professor Module

- This module will allow to view and update the information for the professor.

- Student Module

- This module will allow to view and update the information for the student.

- Account Module

- This module will allow the admin to add account for students and professors. It will also change the password and can change and view the account information.

- Subject Module

- This module will allow the admin to add, view and update the subject.

- Schedule Module

- This module will allow the admin to view the subject, student and professor schedule.

- Report Module

- This module will allow the admin to generalize and print report.

Computer Laboratory Management System for **19 of 209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina IV. Methodology

- ☐ Log Attempts

- ☐ Log History

- Settings Module

- ☐ Add Course Module

- ☐ Add Section

- ☐ Add Semester

- ☐ Add School Year

- Student Panel Module

This module will show the details of the user in time session as well as the subject scheduled. There is a window form that shows the remaining time. Once the time session ended, the system will automatically back to login. However, the user can log out to his account when occurs.

- Professor Panel Module

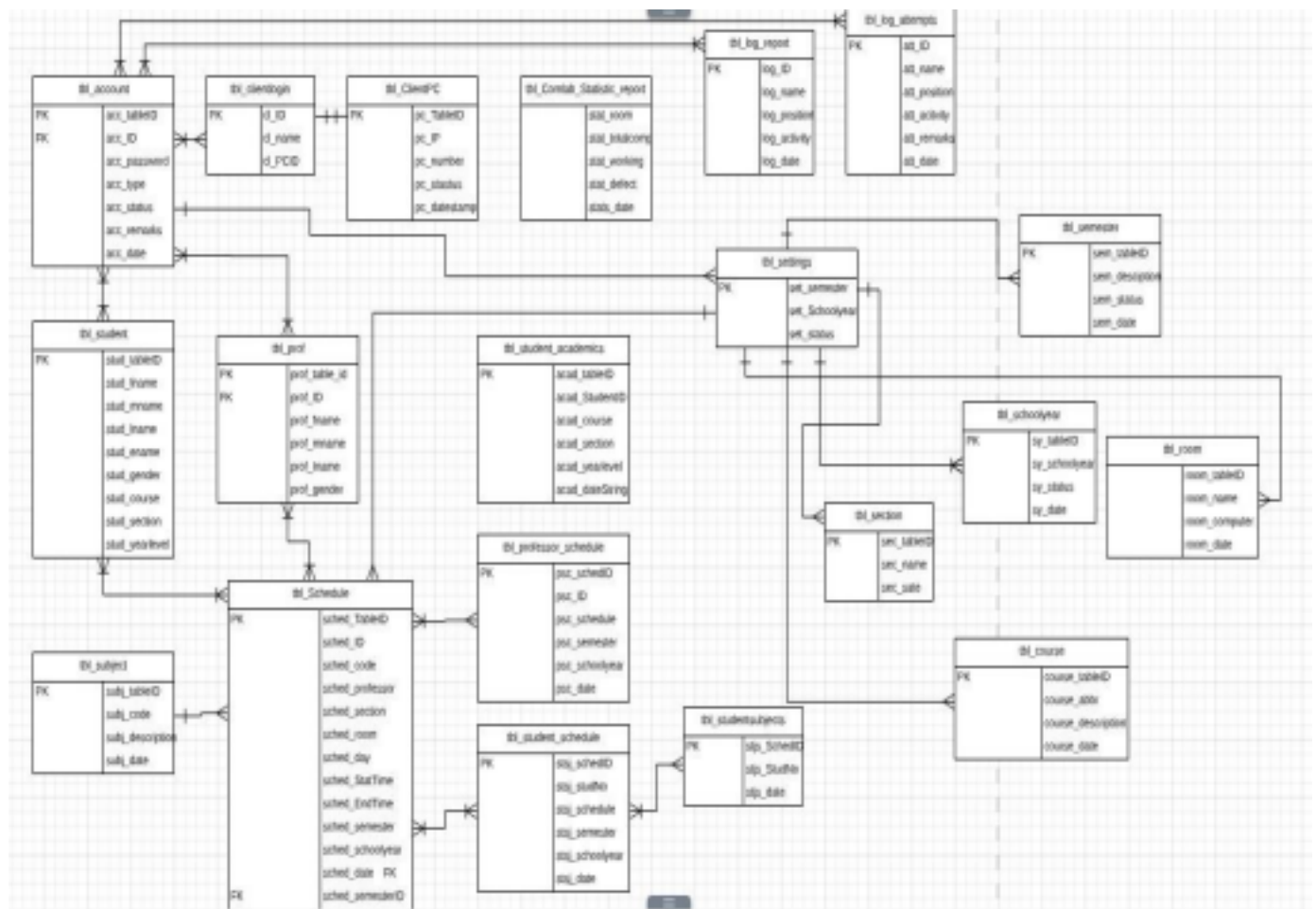
This module will allow the professor to view his account information. As well as the students and schedule information.

- Notification Module

This module will notify the user if the time session is going to end. There is a message box that will remind the user to save his activities in the PC. Also, the system can automatically identify if the user is not scheduled in the computer laboratory. When the user attempt to log in to the PC, the system will let the user know that he is not allowed to use the PC. The access of the user in the PC will be denied.

Computer Laboratory Management System for **20 of 209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina IV. Methodology

This is the **Entity Related Diagram (ERD)** of the system.



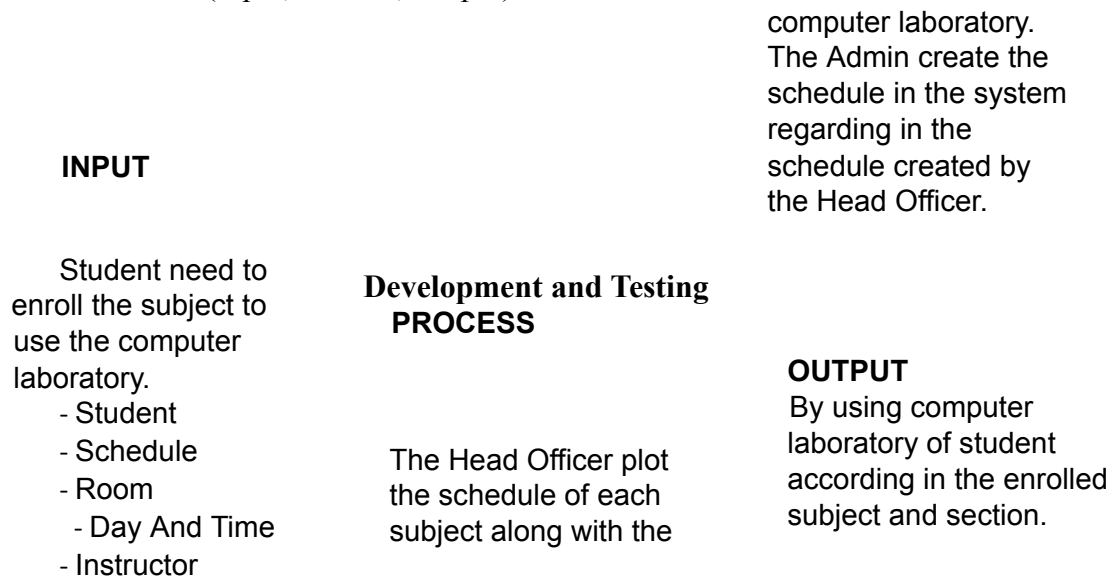
Design Software

In this figure is the Input Process Output (IPO) chart that shows the concept idea of the study. In the input column where the knowledge requirements with regards to the

chapter II, hardware and software requirements. In the process column where the planning, design, system development, system testing and system implementation were discussed. Lastly, in the output column is the computer laboratory management system.

Computer Laboratory Management System for **21** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina IV. Methodology

IPO DIAGRAM (Input, Process, Output)



In this chapter the researchers develop the system according to the goals and objectives. As the system is developing, it should have a testing to know the possibilities to catch errors and bugs to change immediately. This testing can help the programmer to

know the logic and physical errors. In testing, there's a lot of testing method that would help the researchers to know the best way in testing the system for example black box testing white box testing and others.

The following is the testing that we should do:

- Unit Testing

Unit Testing is the test which the system is compatible in the server of the computer laboratory.

- Integration Testing

Integration Testing is a test which the individual software components if it is working appropriately.

Computer Laboratory Management System for **22 of 209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina IV. Methodology

- System testing

System Testing is a final testing that should verify or meet the specified requirements.

- Acceptance Testing

Acceptance Testing is the testing which the client is testing if the system is met according the goals and objectives the client.

Furthermore, in developing, designing and evaluating the proposed Computer Laboratory Management System, the proponents shall be using the ISO 9126-1 software quality model. The ISO 9126-1 represents the latest and ongoing research into characterizing software for the purpose of software quality control, software quality assurance and software process improvement (SPI). It identifies the main quality characteristics namely:

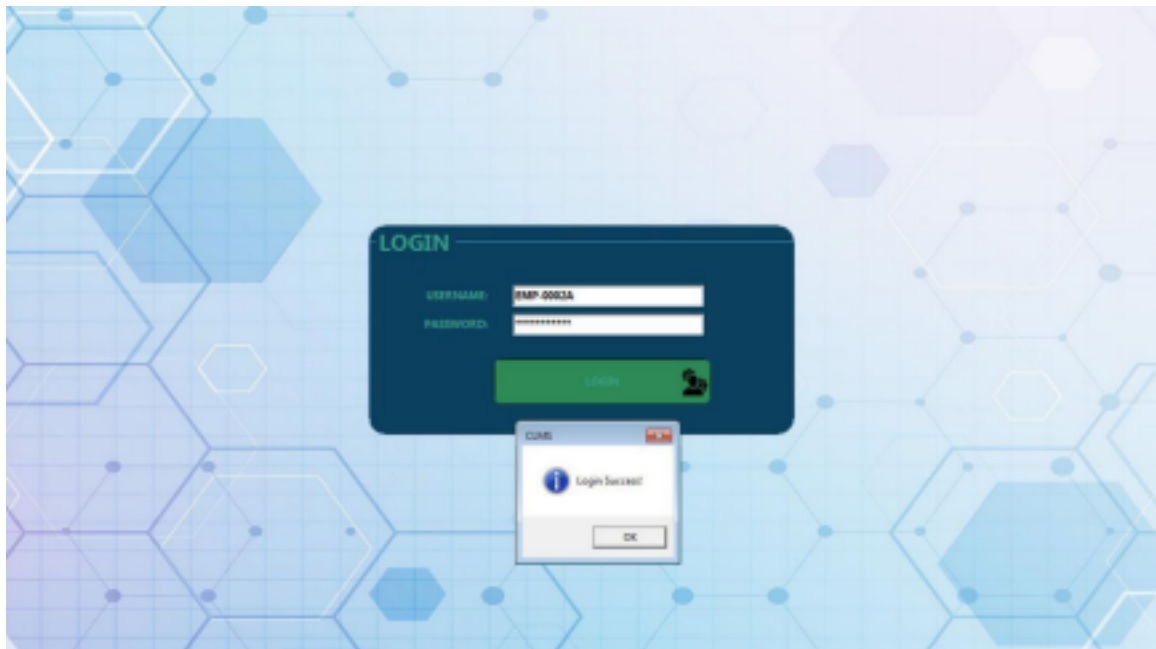
- Functionality
- Reliability
- Usability
- Efficiency
- Maintainability
- Portability

Description of Prototype

In this chapter, the researchers discuss the description of the prototype. To use the prototype of the system is the most important part because the programmer will have a basis in designing the proposed system. Furthermore, this would help to know the functions of each forms of the proposed system.

Computer Laboratory Management System for **23** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)

Pamantasan ng Lungsod ng Marikina IV. Methodology



This is the **login form for professor**. The user should fill up his username and password. When the user enter his account by clicking the login button, he will automatically access the professor panel.

**COMPUTER LABORATORY
MANAGEMENT SYSTEM
GREEN HEIGHTS CAMPUS**

Welcome, professor

Monday, February 16, 2019
10:00:30 PM

Account
Student
Schedule

Employee ID EMP-00024

Name RESUETE ORAIN

Gender Male

Password

Computer Laboratory Management System for **24** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina IV. Methodology

This is the **professor panel** after he accessed his account successfully. This form shows the basic information about the professor such as his Employee ID, name, gender and password (blank).

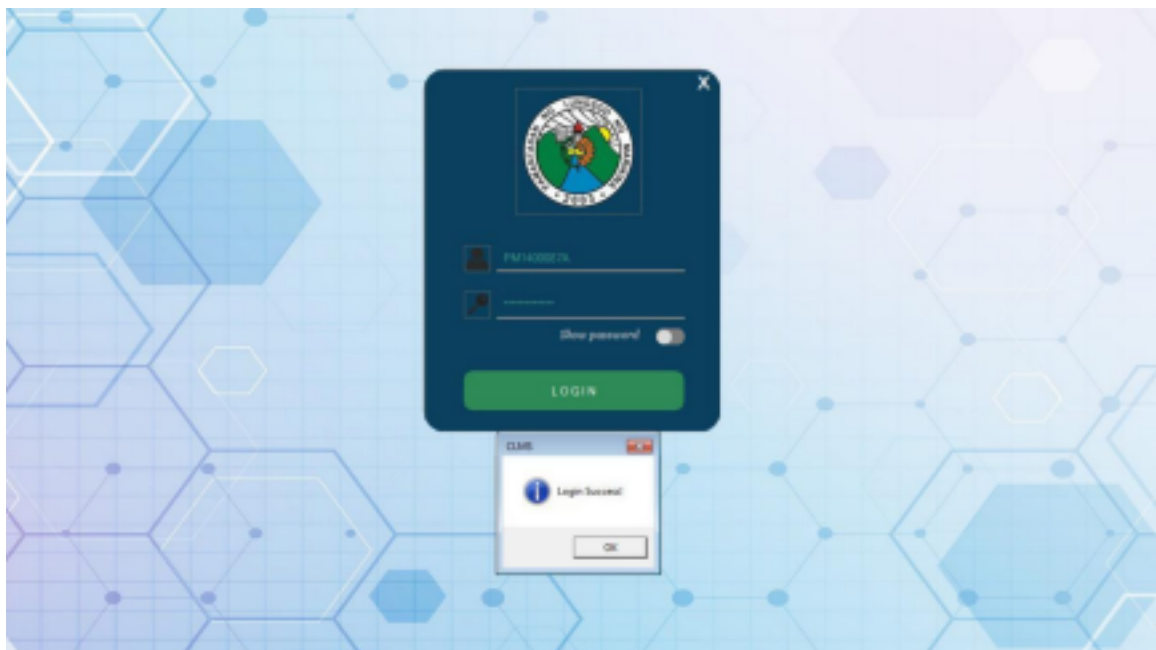
| STUDENT NO. | NAME | COURSE | SECTION | YEAR LEVEL |
|-------------|------------------------|--------|---------|------------|
| PNW00504 | JESSY ALMEDA | BSIT | BSIT2A | 1st Year |
| PNW00514A | ROMELYN FUSELERO ROGAS | BSIT | BSIT2A | 1st Year |

This form shows the students' list handled by the professor. The list displays the student no., name, course, section and year level.

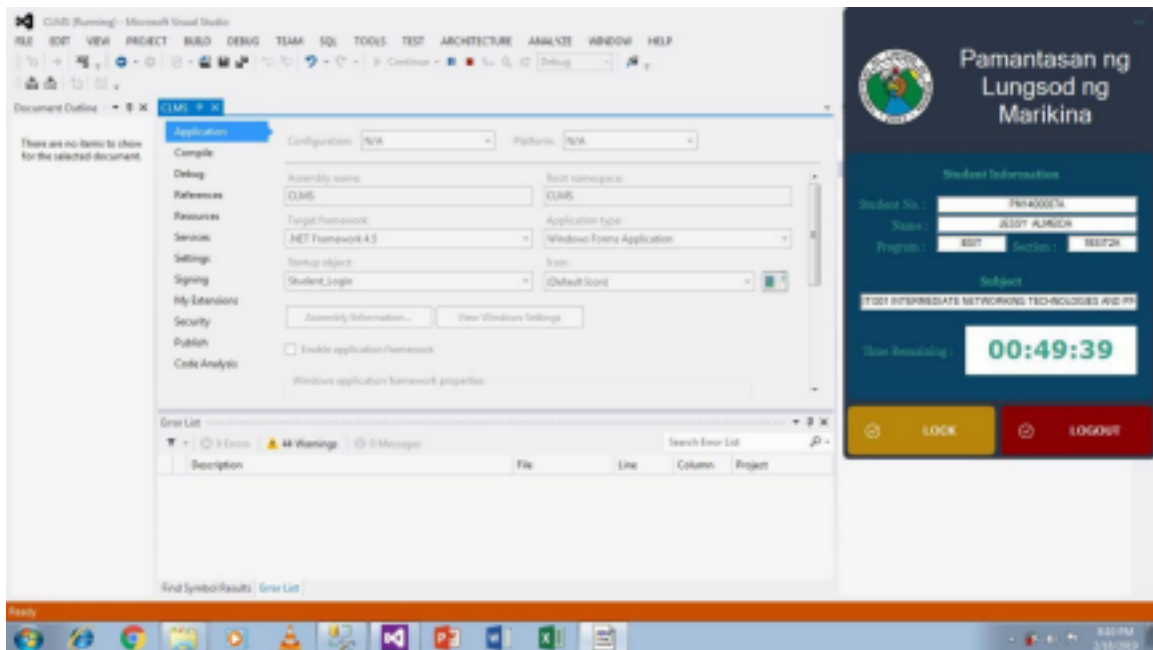


Computer Laboratory Management System for **25** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina IV. Methodology

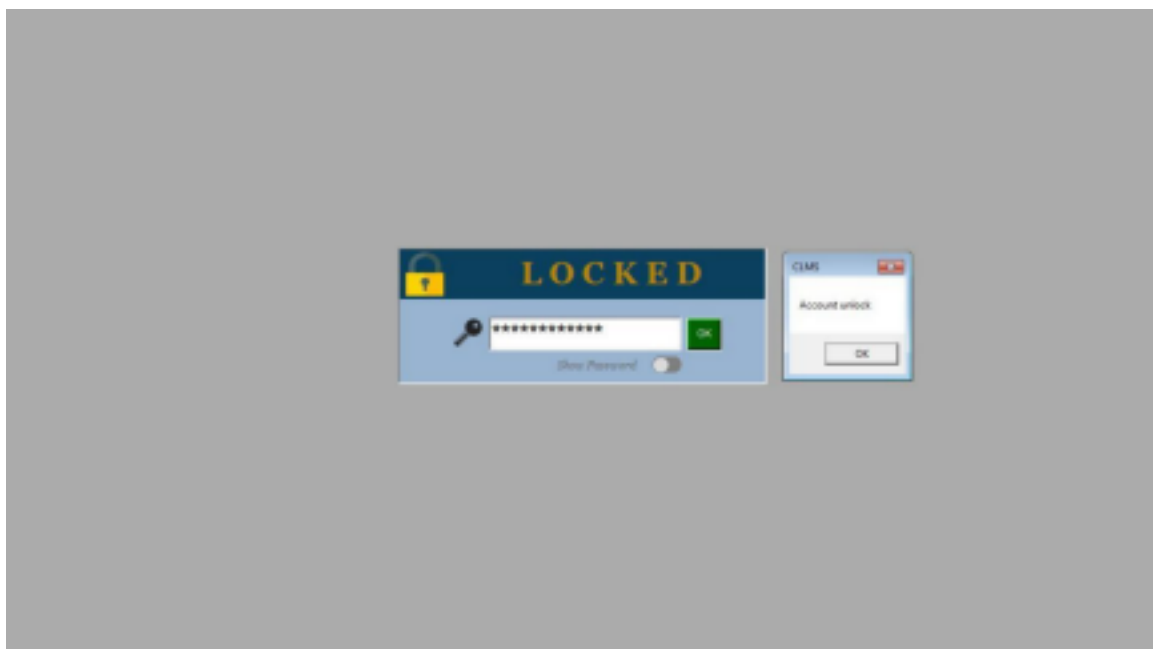
This form shows the subjects' list handled by the professor. The list displays the course code, course description, section and schedule.



This is the **login form for student**. The student should fill up his username and password. He can activate the show password option so he can view his password in text. After he enter his username and password, he can click the login button to access his account.



Computer Laboratory Management System for **26** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina IV. Methodology



After the student successfully accessed his account, the **student panel** will automatically display in the upper right screen of the monitor. This panel shows the basic information about the student such as his stud no., name, program, section and current subject. Under the subject is the time remaining of the student's account. The student can lock his account if he don't use the PC and logout his account.



This is the **login form for admin** where he should fill up his username and password to have access in the system.

Computer Laboratory Management System for **27** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina IV. Methodology

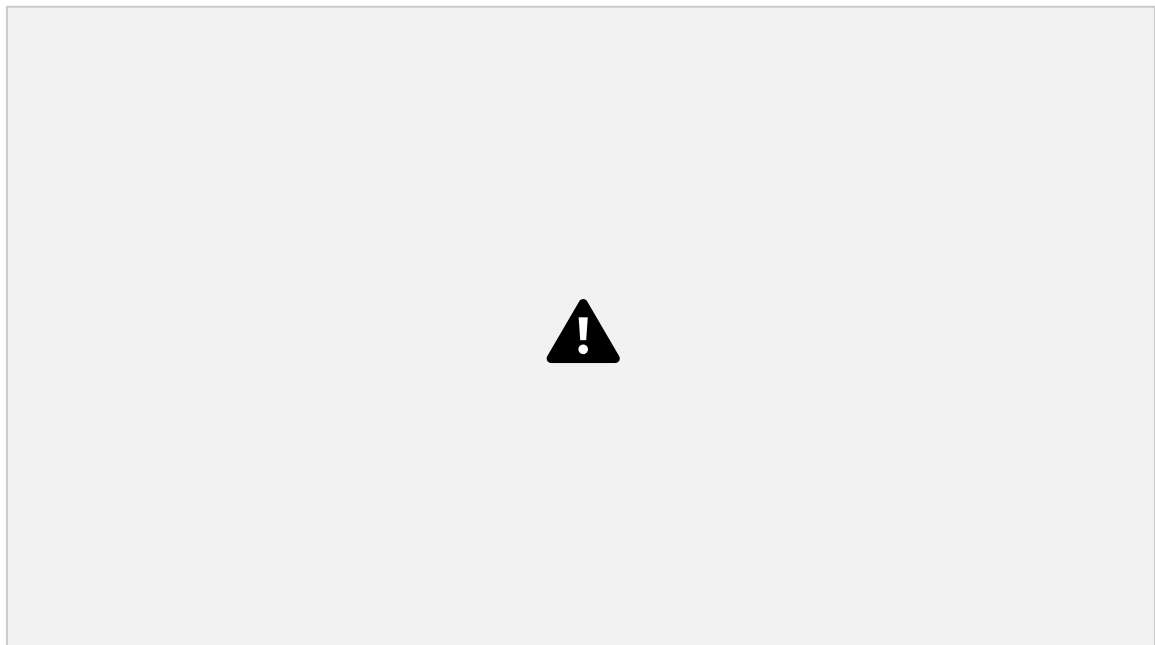


This is the **dashboard form** where the admin can view the information list in the computer laboratory such as PC number, ID number, name and status if online or offline.

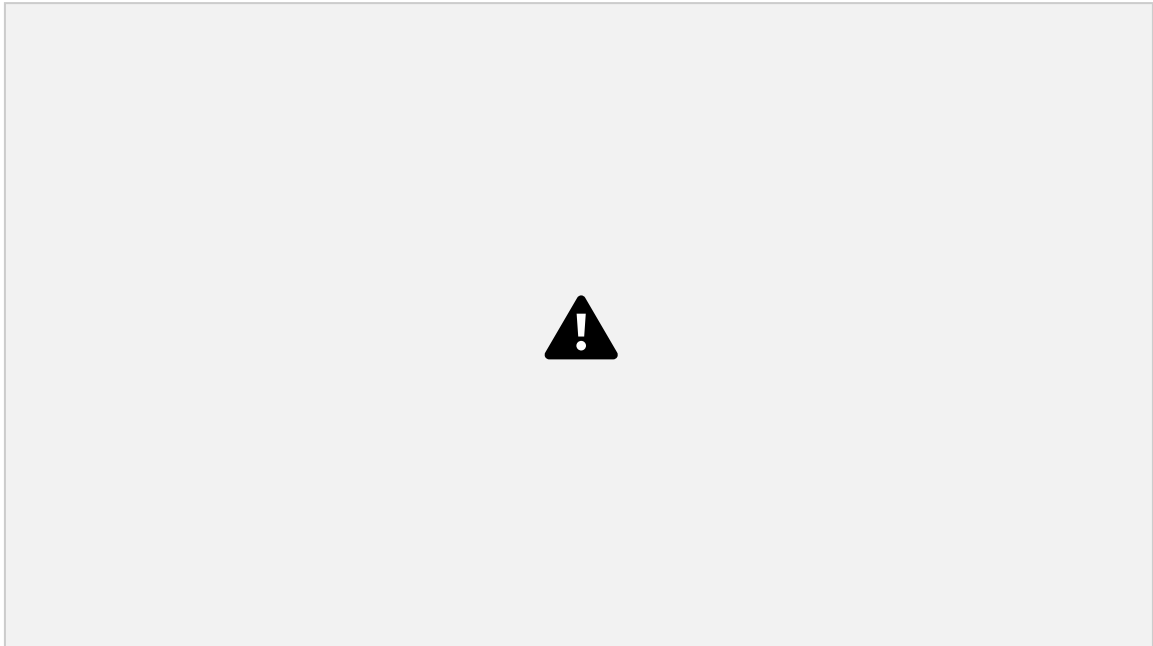


This is the **account overview form**. This is where the admin can view the users details such as ID, name, type (if professor or student) and the status if online or offline.

Computer Laboratory Management System for **28** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina IV. Methodology



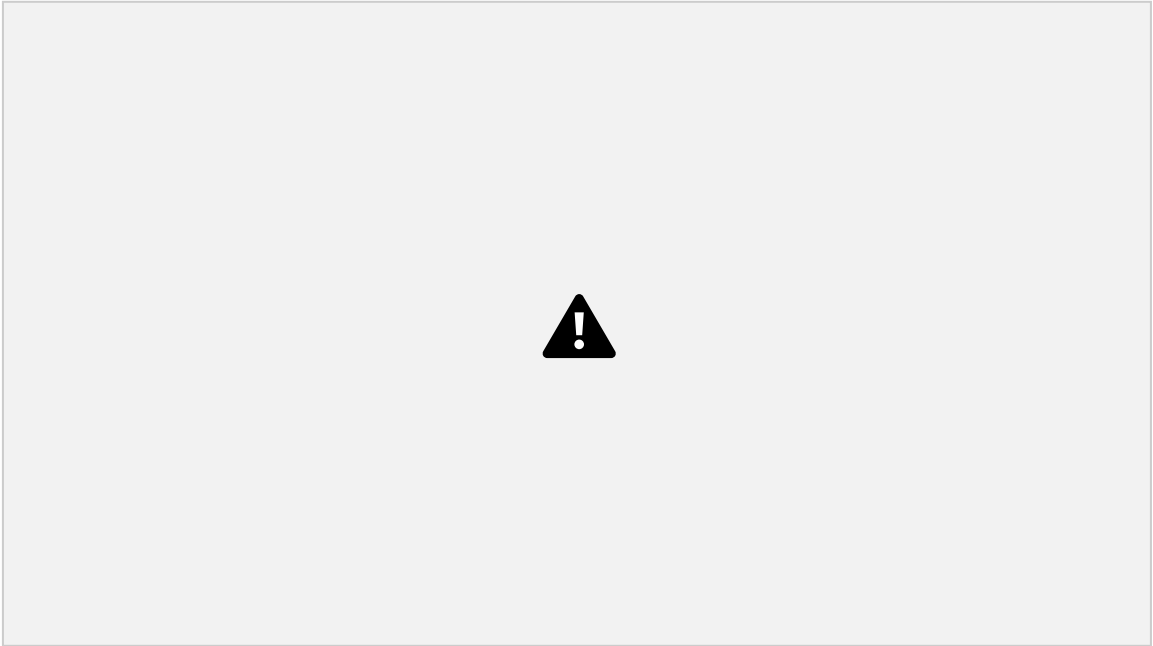
This is the **add student form** where the admin can register an account for the student. The admin should fill up the student no., name, gender, course, section, year level and password. Below the account registration is the subjects offered list where he can select the subjects enrolled for the student.



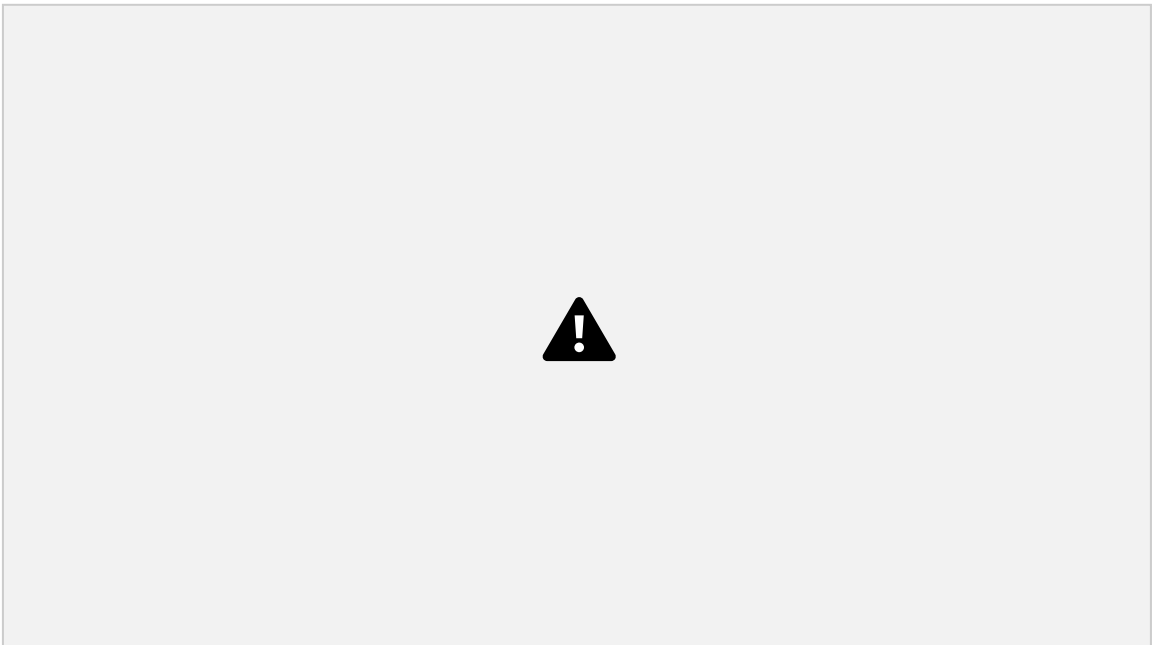
This is the **add professor form** where the admin can register an account for the professor. The admin should fill up the EMP ID., name, gender and password. Below the

Computer Laboratory Management System for **29 of 209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina IV. Methodology

account registration is the subjects offered list where he can select the subjects handled by the professor.

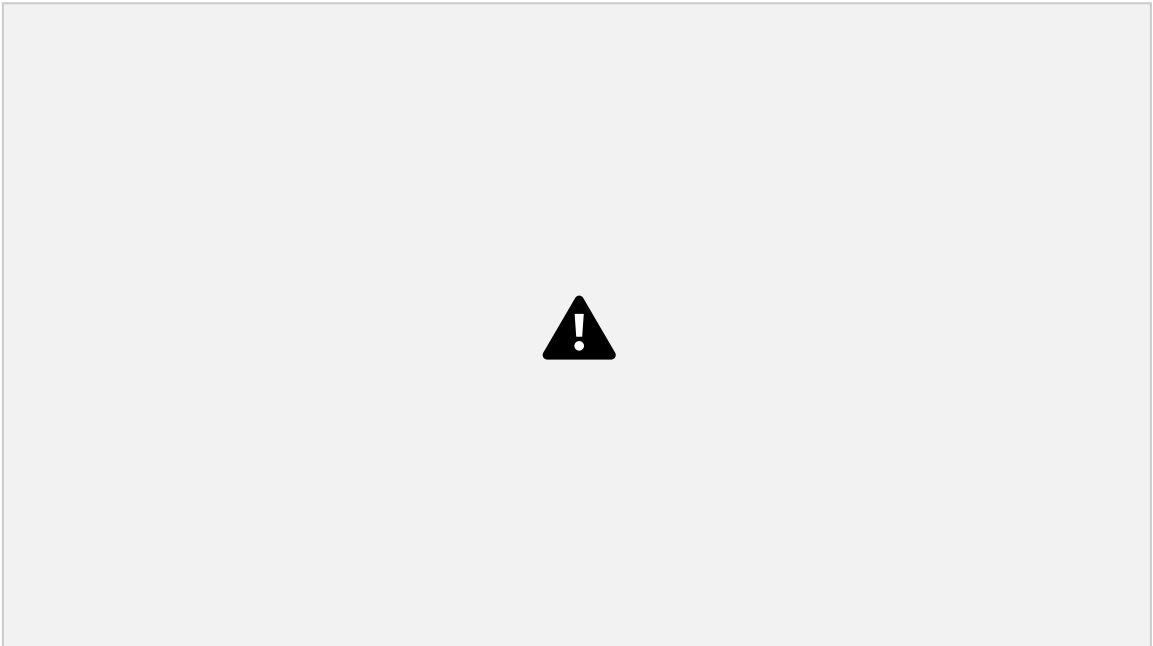


This is the **change password form** where the admin can select the user in the list and change its new password.

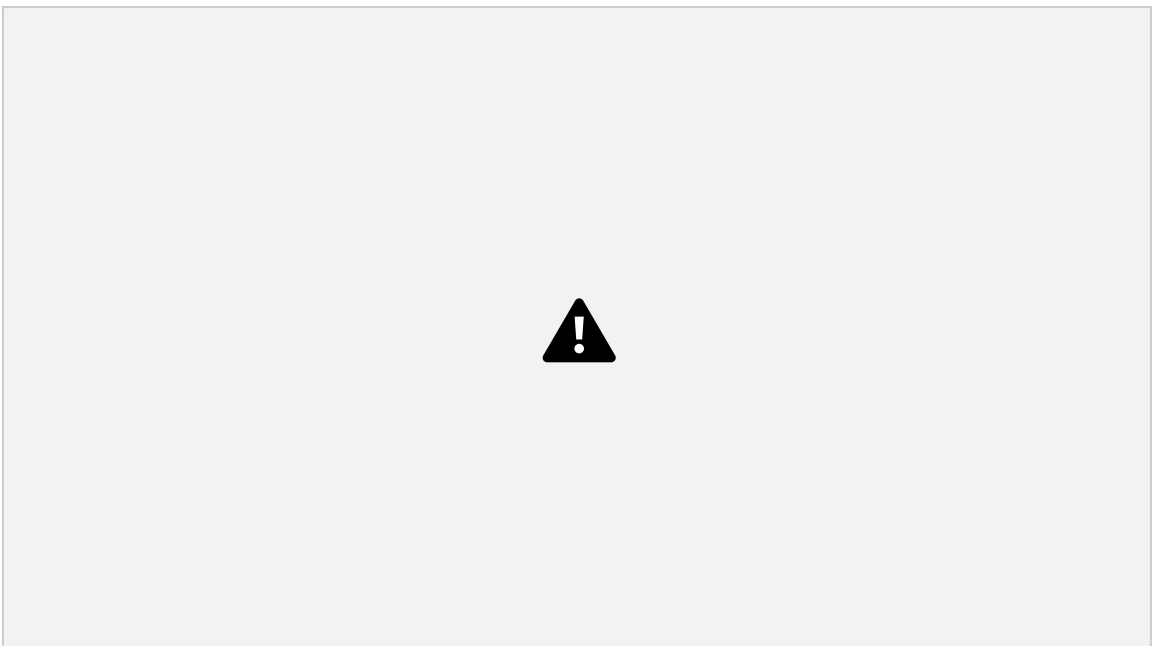


Computer Laboratory Management System for **30** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina IV. Methodology

This is the **status form** where the admin can be able to check if the user is locked or not in the system. However, there this lock and unlock button to lock the account of the user and unlock its account.



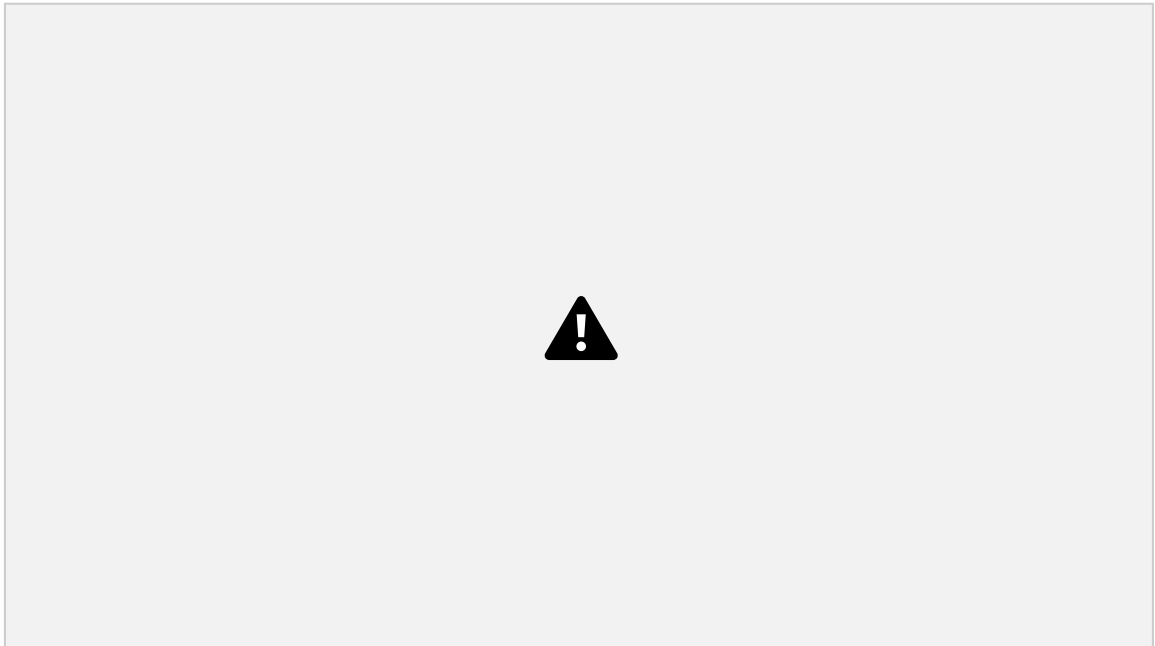
This is the **add subject form** where the admin can add a subject and then save.



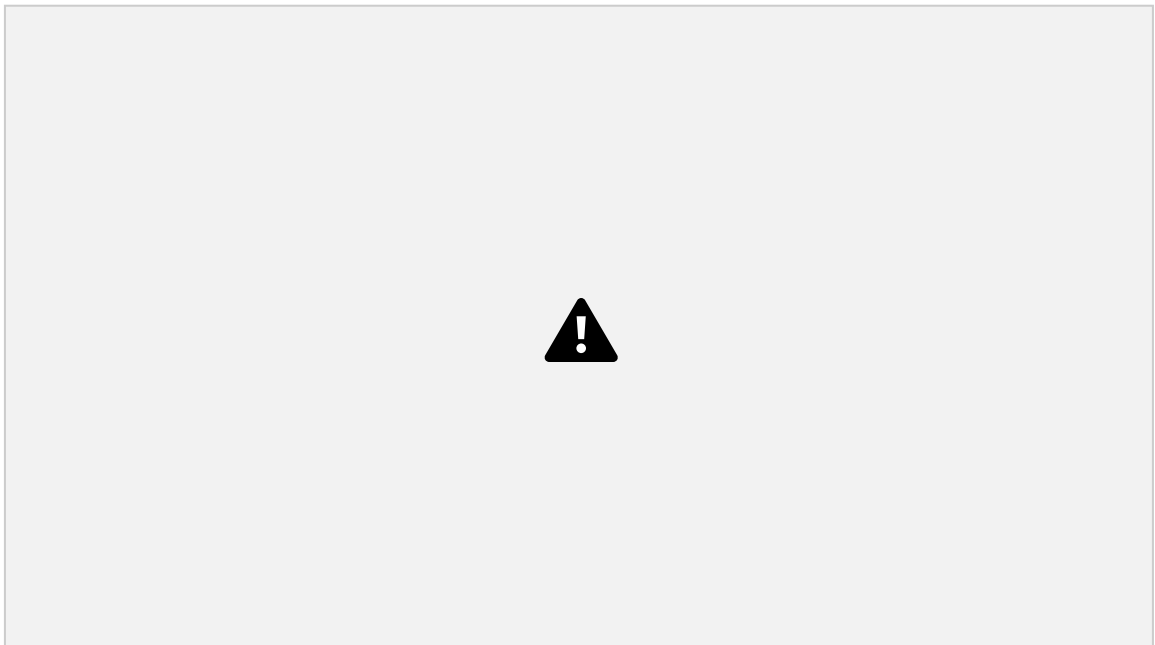
This is the **add schedule form** where the admin can select the subject and then fill up the subject code, subject description, professor, section, room, day and time. After filling up

Computer Laboratory Management System for **31** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina IV. Methodology

the information in the subject, he can save the schedule by clicking the add schedule button below.



This is the **update schedule form** where the admin can edit the information in the subject and then click the update button.



This is the **check schedule form** where the admin can check the subject in the time and day he selected.

Computer Laboratory Management System for **32** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)

Pamantasan ng Lungsod ng Marikina IV. Methodology





This is the **professor form** where the admin can view the professor's information. When he click the view button, the second form will show. The information about the professor will show and its handled subjects. The admin can also update the current subject handled by the professor and the remaining available subject.



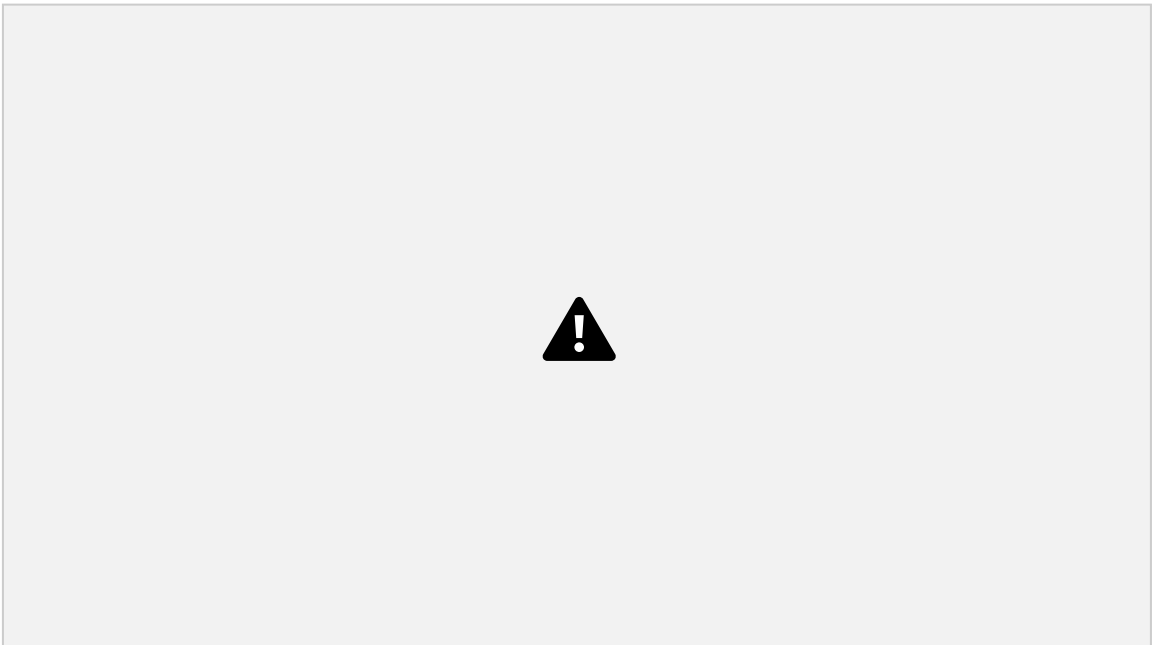


This is the student form where the admin can view the information about the student and its registered subjects. He can also edit the information and then click the update button. If the admin click the print button, the report about the student registration will show.

Pamantasan ng Lungsod ng Marikina IV. Methodology



This is the **schedule form** where the admin can view the subject schedules in the computer laboratory.



This form shows the professors' schedule list in the computer laboratory.

Computer Laboratory Management System for **36** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)

Pamantasan ng Lungsod ng Marikina IV. Methodology



This is the **report form** where the admin can view log history and log attempt in the system. He can print the report as this can be use for reference.

Computer Laboratory Management System for **37** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina IV. Methodology



T



This form shows the computer laboratory information such as computer laboratory room and its total computer, academic and school year.

Computer Laboratory Management System for **38** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina IV. Methodology



This form shows the academic where the admin can add course, section, semester and school year in the computer laboratory.

Implementation Plan

| STRATEGY | ACTIVITES | PERSON INVOLVED | DURATION |
|--|---|---|--|
| Approval from the administrator and the presidents | Letter for the administrator and president | Researchers, administrator and president | One day |
| System installation | System installation : hardware and software | Researchers, administrator | Five to seven hours |
| Information Distribution | Manual Flyers | Administrator and students | One to two days |
| Training | Hands on training | Researchers, administrator students and professor | 3 days is the minimum, 5 days is the maximum |

Computer Laboratory Management System for **40** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

V. Appendices

I. Relevance Source Codes

- Admin

- Account Menu
 - Admin Dashboard

Imports System.Data.SqlClient

Public Class Admin_Account_Dashboard

#Region " EVENT - Form "

Private Sub Admin_Account_Dashboard_Load(sender As Object, e As EventArgs) Handles MyBase.Load

'btnDashboard_Click(sender, e)

'totalProfessorAccount()

'totalStudentAccount()

End Sub

#End Region

#Region " EVENT - Side Buttons "

Public Sub btnDashboard_Click(sender As Object, e As EventArgs) Handles btnDashboard.Click

ucAccountStatus.Visible = False

ucAddProfessor.Visible = False

ucAddStudent.Visible = False

ucChangePassword.Visible = False

dgvAccountList.Rows.Clear()

LoadAll()

SubMenuDashboardActive()

SubMenuRemarksInactive()

SubMenuStudentInactive()

SubMenuProfessorInactive()

SubMenuChangePasswordInactive()

End Sub

Private Sub btnRemarks_Click(sender As Object, e As EventArgs) Handles btnRemarks.Click

ucAddProfessor.Visible = False

ucAddStudent.Visible = False

ucChangePassword.Visible = False

ucAccountStatus.Visible = True

ucAccountStatus.dgvAccountList.Rows.Clear()

ucAccountStatus.totalProfessorAccount()

ucAccountStatus.totalStudentAccount()

ucAccountStatus.ClearAll()

SubMenuDashboardInactive()

SubMenuRemarksActive()

SubMenuStudentInactive()

SubMenuProfessorInactive()

SubMenuChangePasswordInactive()

End Sub

Private Sub btnStudent_Click(sender As Object, e As EventArgs) Handles btnStudent.Click

ucAccountStatus.Visible = False

ucAddProfessor.Visible = False

ucChangePassword.Visible = False

ucAddStudent.Visible = True

ucAddStudent.LoadAll()

SubMenuDashboardInactive()

Computer Laboratory Management System for **42** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```
SubMenuRemarksInactive()
SubMenuStudentActive()
SubMenuProfessorInactive()
SubMenuChangePasswordInactive()
End Sub
Private Sub btnProfessor_Click(sender As Object, e As EventArgs) Handles btnProfessor.Click
ucAccountStatus.Visible = False
ucAddStudent.Visible = False
ucChangePassword.Visible = False
ucAddProfessor.Visible = True
ucAddProfessor.clearAll()
ucAddProfessor.LoadSubjects()

SubMenuDashboardInactive()
SubMenuRemarksInactive()
SubMenuStudentInactive()
SubMenuProfessorActive()
SubMenuChangePasswordInactive()
End Sub
Private Sub btnChangePassword_Click(sender As Object, e As EventArgs) Handles
btnChangePassword.Click
ucAccountStatus.Visible = False
ucAddProfessor.Visible = False
ucAddStudent.Visible = False
ucChangePassword.Visible = True
ucChangePassword.clearAll()
ucChangePassword.loadAccounts()

SubMenuDashboardInactive()
SubMenuRemarksInactive()
SubMenuStudentInactive()
SubMenuProfessorInactive()
SubMenuChangePasswordActive()
End Sub
#End Region

#Region " SUBS "
Public Sub LoadAll()
Try
TotalProfessorAccount()
TotalStudentAccount()
LoadTotalProfessorAccount()
LoadTotalStudentAccount()
Catch ex As Exception
Throw ex
End Try
End Sub
Public Sub TotalStudentAccount()
Dim status As String = ""
Try
conn.Close()
conn.Open()
cmd.Connection = conn
cmd.CommandText = "SELECT s.stud_ID, (s.stud_Fname + ' ' + s.stud_Mname + ' ' +
s.stud_Lname + ' ' + s.stud_Ename) as fullName, a.acc_Type, a.acc_Status FROM tbl_Student as s
INNER JOIN tbl_Account as a ON s.stud_ID = a.acc_ID ORDER BY fullName ASC" dtaReader =
cmd.ExecuteReader
```

```
If dtaReader.HasRows Then
```

Computer Laboratory Management System for **43** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```
While dtaReader.Read
If dtaReader.GetValue(3).ToString = "0" Then
status = "Offline"
Else
status = "Online"
End If
dgvAccountList.Rows.Add(dtaReader.GetValue(0).ToString,
dtaReader.GetValue(1).ToString, dtaReader.GetValue(2).ToString, status)
End While
dtaReader.Close()
Else
dtaReader.Close()
End If
conn.Close()
Catch ex As Exception
Throw ex
End Try
End Sub
Public Sub TotalProfessorAccount()
Dim status As String = ""
Try
conn.Close()
conn.Open()
cmd.Connection = conn
cmd.CommandText = "SELECT p.prof_ID, (p.prof_Fname + ' ' + p.prof_Mname + ' ' + p.prof_Lname
+ ' ' + p.prof_Ename) as fullName, a.acc_Type, a.acc_Status FROM tbl_Professor as p INNER JOIN
tbl_Account as a ON p.prof_ID = a.acc_ID ORDER BY fullName ASC" dtaReader =
cmd.ExecuteReader
```

```
If dtaReader.HasRows Then
While dtaReader.Read
If dtaReader.GetValue(3).ToString = "0" Then
status = "Offline"
Else
status = "Online"
End If
dgvAccountList.Rows.Add(dtaReader.GetValue(0).ToString,
dtaReader.GetValue(1).ToString, dtaReader.GetValue(2).ToString, status)
End While
dtaReader.Close()
Else
dtaReader.Close()
End If
conn.Close()
Catch ex As Exception
MsgBox(ex.Message.ToString)
End Try
End Sub
Public Sub LoadTotalProfessorAccount()
conn.Close()
conn.Open()
Try
cmd.Connection = conn
cmd.CommandText = "SELECT COUNT(*) FROM tbl_Account WHERE acc_Type =
```

```
'Professor'"
dtaReader = cmd.ExecuteReader
```

```
If dtaReader.HasRows Then
While dtaReader.Read
```

Computer Laboratory Management System for **44** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```
txtTotalProfessor.Text = dtaReader.GetValue(0).ToString
End While
End If
dtaReader.Close()
conn.Close()
Catch ex As Exception
Throw ex
End Try
End Sub
Public Sub LoadTotalStudentAccount()
conn.Close()
conn.Open()
Try
cmd.Connection = conn
cmd.CommandText = "SELECT COUNT(*) FROM tbl_Account WHERE acc_Type = 'Student'"
dtaReader = cmd.ExecuteReader
```

```
If dtaReader.HasRows Then
While dtaReader.Read
txtTotalStudent.Text = dtaReader.GetValue(0).ToString
End While
End If
dtaReader.Close()
conn.Close()
Catch ex As Exception
Throw ex
End Try
End Sub
#End Region
```

```
#Region " MENU - Active "
Private Sub SubMenuDashboardActive()
Try
btnDashboard.Normalcolor = Color.FromArgb(59, 160, 137)
btnDashboard.Textcolor = Color.FromArgb(11, 64, 95)
btnDashboard.OnHovercolor = Color.FromArgb(59, 160, 137)
btnDashboard.OnHoverTextColor = Color.FromArgb(11, 64, 95)
btnDashboard.Activecolor = Color.FromArgb(59, 160, 137)
btnDashboard.Font = New System.Drawing.Font("Microsoft Sans Serif", 9.75!,
System.Drawing.FontStyle.Bold, System.Drawing.GraphicsUnit.Point, CType(0, Byte))
Catch ex As Exception
Throw ex
End Try
End Sub
Private Sub SubMenuRemarksActive()
Try
btnRemarks.Normalcolor = Color.FromArgb(59, 160, 137)
btnRemarks.Textcolor = Color.FromArgb(11, 64, 95)
btnRemarks.OnHovercolor = Color.FromArgb(59, 160, 137)
btnRemarks.OnHoverTextColor = Color.FromArgb(11, 64, 95)
btnRemarks.Activecolor = Color.FromArgb(59, 160, 137)
```

```

btnRemarks.TextFont = New System.Drawing.Font("Microsoft Sans Serif", 9.75!,
System.Drawing.FontStyle.Bold, System.Drawing.GraphicsUnit.Point, CType(0, Byte))
Catch ex As Exception
Throw ex
End Try
End Sub
Private Sub SubMenuStudentActive()
Try

```

Computer Laboratory Management System for 45 of 209 Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)

Pamantasan ng Lungsod ng Marikina Appendices

```

btnStudent.Normalcolor = Color.FromArgb(59, 160, 137)
btnStudent.Textcolor = Color.FromArgb(11, 64, 95)
btnStudent.OnHovercolor = Color.FromArgb(59, 160, 137)
btnStudent.OnHoverTextColor = Color.FromArgb(11, 64, 95)
btnStudent.Activecolor = Color.FromArgb(59, 160, 137)
btnStudent.TextFont = New System.Drawing.Font("Microsoft Sans Serif", 9.75!,
System.Drawing.FontStyle.Bold, System.Drawing.GraphicsUnit.Point, CType(0, Byte))
Catch ex As Exception
Throw ex
End Try
End Sub
Private Sub SubMenuProfessorActive()
Try
btnProfessor.Normalcolor = Color.FromArgb(59, 160, 137)
btnProfessor.Textcolor = Color.FromArgb(11, 64, 95)
btnProfessor.OnHovercolor = Color.FromArgb(59, 160, 137)
btnProfessor.OnHoverTextColor = Color.FromArgb(11, 64, 95)
btnProfessor.Activecolor = Color.FromArgb(59, 160, 137)
btnProfessor.TextFont = New System.Drawing.Font("Microsoft Sans Serif", 9.75!,
System.Drawing.FontStyle.Bold, System.Drawing.GraphicsUnit.Point, CType(0, Byte))
Catch ex As Exception
Throw ex
End Try
End Sub
Private Sub SubMenuChangePasswordActive()
Try
btnChangePassword.Normalcolor = Color.FromArgb(59, 160, 137)
btnChangePassword.Textcolor = Color.FromArgb(11, 64, 95)
btnChangePassword.OnHovercolor = Color.FromArgb(59, 160, 137)
btnChangePassword.OnHoverTextColor = Color.FromArgb(11, 64, 95)
btnChangePassword.Activecolor = Color.FromArgb(59, 160, 137)
btnChangePassword.TextFont = New System.Drawing.Font("Microsoft Sans Serif", 9.75!,
System.Drawing.FontStyle.Bold, System.Drawing.GraphicsUnit.Point, CType(0, Byte)) Catch ex
As Exception
Throw ex
End Try
End Sub
#End Region
#Region " MENU - Inactive "
Private Sub SubMenuDashboardInactive()
Try
btnDashboard.Normalcolor = Color.FromArgb(11, 64, 95)
btnDashboard.Textcolor = SystemColors.ButtonHighlight
btnDashboard.OnHovercolor = Color.FromArgb(13, 73, 109)
btnDashboard.OnHoverTextColor = Color.FromArgb(59, 160, 137)
btnDashboard.Activecolor = Color.FromArgb(13, 73, 109)
btnDashboard.TextFont = New System.Drawing.Font("Microsoft Sans Serif", 9.75!,
System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, CType(0, Byte))

```

```

Catch ex As Exception
Throw ex
End Try
End Sub
Private Sub SubMenuRemarksInactive()
Try
btnRemarks.Normalcolor = Color.FromArgb(11, 64, 95)
btnRemarks.Textcolor = SystemColors.ButtonHighlight
btnRemarks.OnHovercolor = Color.FromArgb(13, 73, 109)
btnRemarks.OnHoverTextColor = Color.FromArgb(59, 160, 137)
btnRemarks.Activecolor = Color.FromArgb(13, 73, 109)

```

Computer Laboratory Management System for 46 of 209 Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)

Pamantasan ng Lungsod ng Marikina Appendices

```

btnRemarks.TextFont = New System.Drawing.Font("Microsoft Sans Serif", 9.75!,
System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, CType(0, Byte))
Catch ex As Exception
Throw ex
End Try
End Sub
Private Sub SubMenuStudentInactive()
Try
btnStudent.Normalcolor = Color.FromArgb(11, 64, 95)
btnStudent.Textcolor = SystemColors.ButtonHighlight
btnStudent.OnHovercolor = Color.FromArgb(13, 73, 109)
btnStudent.OnHoverTextColor = Color.FromArgb(59, 160, 137)
btnStudent.Activecolor = Color.FromArgb(13, 73, 109)
btnStudent.TextFont = New System.Drawing.Font("Microsoft Sans Serif", 9.75!,
System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, CType(0, Byte))
Catch ex As Exception
Throw ex
End Try
End Sub
Private Sub SubMenuProfessorInactive()
Try
btnProfessor.Normalcolor = Color.FromArgb(11, 64, 95)
btnProfessor.Textcolor = SystemColors.ButtonHighlight
btnProfessor.OnHovercolor = Color.FromArgb(13, 73, 109)
btnProfessor.OnHoverTextColor = Color.FromArgb(59, 160, 137)
btnProfessor.Activecolor = Color.FromArgb(13, 73, 109)
    btnProfessor.TextFont = New System.Drawing.Font("Microsoft Sans Serif", 9.75!,
System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, CType(0, Byte))
Catch ex As Exception
Throw ex
End Try
End Sub
Private Sub SubMenuChangePasswordInactive()
Try
btnChangePassword.Normalcolor = Color.FromArgb(11, 64, 95)
btnChangePassword.Textcolor = SystemColors.ButtonHighlight
btnChangePassword.OnHovercolor = Color.FromArgb(13, 73, 109)
btnChangePassword.OnHoverTextColor = Color.FromArgb(59, 160, 137)
btnChangePassword.Activecolor = Color.FromArgb(13, 73, 109)
    btnChangePassword.TextFont = New System.Drawing.Font("Microsoft Sans Serif", 9.75!,
System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, CType(0, Byte)) Catch
ex As Exception
Throw ex
End Try
End Sub

```

#End Region

End Class

Computer Laboratory Management System for **47** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

- Adding Professor

Imports System.Data.SqlClient

Public Class Admin_Account_Professor_Add

Dim Semester As String = ""

Dim SchoolYear As String = ""

#Region " EVENT - Form "

Private Sub Admin_Account_Professor_Add_Load(sender As Object, e As EventArgs) Handles MyBase.Load

Try

LoadSetting()

LoadSubjects()

Catch ex As Exception

MsgBox(ex.ToString)

End Try

End Sub

#End Region

#Region " EVENT - Buttons "

Private Sub btnSave_Click(sender As Object, e As EventArgs) Handles btnSave.Click

If txtEmpID.Text = "" Then

MsgBox("Employee ID cannot be blank", MsgBoxStyle.Critical, "Empty field") Elseif

txtFname.Text = "" Then

MsgBox("First name cannot be blank", MsgBoxStyle.Critical, "Empty field") Elseif

txtLname.Text = "" Then

MsgBox("Last name cannot be blank", MsgBoxStyle.Critical, "Empty field") Elseif

txtPassword.Text = "" Then

MsgBox("Password cannot be blank", MsgBoxStyle.Critical, "Empty field") Elseif

txtEmpID.LineIdleColor = Color.Red Then

MsgBox("Employee ID already exist", MsgBoxStyle.Critical, "Duplicate data") Elseif

txtPassword.LineIdleColor = Color.Red Then

MsgBox("Password should have at least 6 alphanumeric characters", MsgBoxStyle.Critical, "Invalid format")

Elseif rbtnMale.Checked = False And rbtnFemale.Checked = False Then

MsgBox("Choose your gender", MsgBoxStyle.Critical, "")

Else

AddProfessor()

MsgBox("Successfully added!", MsgBoxStyle.Information)

End If

```

End Sub
#End Region
#Region " EVENT - TextBox "
Private Sub txtEmpID_onvaluechanged(sender As Object, e As EventArgs) Handles
txtEmpID.OnValueChanged
Try
conn.Close()
conn.Open()
cmd.Connection = conn
cmd.CommandText = "select * from tbl_account where acc_id like '%EMP-' & txtEmpID.Text & '%"
dtaReader = cmd.ExecuteReader

If dtaReader.HasRows Then
txtEmpID.LineFocusedColor = Color.Red
txtEmpID.LineIdleColor = Color.Red

```

Computer Laboratory Management System for **48** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```

Else
txtEmpID.LineFocusedColor = Color.FromArgb(11, 64, 95)
txtEmpID.LineIdleColor = Color.Gray
End If
dtaReader.Close()
conn.Close()
Catch ex As Exception
MsgBox(ex.Message.ToString)
End Try
End Sub
Private Sub txtEmpID_KeyPress(sender As Object, e As KeyPressEventArgs) Handles
txtEmpID.KeyPress
Try
If Asc(e.KeyChar) <> 13 AndAlso Asc(e.KeyChar) <> 8 AndAlso Asc(e.KeyChar) <> 45
AndAlso Not Char.IsLetter(e.KeyChar) AndAlso Not Char.IsDigit(e.KeyChar) AndAlso Not
Char.IsWhiteSpace(e.KeyChar) Then
Beep()
MessageBox.Show("Please enter letters and special characters(-) only")
e.Handled = True
End If
Catch ex As Exception
MsgBox(ex.Message)
End Try
End Sub
Private Sub txtFname_KeyPress(sender As Object, e As KeyPressEventArgs) Handles
txtFname.KeyPress
Try
If Asc(e.KeyChar) <> 13 AndAlso Asc(e.KeyChar) <> 8 AndAlso Asc(e.KeyChar) <> 45
AndAlso Not Char.IsLetter(e.KeyChar) AndAlso Not Char.IsWhiteSpace(e.KeyChar) Then
Beep()
MessageBox.Show("Please enter letters and special characters(-) only")
e.Handled = True
End If
Catch ex As Exception
MsgBox(ex.Message)
End Try
End Sub
Private Sub txtMname_KeyPress(sender As Object, e As KeyPressEventArgs) Handles
txtMname.KeyPress
If Asc(e.KeyChar) <> 13 AndAlso Asc(e.KeyChar) <> 42 AndAlso Asc(e.KeyChar) <> 8 AndAlso Not
Char.IsLetter(e.KeyChar) AndAlso Not Char.IsWhiteSpace(e.KeyChar) Then Beep()

```

```

MessageBox.Show("Please enter letters only")
e.Handled = True
End If

'if already has an asterisk but pressed asterisk(*) again
If txtMname.Text = "*" Then
If Asc(e.KeyChar) = 42 Then
If e.KeyChar <> ControlChars.Back Then
MsgBox("You already inputted asterisk(*)")
e.Handled = True
End If
End If

'if already has a value but pressed asterisk(*)
ElseIf txtMname.Text <> "" Then
If Asc(e.KeyChar) = 42 Then
If e.KeyChar <> ControlChars.Back Then

```

Computer Laboratory Management System for **49 of 209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```

MsgBox("You already inputted your middle name")
e.Handled = True
End If
End If

'if already a value asterisk(*) but enter a letters
ElseIf txtMname.Text = "*" Then
If Char.IsLetter(e.KeyChar) Or Char.IsWhiteSpace(e.KeyChar) Then
If e.KeyChar <> ControlChars.Back Then
MsgBox("You already inputted asterisk(*)")
e.Handled = True
End If
End If
End If
End Sub
Private Sub txtLname_KeyPress(sender As Object, e As KeyPressEventArgs) Handles
txtLname.KeyPress
If Asc(e.KeyChar) <> 13 AndAlso Asc(e.KeyChar) <> 8 AndAlso Not Char.IsLetter(e.KeyChar)
AndAlso Not Char.IsWhiteSpace(e.KeyChar) Then
Beep()
MessageBox.Show("Please enter letters and special characters(-) only")
e.Handled = True
End If
End Sub
Private Sub txtEname_KeyPress(sender As Object, e As KeyPressEventArgs) Handles
txtEname.KeyPress
If Asc(e.KeyChar) <> 13 AndAlso Asc(e.KeyChar) <> 42 AndAlso Asc(e.KeyChar) <> 8 AndAlso Not
Char.IsLetter(e.KeyChar) AndAlso Not Char.IsWhiteSpace(e.KeyChar) Then Beep()
MessageBox.Show("Please enter letters only")
e.Handled = True
End If

'if already has an asterisk but pressed asterisk(*) again
If txtEname.Text = "*" Then
If Asc(e.KeyChar) = 42 Then
If e.KeyChar <> ControlChars.Back Then
MsgBox("You already inputted asterisk(*)")
e.Handled = True
End If

```


End If

```
'if already has a value but pressed asterisk(*)
ElseIf txtEname.Text <> "" Then
If Asc(e.KeyChar) = 42 Then
If e.KeyChar <> ControlChars.Back Then
MsgBox("You already inputted your middle name")
e.Handled = True
End If
End If
```

```
'if already a value asterisk(*) but enter a letters
ElseIf txtEname.Text = "*" Then
If Char.IsLetter(e.KeyChar) Or Char.IsWhiteSpace(e.KeyChar) Then
If e.KeyChar <> ControlChars.Back Then
MsgBox("You already inputted asterisk(*)")
e.Handled = True
```

Computer Laboratory Management System for **50** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```
End If
End If
End If
End Sub
Private Sub txtPassword_KeyPress(sender As Object, e As KeyPressEventArgs) Handles
txtPassword.KeyPress
If Asc(e.KeyChar) <> 13 AndAlso Asc(e.KeyChar) <> 8 AndAlso Not Char.IsDigit(e.KeyChar)
AndAlso Not Char.IsLetter(e.KeyChar) Then
MessageBox.Show("Please insert alphanumeric characters only")
e.Handled = True
End If
```

```
'If exceeded the maximum characters allowed
If txtPassword.Text.Length > 17 Then
If e.KeyChar <> ControlChars.Back Then
MessageBox.Show("Exceeding max characters")
e.Handled = True
```

```
End If
End If
End Sub
Private Sub txtPassword_OnValueChanged(sender As Object, e As EventArgs) Handles
txtPassword.OnValueChanged
If txtPassword.Text = "" Then
txtPassword.LineFocusedColor = Color.FromArgb(11, 64, 95)
txtPassword.LineIdleColor = Color.Gray
txtPassword.IsPassword = False
Else
txtPassword.IsPassword = True
If txtPassword.Text.Length < 6 Then
txtPassword.LineFocusedColor = Color.Red
txtPassword.LineIdleColor = Color.Red
Else
txtPassword.LineFocusedColor = Color.FromArgb(11, 64, 95)
txtPassword.LineIdleColor = Color.Gray
End If
End If
End Sub
```

#End Region

#Region " SUBS "

Public Sub LoadSetting()

Try

conn.Close()

conn.Open()

cmd.Connection = conn

cmd.CommandText = "SELECT * FROM tbl_Settings"

dtaReader = cmd.ExecuteReader

If dtaReader.HasRows Then

While dtaReader.Read

Semester = dtaReader.GetValue(0).ToString

SchoolYear = dtaReader.GetValue(1).ToString

End While

dtaReader.Close()

Else

dtaReader.Close()

End If

conn.Close()

Catch ex As Exception

Computer Laboratory Management System for **51** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

Throw ex

End Try

End Sub

Public Sub LoadSubjects()

Try

conn.Close()

conn.Open()

dgvSubjectList.Rows.Clear()

cmd.Connection = conn

cmd.CommandText = "SELECT sched.sched_ID, subj.subj_Code, subj.subj_Description, sched.sched_Section, sched.sched_Day, sched.sched_StartTime, sched.sched_EndTime FROM tbl_Subject as subj INNER JOIN tbl_Schedule as sched ON subj.subj_Code = sched.sched_Code WHERE sched.sched_Semester = '' & CurrentSemester & '' AND sched.sched_SchoolYear = '' & CurrentSchoolYear & '' AND (sched.sched_Professor = '*' OR sched.sched_Professor = '')"

'cmd.CommandText = "SELECT sched.sched_ID, subj.subj_Code, subj.subj_Description, sched.sched_Section, sched.sched_Day, sched.sched_StartTime, sched.sched_EndTime FROM tbl_Subject as subj INNER JOIN tbl_Schedule as sched ON subj.subj_Code = sched.sched_Code WHERE sched.sched_Professor = 'Professor ID'"

dtaReader = cmd.ExecuteReader

If dtaReader.HasRows Then

While dtaReader.Read

Dim day As String = ""

If dtaReader.GetValue(4).ToString = "Monday" Then

day = "M"

Elseif dtaReader.GetValue(4).ToString = "Tuesday" Then

day = "T"

Elseif dtaReader.GetValue(4).ToString = "Wednesday" Then

day = "W"

Elseif dtaReader.GetValue(4).ToString = "Thursday" Then

day = "TH"

Elseif dtaReader.GetValue(4).ToString = "Friday" Then

```

day = "F"
Elseif dtaReader.GetValue(4).ToString = "Saturday" Then
day = "S"
End If

Dim startTime As String =
DateTime.Parse(dtaReader.GetValue(5).ToString).ToString("hh:mm tt")
Dim endTime As String =
DateTime.Parse(dtaReader.GetValue(6).ToString).ToString("hh:mm tt")

Dim schedule As String = day & "\ " & startTime & " - " & endTime Dim found
As Boolean = False

If dgvSubjectList.Rows.Count > 0 Then

'with duplicate
For Each row As DataGridViewRow In dgvSubjectList.Rows If
row.Cells(1).Value = dtaReader.GetValue(0).ToString Then row.Cells(5).Value
= row.Cells(5).Value + day
row.Cells(8).Value = row.Cells(5).Value & "\ " & startTime & " - " & endTime found = True
End If
Next

' no duplicate

```

Computer Laboratory Management System for **52** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```

If Not found Then
dgvSubjectList.Rows.Add(False, dtaReader.GetValue(0).ToString, dtaReader.GetValue(1).ToString,
dtaReader.GetValue(2).ToString, dtaReader.GetValue(3).ToString, day,
dtaReader.GetValue(5).ToString, dtaReader.GetValue(6).ToString, schedule) End If

'firt item to be added
Else
dgvSubjectList.Rows.Add(False, dtaReader.GetValue(0).ToString, dtaReader.GetValue(1).ToString,
dtaReader.GetValue(2).ToString, dtaReader.GetValue(3).ToString, day,
dtaReader.GetValue(5).ToString, dtaReader.GetValue(6).ToString, schedule) End If

End While
dtaReader.Close()
Else
dtaReader.Close()
End If
conn.Close()
Catch ex As Exception
Throw ex
End Try
End Sub
Private Sub AddProfessor()
Dim gender As String = ""

Try
conn.Close()
conn.Open()

If rbtnMale.Checked = True Then
gender = "Male"
Elseif rbtnFemale.Checked = True Then
gender = "Female"

```

End If

```
cmd.Connection = conn
cmd.CommandText = "INSERT INTO tbl_Account VALUES ('EMP-" & txtEmpID.Text & ", " &
txtPassword.Text & ", 'Professor', '0', 'Active', GETDATE())"
cmd.ExecuteNonQuery()
```

```
cmd.Connection = conn
cmd.CommandText = "INSERT INTO tbl_Professor VALUES ('EMP-" & txtEmpID.Text & ", " &
txtFname.Text & ", " & txtMname.Text & ", " & txtLname.Text & ", " & txtEname.Text & ", " & gender
& ")"
cmd.ExecuteNonQuery()
```

```
For Each rowCheck As DataGridViewRow In dgvSubjectList.Rows
Dim scheduleID As String = rowCheck.Cells("colSchedID").Value
Dim professorName As String = txtFname.Text & " " & txtMname.Text & " " & txtLname.Text & " " &
txtEname.Text
```

```
If rowCheck.Cells("colCheck").Value = True Then
cmd.Connection = conn
cmd.CommandText = "UPDATE tbl_Schedule SET sched_Professor = 'EMP-" &
txtEmpID.Text & " WHERE sched_ID = " & scheduleID & ""
cmd.ExecuteNonQuery()
End If
```

Computer Laboratory Management System for **53** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

Next

```
clearAll()
conn.Close()
Catch ex As Exception
Throw ex
End Try
End Sub
Public Sub clearAll()
Try
txtEmpID.Text = ""
txtFname.Text = ""
txtMname.Text = ""
txtLname.Text = ""
txtEname.Text = ""
rbtnFemale.Checked = False
rbtnMale.Checked = False
txtPassword.Text = ""
LoadSubjects()
Catch ex As Exception
Throw ex
End Try
End Sub
#End Region

End Class
```

- Adding Student

Imports System.Data.SqlClient

```
Public Class Admin_Account_Student_Add
```

```
Dim dateNow As DateTime = Date.Now.ToString("yyyy-MM-dd HH:mm:ss")
```

```
Dim Semester As String = ""
```

```
Dim SchoolYear As String = ""
```

```
Dim TableID As Integer
```

```
#Region " EVENT - Form "
```

```
Private Sub Admin_Account_Student_Add_Load(sender As Object, e As EventArgs) Handles
```

```
MyBase.Load
```

```
Try
```

```
'loadSubject()
```

```
'clearAll()
```

```
Catch ex As Exception
```

```
MsgBox(ex.Message)
```

```
End Try
```

```
End Sub
```

```
#End Region
```

```
#Region " EVENT - Button "
```

```
Private Sub btnSave_Click(sender As Object, e As EventArgs) Handles btnSave.Click
```

```
Try
```

```
If txtStudNo.Text = "" Then
```

```
MsgBox("Student number cannot be blank", MsgBoxStyle.Critical, "Empty field error") Elseif
```

```
txtFname.Text = "" Then
```

```
MsgBox("First name cannot be blank", MsgBoxStyle.Critical, "Empty field error") Elseif
```

```
txtLname.Text = "" Then
```

```
MsgBox("Last name cannot be blank", MsgBoxStyle.Critical, "Empty field error")
```

Computer Laboratory Management System for **54** of **209** Students of Pamantasan ng

Lungsod ng Marikina (Green Heights campus)

Pamantasan ng Lungsod ng Marikina Appendices

```
Elseif txtStudNo.LinIdleColor = Color.Red Then
```

```
MsgBox("Student number already exist", MsgBoxStyle.Critical, "Duplication Error") Elseif
```

```
txtPassword.LinIdleColor = Color.Red Then
```

```
MsgBox("Password format is incorrect", MsgBoxStyle.Critical, "Field format error") Elseif
```

```
rbtnMale.Checked = False And rbtnFemale.Checked = False Then MsgBox("Choose your  
gender", MsgBoxStyle.Critical)
```

```
Elseif cmbCourse.SelectedIndex = 0 Then
```

```
MsgBox("Choose your course", MsgBoxStyle.Critical)
```

```
Elseif cmbSection.SelectedIndex = 0 Then
```

```
MsgBox("Choose your section", MsgBoxStyle.Critical)
```

```
Elseif cmbYearLevel.SelectedIndex = 0 Then
```

```
MsgBox("Choose your current year level", MsgBoxStyle.Critical)
```

```
Elseif txtPassword.Text = "" Then
```

```
MsgBox("Password cannot be blank", MsgBoxStyle.Critical, "Empty field error") Else
```

```
AddStudent()
```

```
End If
```

```
Catch ex As Exception
```

```
MsgBox(ex.Message)
```

```
End Try
```

```
End Sub
```

```
#End Region
```

```
#Region " EVENT - TextBox "
```

```
Private Sub txtStudNo_KeyPress(sender As Object, e As KeyPressEventArgs) Handles
```

```
txtStudNo.KeyPress
```

```
Try
```

```
If Asc(e.KeyChar) <> 13 AndAlso Asc(e.KeyChar) <> 8 AndAlso Not Char.IsLetter(e.KeyChar)
```

```
AndAlso Not Char.IsDigit(e.KeyChar) AndAlso Not Char.IsWhiteSpace(e.KeyChar) Then Beep()
```

```
e.Handled = True
```

```

End If
Catch ex As Exception
MsgBox(ex.Message)
End Try
End Sub
Private Sub txtFname_KeyPress(sender As Object, e As KeyPressEventArgs) Handles
txtFname.KeyPress
Try
If Asc(e.KeyChar) <> 13 AndAlso Asc(e.KeyChar) <> 8 AndAlso Asc(e.KeyChar) <> 45
AndAlso Not Char.IsLetter(e.KeyChar) AndAlso Not Char.IsWhiteSpace(e.KeyChar) Then
Beep()
e.Handled = True
End If
Catch ex As Exception
MsgBox(ex.Message)
End Try
End Sub
Private Sub txtMname_KeyPress(sender As Object, e As KeyPressEventArgs) Handles
txtMname.KeyPress
Try
If Asc(e.KeyChar) <> 13 AndAlso Asc(e.KeyChar) <> 42 AndAlso Asc(e.KeyChar) <> 8
AndAlso Not Char.IsLetter(e.KeyChar) AndAlso Not Char.IsWhiteSpace(e.KeyChar) Then
Beep()
'MessageBox.Show("Please enter letters only")
e.Handled = True
End If

'if already has an asterisk but pressed asterisk(*) again
If txtMname.Text = "*" Then

```

Computer Laboratory Management System for **55** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```

If Asc(e.KeyChar) = 42 Then
If e.KeyChar <> ControlChars.Back Then
'MessageBox("You already inputted asterisk(*)")
e.Handled = True
End If
End If

```

```

'if already has a value but pressed asterisk(*)
Elseif txtMname.Text <> "" Then
If Asc(e.KeyChar) = 42 Then
If e.KeyChar <> ControlChars.Back Then
'MessageBox("You already inputted your middle name")
e.Handled = True
End If
End If

```

```

'if already a value asterisk(*) but enter a letters
Elseif txtMname.Text = "*" Then
If Char.IsLetter(e.KeyChar) Or Char.IsWhiteSpace(e.KeyChar) Then If
e.KeyChar <> ControlChars.Back Then
'MessageBox("You already inputted asterisk(*)")
e.Handled = True
End If
End If
End If

```

```

Catch ex As Exception
MsgBox(ex.Message)
End Try
End Sub
Private Sub txtLname_KeyPress(sender As Object, e As KeyPressEventArgs) Handles
txtLname.KeyPress
Try
If Asc(e.KeyChar) <> 13 AndAlso Asc(e.KeyChar) <> 8 AndAlso Not Char.IsLetter(e.KeyChar)
AndAlso Not Char.IsWhiteSpace(e.KeyChar) Then
Beep()
e.Handled = True
End If
Catch ex As Exception
MsgBox(ex.Message)
End Try
End Sub
Private Sub txtEname_KeyPress(sender As Object, e As KeyPressEventArgs) Handles
txtEname.KeyPress
Try
If Asc(e.KeyChar) <> 13 AndAlso Asc(e.KeyChar) <> 42 AndAlso Asc(e.KeyChar) <> 8
AndAlso Not Char.IsLetter(e.KeyChar) AndAlso Not Char.IsWhiteSpace(e.KeyChar) Then
Beep()
'MessageBox.Show("Please enter letters only")
e.Handled = True
End If

'if already has an asterisk but pressed asterisk(*) again
If txtEname.Text = "*" Then
If Asc(e.KeyChar) = 42 Then
If e.KeyChar <> ControlChars.Back Then
'MsgBox("You already inputted asterisk(*)")
e.Handled = True

```

Computer Laboratory Management System for **56** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```

End If
End If

```

```

'if already has a value but pressed asterisk(*)
Elseif txtEname.Text <> "" Then
If Asc(e.KeyChar) = 42 Then
If e.KeyChar <> ControlChars.Back Then
'MsgBox("You already inputted your middle name")
e.Handled = True
End If
End If

```

```

'if already a value asterisk(*) but enter a letters
Elseif txtEname.Text = "*" Then
If Char.IsLetter(e.KeyChar) Or Char.IsWhiteSpace(e.KeyChar) Then If
e.KeyChar <> ControlChars.Back Then
'MsgBox("You already inputted asterisk(*)")
e.Handled = True
End If
End If
End If
Catch ex As Exception

```

```

MsgBox(ex.Message)
End Try
End Sub
Private Sub txtPassword_KeyPress(sender As Object, e As KeyPressEventArgs) Handles
txtPassword.KeyPress
Try
If Asc(e.KeyChar) <> 13 AndAlso Asc(e.KeyChar) <> 8 AndAlso Not Char.IsDigit(e.KeyChar)
AndAlso Not Char.IsLetter(e.KeyChar) Then
'MessageBox.Show("Please insert alphanumeric characters only")
e.Handled = True
End If

'If exceeded the maximum characters allowed
If txtPassword.Text.Length > 17 Then
If e.KeyChar <> ControlChars.Back Then
'MessageBox.Show("Exceeding max characters")
e.Handled = True
End If
End If
Catch ex As Exception
MsgBox(ex.Message)
End Try
End Sub
Private Sub txtPassword_OnValueChanged(sender As Object, e As EventArgs) Handles
txtPassword.OnValueChanged
Try
If txtPassword.Text = "" Then
txtPassword.LineFocusedColor = Color.FromArgb(11, 64, 95)
txtPassword.LineIdleColor = Color.Gray
txtPassword.isPassword = False
Else
txtPassword.isPassword = True
If txtPassword.Text.Length < 6 Then
txtPassword.LineFocusedColor = Color.Red
txtPassword.LineIdleColor = Color.Red

```

Computer Laboratory Management System for **57** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```

Else
txtPassword.LineFocusedColor = Color.FromArgb(11, 64, 95)
txtPassword.LineIdleColor = Color.Gray
End If
End If
Catch ex As Exception
MsgBox(ex.Message)
End Try
End Sub
#End Region

```

```

#Region " SUBS "
Public Sub LoadAll()
Try
loadCourse()
LoadSection()
LoadSubject()
ClearAll()
Catch ex As Exception
Throw ex
End Try

```



```

End Sub
Public Sub LoadSubject()
Try
conn.Close()
conn.Open()
dgvSubjectList.Rows.Clear()
cmd.Connection = conn
cmd.CommandText = "SELECT sched.sched_ID, subj.subj_Code, subj.subj_Description,
sched.sched_Day, sched.sched_StartTime, sched.sched_EndTime FROM tbl_Subject as subj INNER
JOIN tbl_Schedule as sched ON subj.subj_Code = sched.sched_Code WHERE
sched.sched_Semester = '" & CurrentSemester & "' AND sched.sched_SchoolYear = '" &
CurrentSchoolYear & "'"
dtaReader = cmd.ExecuteReader

If dtaReader.HasRows Then
While dtaReader.Read

Dim day As String = ""

If dtaReader.GetValue(3).ToString = "Monday" Then
day = "M"
ElseIf dtaReader.GetValue(3).ToString = "Tuesday" Then
day = "T"
ElseIf dtaReader.GetValue(3).ToString = "Wednesday" Then
day = "W"
ElseIf dtaReader.GetValue(3).ToString = "Thursday" Then
day = "TH"
ElseIf dtaReader.GetValue(3).ToString = "Friday" Then
day = "F"
ElseIf dtaReader.GetValue(3).ToString = "Saturday" Then
day = "S"
End If

Dim startTime As String =
DateTime.Parse(dtaReader.GetValue(4).ToString).ToString("hh:mm tt")
Dim endTime As String =
DateTime.Parse(dtaReader.GetValue(5).ToString).ToString("hh:mm tt")

```

Computer Laboratory Management System for **58** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```

Dim schedule As String = day & "\ " & startTime & " - " & endTime Dim found
As Boolean = False

If dgvSubjectList.Rows.Count > 0 Then

'with duplicate
For Each row As DataGridViewRow In dgvSubjectList.Rows
If row.Cells(1).Value = dtaReader.GetValue(0).ToString Then
row.Cells(4).Value = row.Cells(4).Value + day
row.Cells(7).Value = row.Cells(4).Value & "\ " & startTime & " - " & endTime found = True
End If
Next

' no duplicate
If Not found Then
dgvSubjectList.Rows.Add(False, dtaReader.GetValue(0).ToString,
dtaReader.GetValue(1).ToString, dtaReader.GetValue(2).ToString, day,
dtaReader.GetValue(4).ToString, dtaReader.GetValue(5).ToString, schedule)

```

End If

'firt item to be added

Else

dgvSubjectList.Rows.Add(False, dtaReader.GetValue(0).ToString,
dtaReader.GetValue(1).ToString, dtaReader.GetValue(2).ToString, day,
dtaReader.GetValue(4).ToString, dtaReader.GetValue(5).ToString, schedule)

End If

'dgvSubjectList.Rows.Add(dtaReader.GetValue(0).ToString,
dtaReader.GetValue(1).ToString, dtaReader.GetValue(2).ToString, dtaReader.GetValue(3).ToString)

End While

dtaReader.Close()

End If

conn.Close()

Catch ex As Exception

Throw ex

End Try

End Sub

Public Sub LoadCourse()

Try

cmbCourse.Items.Clear()

cmbCourse.Items.Add("Choose your course...")

conn.Close()

conn.Open()

cmd.Connection = conn

cmd.CommandText = "SELECT course_Abbr FROM tbl_Course"

dtaReader = cmd.ExecuteReader

If dtaReader.HasRows Then

While dtaReader.Read

cmbCourse.Items.Add(dtaReader.GetValue(0).ToString)

End While

dtaReader.Close()

End If

conn.Close()

Catch ex As Exception

Throw ex

Computer Laboratory Management System for **59** of **209** Students of Pamantasan ng
Lungsod ng Marikina (Green Heights campus)

Pamantasan ng Lungsod ng Marikina Appendices

End Try

End Sub

Public Sub LoadSection()

Try

cmbSection.Items.Clear()

cmbSection.Items.Add("Choose your section...")

conn.Close()

conn.Open()

cmd.Connection = conn

cmd.CommandText = "SELECT sec_Name FROM tbl_Section"

dtaReader = cmd.ExecuteReader

If dtaReader.HasRows Then

While dtaReader.Read

```

cmbSection.Items.Add(dtaReader.GetValue(0).ToString)
End While
dtaReader.Close()
End If
conn.Close()
Catch ex As Exception
Throw ex
End Try
End Sub
Private Sub AddStudent()
Dim gender As String = ""
Try
conn.Close()
conn.Open()

If rbtnMale.Checked = True Then
gender = "Male"
ElseIf rbtnFemale.Checked = True Then
gender = "Female"
End If

cmd.Connection = conn
cmd.CommandText = "INSERT INTO tbl_Account VALUES ('" & txtStudNo.Text & "', '" &
txtPassword.Text & "', 'Student', '0', 'Active', GETDATE())"
cmd.ExecuteNonQuery()

cmd.Connection = conn
cmd.CommandText = "INSERT INTO tbl_Student VALUES ('" & txtStudNo.Text & "', '" & txtFname.Text
& "', '" & txtMname.Text & "', '" & txtLname.Text & "', '" & txtEname.Text & "', '" & gender & "', '" &
cmbCourse.Text & "', '" & cmbSection.Text & "', '" & cmbYearLevel.Text & "')" cmd.ExecuteNonQuery()

cmd.Connection = conn
cmd.CommandText = "SELECT stud_TableID FROM tbl_Student WHERE stud_ID = '" &
txtStudNo.Text & "'"
dtaReader = cmd.ExecuteReader
While dtaReader.Read
TableID = dtaReader.GetValue(0).ToString
End While
dtaReader.Close()
MsgBox(TableID)

For Each checkRow As DataGridViewRow In dgvSubjectList.Rows

```

Computer Laboratory Management System for **60** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```

If checkRow.Cells("colCheck").Value = True Then
cmd.Connection = conn
MsgBox(txtStudNo.Text)
cmd.CommandText = "INSERT INTO tbl_Student_Schedule VALUES ('" &
checkRow.Cells("colSchedID").Value & "', '" & txtStudNo.Text & "', '" &
checkRow.Cells("colSchedule").Value & "', '" & CurrentSemester & "', '" & CurrentSchoolYear & "',
GETDATE())"
cmd.ExecuteNonQuery()
End If
Next
MsgBox("Save successful", MsgBoxStyle.Information, "Message")
ClearAll()
conn.Close()
Catch ex As Exception

```

```

Throw ex
End Try
End Sub
Public Sub ClearAll()
Try
txtStudNo.Text = ""
txtFname.Text = ""
txtMname.Text = ""
txtLname.Text = ""
txtEname.Text = ""
txtPassword.Text = ""
cmbCourse.SelectedIndex = 0
cmbSection.SelectedIndex = 0
cmbYearLevel.SelectedIndex = 0
rbtnFemale.Checked = False
rbtnMale.Checked = False
Catch ex As Exception
Throw ex
End Try
End Sub
#End Region

```

```

'Private Sub txtFname_KeyPress(sender As Object, e As KeyPressEventArgs) Handles
txtFname.KeyPress, txtFname.KeyPress
' If Not Char.IsLetter(e.KeyChar) AndAlso Not Char.IsSeparator(e.KeyChar) AndAlso Not
Char.IsControl(e.KeyChar) Then e.KeyChar = ""
'End Sub
'Private Sub txtMname_KeyPress(sender As Object, e As KeyPressEventArgs) Handles
txtMname.KeyPress, txtFname.KeyPress
' If Not Char.IsLetter(e.KeyChar) AndAlso Not Char.IsSeparator(e.KeyChar) AndAlso Not
Char.IsControl(e.KeyChar) Then e.KeyChar = ""
'End Sub
'Private Sub txtLname_KeyPress(sender As Object, e As KeyPressEventArgs) Handles
txtLname.KeyPress, txtFname.KeyPress

```

End Class

- Change password

```
Imports System.Data.SqlClient
```

```
Public Class Admin_Account_Change_Password
```

Computer Laboratory Management System for **61** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```
Dim accountType As String = ""
```

```
#Region " EVENT - Form "
```

```
Private Sub Admin_Account_Change_Password_Load(sender As Object, e As EventArgs) Handles
MyBase.Load
loadAccounts()
clearAll()
End Sub
#End Region
```

```
#Region " EVENT - Grid "
```

```
Private Sub dgvAccountList_RowHeaderMouseClick(sender As Object, e As
DataGridViewCellMouseEventArgs) Handles dgvAccountList.RowHeaderMouseClick
```

```

Dim rowClick As DataGridViewRow = dgvAccountList.Rows(e.RowIndex)

txtID.Text = rowClick.Cells("colID").Value
txtFullName.Text = rowClick.Cells("colFullName").Value

txtPassword.Select()
btnUpdate.Enabled = True
txtPassword.Text = ""
txtConfirmPassword.Text = ""
End Sub
#End Region
#Region " EVENT - Buttons "
Private Sub btnUpdate_Click(sender As Object, e As EventArgs) Handles btnUpdate.Click

If txtID.Text = "" And txtFullName.Text = "" Then
MsgBox("Choose an account first", MsgBoxStyle.Exclamation)
ElseIf txtPassword.Text <> txtConfirmPassword.Text Then
MsgBox("Password did not match!", MsgBoxStyle.Exclamation)
Else
Try
conn.Close()
conn.Open()
If txtPassword.Text = txtConfirmPassword.Text Then
cmd.Connection = conn
cmd.CommandText = "UPDATE tbl_Account SET acc_Password = " & txtPassword.Text & "
WHERE acc_ID = " & txtID.Text & ""
cmd.ExecuteNonQuery()
End If
MsgBox("Update successfully!", MsgBoxStyle.Information, "Message")
clearAll()
btnUpdate.Enabled = False
loadAccounts()
conn.Close()
Catch ex As Exception
MsgBox(ex.Message.ToString)
End Try
End If
End Sub
Private Sub btnClear_Click(sender As Object, e As EventArgs) Handles btnClear.Click
btnUpdate.Enabled = False
clearAll()
End Sub
#End Region
#Region " EVENT - TextBox "
Private Sub txtPassword_KeyPress(sender As Object, e As KeyPressEventArgs) Handles
txtPassword.KeyPress

```

Computer Laboratory Management System for **62** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```

If Asc(e.KeyChar) <> 13 AndAlso Asc(e.KeyChar) <> 8 AndAlso Not Char.IsDigit(e.KeyChar)
AndAlso Not Char.IsLetter(e.KeyChar) Then
' MessageBox.Show("Please insert alphanumeric characters only")
e.Handled = True
End If

'If exceeded the maximum characters allowed
If txtPassword.Text.Length > 15 Then
If e.KeyChar <> ControlChars.Back Then

```

```

'MessageBox.Show("Exceeding max characters")
e.Handled = True
End If
End If

End Sub
Private Sub txtConfirmPassword_KeyPress(sender As Object, e As KeyPressEventArgs) Handles
txtConfirmPassword.KeyPress
If Asc(e.KeyChar) <> 13 AndAlso Asc(e.KeyChar) <> 8 AndAlso Not Char.IsDigit(e.KeyChar)
AndAlso Not Char.IsLetter(e.KeyChar) Then
'MessageBox.Show("Please insert alphanumeric characters only")
e.Handled = True
End If

'If exceeded the maximum characters allowed
If txtConfirmPassword.Text.Length > 15 Then
If e.KeyChar <> ControlChars.Back Then
'MessageBox.Show("Exceeding max characters")
e.Handled = True
End If
End If

End Sub
Private Sub txtPassword_OnValueChanged(sender As Object, e As EventArgs) Handles
txtPassword.OnValueChanged
If txtPassword.Text = "" Then

txtPassword.LineFocusedColor = Color.FromArgb(11, 64, 95)
txtPassword.LineIdleColor = Color.Gray
txtPassword.isPassword = False

Else

txtPassword.isPassword = True

If txtPassword.Text.Length < 6 Then
txtPassword.LineFocusedColor = Color.Red
txtPassword.LineIdleColor = Color.Red
Else
txtPassword.LineFocusedColor = Color.FromArgb(11, 64, 95)
txtPassword.LineIdleColor = Color.Gray
End If

End If
End Sub
Private Sub txtConfirmPassword_OnValueChanged(sender As Object, e As EventArgs) Handles
txtConfirmPassword.OnValueChanged
If txtConfirmPassword.Text = "" Then

txtConfirmPassword.LineFocusedColor = Color.FromArgb(11, 64, 95)

```

Computer Laboratory Management System for **63** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```

txtConfirmPassword.LineIdleColor = Color.Gray
txtConfirmPassword.isPassword = False

Else

txtConfirmPassword.isPassword = True

```

```

If txtConfirmPassword.Text.Length < 6 Then
txtConfirmPassword.LineFocusedColor = Color.Red
txtConfirmPassword.LineIdleColor = Color.Red
Else
txtConfirmPassword.LineFocusedColor = Color.FromArgb(11, 64, 95)
txtConfirmPassword.LineIdleColor = Color.Gray
End If

End If
End Sub
Private Sub txtSearch_KeyPress(sender As Object, e As KeyPressEventArgs) Handles
txtSearch.KeyPress

If e.KeyChar = ChrW(Keys.Enter) Then
If e.KeyChar <> ControlChars.Back Then
MsgBox("weh")
e.Handled = True
End If

ElseIf e.KeyChar = Chr(39) Then 'ASCII for '

If e.KeyChar <> ControlChars.Back Then
e.Handled = True
End If

Else
'Do nothing
End If

' MsgBox(Keys.Oem7.ToString)

End Sub

Private Sub txtSearch_OnTextChanged(sender As Object, e As EventArgs) Handles
txtSearch.OnTextChanged

If txtSearch.text = "" Then

loadAccounts()

Else
conn.Close()
conn.Open()

Try
dgvAccountList.Rows.Clear()

'Search info in professors
cmd.Connection = conn

```

Computer Laboratory Management System for **64** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```

cmd.CommandText = "SELECT acc.acc_ID, prof.prof_Fname + ' ' + prof.prof_Mname + ' ' +
prof.prof_Lname + ' ' + prof.prof_Ename, acc.acc_Type FROM tbl_Account as acc INNER JOIN
tbl_Professor as prof ON acc.acc_ID = prof.prof_ID WHERE acc.acc_ID LIKE '%" & txtSearch.text &

```

```

"%'" OR prof.prof_Fname LIKE '%" & txtSearch.text & "%'" OR prof.prof_Mname LIKE '%" &
txtSearch.text & "%'" OR prof.prof_Lname LIKE '%" & txtSearch.text & "%'" OR prof.prof_Ename LIKE
'%" & txtSearch.text & "%'"
dtaReader = cmd.ExecuteReader

If dtaReader.HasRows Then
While dtaReader.Read
dgvAccountList.Rows.Add(dtaReader.GetValue(0).ToString,
dtaReader.GetValue(1).ToString, dtaReader.GetValue(2).ToString)
End While
dtaReader.Close()
Else
dtaReader.Close()
End If

'Search data in students
cmd.Connection = conn
cmd.CommandText = "SELECT acc.acc_ID, stud.stud_Fname + ' ' + stud.stud_Mname + ' ' +
stud.stud_Lname + ' ' + stud.stud_Ename, acc.acc_Type FROM tbl_Account as acc INNER JOIN
tbl_Student as stud ON acc.acc_ID = stud.stud_ID WHERE acc.acc_ID LIKE '%" & txtSearch.text &
"%'" OR stud.stud_Fname LIKE '%" & txtSearch.text & "%'" OR stud.stud_Mname LIKE '%" &
txtSearch.text & "%'" OR stud.stud_Lname LIKE '%" & txtSearch.text & "%'" OR stud.stud_Ename LIKE
'%" & txtSearch.text & "%'"
dtaReader = cmd.ExecuteReader

If dtaReader.HasRows Then
While dtaReader.Read
dgvAccountList.Rows.Add(dtaReader.GetValue(0).ToString,
dtaReader.GetValue(1).ToString, dtaReader.GetValue(2).ToString)
End While
dtaReader.Close()
Else
dtaReader.Close()
End If

Catch ex As Exception
MsgBox(ex.Message.ToString)
End Try

conn.Close()

End If

End Sub
#End Region

#Region " SUBS "
Public Sub loadAccounts()
Try
conn.Close()
conn.Open()
dgvAccountList.Rows.Clear()

cmd.Connection = conn

```



```

cmd.CommandText = "SELECT acc.acc_ID, prof.prof_Fname + ' ' + prof.prof_Mname + ' ' +
prof.prof_Lname + ' ' + prof.prof_Ename, acc.acc_Type FROM tbl_Account as acc INNER JOIN
tbl_Professor as prof ON acc.acc_ID = prof.prof_ID"
dtaReader = cmd.ExecuteReader

If dtaReader.HasRows Then
While dtaReader.Read
dgvAccountList.Rows.Add(dtaReader.GetValue(0).ToString,
dtaReader.GetValue(1).ToString, dtaReader.GetValue(2).ToString)
End While
dtaReader.Close()
Else
dtaReader.Close()
End If

cmd.Connection = conn
cmd.CommandText = "SELECT acc.acc_ID, stud.stud_Fname + ' ' + stud.stud_Mname + ' ' +
stud.stud_Lname + ' ' + stud.stud_Ename, acc.acc_Type FROM tbl_Account as acc INNER JOIN
tbl_Student as stud ON acc.acc_ID = stud.stud_ID"
dtaReader = cmd.ExecuteReader

If dtaReader.HasRows Then
While dtaReader.Read
dgvAccountList.Rows.Add(dtaReader.GetValue(0).ToString,
dtaReader.GetValue(1).ToString, dtaReader.GetValue(2).ToString)
End While
dtaReader.Close()
Else
dtaReader.Close()
End If
conn.Close()
Catch ex As Exception
Throw ex
End Try
End Sub
Public Sub clearAll()
Try
txtID.Text = ""
txtFullName.Text = ""
txtPassword.Text = ""
txtConfirmPassword.Text = ""
txtSearch.text = ""
loadAccounts()
Catch ex As Exception
Throw ex
End Try
End Sub
#End Region

End Class

```

Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

- Status

Imports System.Data.SqlClient

Public Class Admin_Account_Status

#Region " EVENT - Form "

Private Sub Admin_Account_Status_Load(sender As Object, e As EventArgs) Handles MyBase.Load

'clearAll()

'totalProfessorAccount()

'totalStudentAccount()

End Sub

#End Region

#Region " EVENT - TextBox "

Private Sub txtSearch_KeyPress(sender As Object, e As KeyPressEventArgs) Handles txtSearch.KeyPress

Try

If e.KeyChar = ChrW(Keys.Enter) Then

If e.KeyChar <> ControlChars.Back Then

e.Handled = True

End If

End If

Catch ex As Exception

MsgBox(ex.Message)

End Try

End Sub

Private Sub txtSearch_OnTextChanged(sender As Object, e As EventArgs) Handles txtSearch.OnTextChanged

Dim status As String = ""

Dim action As String = ""

If txtSearch.text = "" Then

totalProfessorAccount()

totalStudentAccount()

Else

Try

dgvAccountList.Rows.Clear()

conn.Close()

conn.Open()

cmd.Connection = conn

cmd.CommandText = "SELECT p.prof_ID, (p.prof_Fname + ' ' + p.prof_Mname + ' ' + p.prof_Lname + ' ' + p.prof_Ename) as fullName, a.acc_Type, a.acc_Status, acc_Remarks FROM tbl_Professor as p INNER JOIN tbl_Account as a ON p.prof_ID = a.acc_ID WHERE a.acc_Type = 'Professor' AND (a.acc_ID LIKE '%" & txtSearch.text & "%' OR p.prof_Fname LIKE '%" & txtSearch.text & "%' OR p.prof_Mname LIKE '%" & txtSearch.text & "%' OR p.prof_Lname LIKE '%" & txtSearch.text & "%' OR p.prof_Ename LIKE '%" & txtSearch.text & "%') ORDER BY fullName ASC" dtaReader = cmd.ExecuteReader

If dtaReader.HasRows Then

While dtaReader.Read

dgvAccountList.Rows.Add(dtaReader.GetValue(0).ToString,

dtaReader.GetValue(1).ToString, dtaReader.GetValue(2).ToString, status,

dtaReader.GetValue(4).ToString, action)

End While

dtaReader.Close()

Computer Laboratory Management System for **67** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```
Else
dtaReader.Close()
End If

'Search data in student database
cmd.Connection = conn
cmd.CommandText = "SELECT s.stud_ID, (s.stud_Fname + ' ' + s.stud_Mname + ' ' + s.stud_Lname
+ ' ' + s.stud_Ename) as fullName, a.acc_Type, a.acc_Status, acc_Remarks FROM tbl_Student as s
INNER JOIN tbl_Account as a ON s.stud_ID = a.acc_ID WHERE a.acc_Type = 'Student' AND
(a.acc_ID LIKE '%" & txtSearch.text & "%' OR s.stud_Fname LIKE '%" & txtSearch.text & "%' OR
s.stud_Mname LIKE '%" & txtSearch.text & "%' OR s.stud_Lname LIKE '%" & txtSearch.text & "%' OR
s.stud_Ename LIKE '%" & txtSearch.text & "%') ORDER BY fullName ASC" dtaReader =
cmd.ExecuteReader

If dtaReader.HasRows Then
While dtaReader.Read
dgvAccountList.Rows.Add(dtaReader.GetValue(0).ToString,
dtaReader.GetValue(1).ToString, dtaReader.GetValue(2).ToString, status,
dtaReader.GetValue(4).ToString, action)
End While
dtaReader.Close()
Else
dtaReader.Close()
End If

'Check if status is online/offline
For Each items As DataGridViewRow In dgvAccountList.Rows
If items.Cells(3).Value = "0" Then
status = "Offline"
Else
status = "Online"
End If

If items.Cells(4).Value = "Active" Then
items.Cells(5).Value = "Lock"
ElseIf items.Cells(4).Value = "Lock" Then
items.Cells(5).Value = "Unlock"
Else
items.Cells(5).Value = "Activate"
End If
Next
conn.Close()
Catch ex As Exception
MsgBox(ex.Message.ToString, MsgBoxStyle.Critical)
End Try
End If
End Sub
#End Region
#Region " EVENT - Grid "
Private Sub dgvAccountList_CellContentClick(sender As Object, e As DataGridViewCellEventArgs)
Handles dgvAccountList.CellContentClick

Dim statusQuery As String = ""
Dim attemptClear As String = ""
Dim accountUnlock As String = ""
Dim senderGrid = DirectCast(sender, DataGridView)
```

```

Try
If TypeOf senderGrid.Columns(e.ColumnIndex) Is DataGridViewButtonColumn AndAlso
e.RowIndex >= 0 Then

```

Computer Laboratory Management System for **68** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```

conn.Close()
conn.Open()
'Activate/Deactivate Button Action
Dim selectedAccount As String = dgvAccountList.Rows(e.RowIndex).Cells(0).Value 'get the ID
Number of the student

For Each accountList As DataGridViewRow In dgvAccountList.Rows 'Search to every row of the table
'Search student with the same ID
If accountList.Cells(0).Value = selectedAccount Then

If accountList.Cells(4).Value = "Active" Then 'Change Active Student to Inactive Status
accountList.Cells(4).Value = "Lock"
accountList.Cells(5).Value = "Unlock"
statusQuery = "UPDATE tbl_Account SET acc_Remarks = 'Lock' WHERE acc_ID = '" &
selectedAccount & "'"

Elseif accountList.Cells(4).Value = "Lock" Then 'Change Inactive Student to Active Status
accountList.Cells(4).Value = "Active"
accountList.Cells(5).Value = "Lock"
statusQuery = "UPDATE tbl_Account SET acc_Remarks = 'Active' WHERE acc_ID = '" &
selectedAccount & "'"
attemptClear = "UPDATE tbl_Log_Attempt SET att_Remarks = '0' WHERE att_Remarks =
'1' AND att_ID = '" & accountList.Cells(0).Value & "'"
accountUnlock = "UPDATE tbl_Account SET acc_Remarks = 'Active' WHERE acc_ID = '" &
accountList.Cells(0).Value & "'"

cmd.Connection = conn
cmd.CommandText = accountUnlock
cmd.ExecuteNonQuery()

cmd.Connection = conn
cmd.CommandText = attemptClear
cmd.ExecuteNonQuery()

Else
accountList.Cells(4).Value = "Active"
accountList.Cells(5).Value = "Lock"
End If

End If
Next

cmd.Connection = conn
cmd.CommandText = statusQuery
cmd.ExecuteNonQuery()

MsgBox("Done!", MsgBoxStyle.Information)
conn.Close()
End If
Catch ex As Exception
MsgBox(ex.Message.ToString)
End Try
End Sub

```

#End Region

```
#Region " SUBS "  
Public Sub LoadAll()
```

Computer Laboratory Management System for **69** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```
Try  
clearAll()  
totalProfessorAccount()  
totalStudentAccount()  
Catch ex As Exception  
Throw ex  
End Try  
End Sub  
Public Sub TotalStudentAccount()
```

```
Dim status As String = ""  
Dim action As String = ""
```

```
Try  
conn.Close()  
conn.Open()  
cmd.Connection = conn  
cmd.CommandText = "SELECT s.stud_ID, (s.stud_Fname + ' ' + s.stud_Mname + ' ' +  
s.stud_Lname + ' ' + s.stud_Ename) as fullName, a.acc_Type, a.acc_Status, acc_Remarks FROM  
tbl_Student as s INNER JOIN tbl_Account as a ON s.stud_ID = a.acc_ID WHERE a.acc_Type =  
'Student' ORDER BY fullName ASC"  
dtaReader = cmd.ExecuteReader
```

```
If dtaReader.HasRows Then  
While dtaReader.Read  
If dtaReader.GetValue(3).ToString = "0" Then  
status = "Offline"  
Else  
status = "Online"  
End If
```

```
If dtaReader.GetValue(4).ToString = "Active" Then  
action = "Lock"  
ElseIf dtaReader.GetValue(4).ToString = "Lock" Then  
action = "Unlock"  
Else  
action = "Activate"  
End If  
dgvAccountList.Rows.Add(dtaReader.GetValue(0).ToString,  
dtaReader.GetValue(1).ToString, dtaReader.GetValue(2).ToString, status,  
dtaReader.GetValue(4).ToString, action)  
End While  
dtaReader.Close()  
End If  
conn.Close()  
Catch ex As Exception  
Throw ex  
End Try  
End Sub  
Public Sub TotalProfessorAccount()
```

```
Dim status As String = ""
Dim action As String = ""
```

```
Try
conn.Close()
conn.Open()
cmd.Connection = conn
```

Computer Laboratory Management System for **70** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)

Pamantasan ng Lungsod ng Marikina Appendices

```
cmd.CommandText = "SELECT p.prof_ID, (p.prof_Fname + ' ' + p.prof_Mname + ' ' +
p.prof_Lname + ' ' + p.prof_Ename) as fullName, a.acc_Type, a.acc_Status, acc_Remarks FROM
tbl_Professor as p INNER JOIN tbl_Account as a ON p.prof_ID = a.acc_ID WHERE a.acc_Type =
'Professor' ORDER BY fullName ASC"
dtaReader = cmd.ExecuteReader
```

```
If dtaReader.HasRows Then
While dtaReader.Read
```

```
If dtaReader.GetValue(3).ToString = "0" Then
status = "Offline"
Else
status = "Online"
End If
```

```
If dtaReader.GetValue(4).ToString = "Active" Then
action = "Lock"
ElseIf dtaReader.GetValue(4).ToString = "Lock" Then
action = "Unlock"
Else
action = "Activate"
End If
dgvAccountList.Rows.Add(dtaReader.GetValue(0).ToString,
dtaReader.GetValue(1).ToString, dtaReader.GetValue(2).ToString, status,
dtaReader.GetValue(4).ToString, action)
```

```
End While
End If
conn.Close()
Catch ex As Exception
Throw ex
End Try
End Sub
Public Sub ClearAll()
Try
txtSearch.text = ""
Catch ex As Exception
Throw ex
End Try
End Sub
#End Region
```

```
End Class
```

□ Dashboard Menu

```
Imports System.Data.SqlClient
```

```
Public Class Admin_Main_Dashboard
```

```

#Region " EVENT - Form "
Private Sub Admin_Main_Dashboard_Load(sender As Object, e As EventArgs) Handles
MyBase.Load
DoubleBuffered = True

End Sub
#End Region

```

Computer Laboratory Management System for **71** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

End Class

□ Professor Menu - Professor List

Public Class Admin_Professor_List

```

#Region " EVENT - Form "
Private Sub Admin_Professor_Dashboard_Load(sender As Object, e As EventArgs) Handles
MyBase.Load
loadEmployeeList()
totalFemaleProfessor()
totalMaleProfessor()
Me.pnl_HeaderTop.Hide()
Me.ucUpdate.Hide()
End Sub
#End Region
#Region " EVENT - Buttons "
Private Sub btn_Close_Click(sender As Object, e As EventArgs) Handles btn_Close.Click
Try
Me.pnl_HeaderTop.Hide()
Me.ucUpdate.Hide()
Catch ex As Exception
MsgBox(ex.Message)
End Try
End Sub
Private Sub btn_Update_Click(sender As Object, e As EventArgs) Handles btn_Update.Click
Try
With ucUpdate
.UpdateInfo()
.UpdateStudentSchedule()
.LoadAllInformation()
End With
MsgBox("Update successful", MsgBoxStyle.Information, "Message") Catch
ex As Exception
MsgBox(ex.Message)
End Try
End Sub
#End Region
#Region " EVENT - Grid "
Private Sub dgvEmployeeList_CellContentClick(sender As Object, e As
DataGridViewCellEventArgs) Handles dgvEmployeeList.CellContentClick

```

```

Try
Dim rowClick = Me.dgvEmployeeList.Rows(e.RowIndex)
Dim senderGrid = DirectCast(sender, DataGridView)

If TypeOf senderGrid.Columns(e.ColumnIndex) Is DataGridViewButtonColumn AndAlso
e.RowIndex >= 0 Then
With ucUpdate
.TableID = Me.dgvEmployeeList.Rows(e.RowIndex).Cells(8).Value.ToString .currentID =
Me.dgvEmployeeList.Rows(e.RowIndex).Cells(0).Value.ToString .fName =
Me.dgvEmployeeList.Rows(e.RowIndex).Cells(1).Value.ToString .mName =
Me.dgvEmployeeList.Rows(e.RowIndex).Cells(2).Value.ToString .lName =
Me.dgvEmployeeList.Rows(e.RowIndex).Cells(3).Value.ToString .eName =
Me.dgvEmployeeList.Rows(e.RowIndex).Cells(4).Value.ToString

```

Computer Laboratory Management System for **72** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```

.Gender = Me.dgvEmployeeList.Rows(e.RowIndex).Cells(6).Value.ToString
.LoadAllInformation()
Me.pnl_HeaderTop.Show()
Me.ucUpdate.Show()
End With
End If
Catch ex As Exception
MsgBox(ex.ToString)
End Try
End Sub
#End Region

#Region " SUBS "
Public Sub loadAll()
Try
loadEmployeeList()
totalFemaleProfessor()
totalMaleProfessor()
Catch ex As Exception
Throw ex
End Try
End Sub
Public Sub totalMaleProfessor()
conn.Close()
conn.Open()
Try
cmd.Connection = conn
cmd.CommandText = "SELECT COUNT(*) FROM tbl_Professor WHERE prof_Gender = 'Male'"
dtaReader = cmd.ExecuteReader

If dtaReader.HasRows Then
While dtaReader.Read
txtTotalMale.Text = dtaReader.GetValue(0).ToString
End While
dtaReader.Close()
End If
Catch ex As Exception
Throw ex
End Try
conn.Close()
End Sub
Public Sub totalFemaleProfessor()
conn.Close()

```



```

conn.Open()
Try
cmd.Connection = conn
cmd.CommandText = "SELECT COUNT(*) FROM tbl_Professor WHERE prof_Gender =
'Female'"
dtaReader = cmd.ExecuteReader

If dtaReader.HasRows Then
While dtaReader.Read
txtTotalFemale.Text = dtaReader.GetValue(0).ToString
End While
dtaReader.Close()
End If
Catch ex As Exception
Throw ex

```

Computer Laboratory Management System for **73** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```

End Try
conn.Close()
End Sub
Public Sub loadEmployeeList()
conn.Close()
conn.Open()
Try
dgvEmployeeList.Rows.Clear()
cmd.Connection = conn
'SELECT prof_ID, (prof_Fname + ' ' + prof_Mname + ' ' + prof_Lname + ' ' + prof_Ename) as
fullName, prof_Gender FROM tbl_Professor
cmd.CommandText = "SELECT prof_ID, prof_Fname, prof_Mname, prof_Lname,
prof_Ename, prof_Gender, prof_TableID FROM tbl_Professor"
dtaReader = cmd.ExecuteReader

If dtaReader.HasRows Then
While dtaReader.Read
Dim FullName As String = dtaReader.GetValue(1).ToString & " " &
dtaReader.GetValue(2).ToString & " " & dtaReader.GetValue(3).ToString & " " &
dtaReader.GetValue(4).ToString
dgvEmployeeList.Rows.Add(dtaReader.GetValue(0).ToString,
dtaReader.GetValue(1).ToString, dtaReader.GetValue(2).ToString, dtaReader.GetValue(3).ToString,
dtaReader.GetValue(4).ToString, FullName, dtaReader.GetValue(5).ToString, "VIEW",
dtaReader.GetValue(6).ToString)
End While
dtaReader.Close()
End If
Catch ex As Exception
Throw ex
End Try
conn.Close()
End Sub
#End Region

End Class

```

- Professor's Update

```

Imports System.Data.SqlClient

Public Class Admin_Professor_Update

```

```

Public TableID As String
Public currentID As String
Public fName As String
Public mName As String
Public lName As String
Public eName As String
Public Gender As String

Dim Semester As String = ""
Dim SchoolYear As String = ""

```

```

#Region " EVENT - Form "
Private Sub Admin_Professor_Update_Load(sender As Object, e As EventArgs) Handles
MyBase.Load
loadSetting()

```

Computer Laboratory Management System for **74** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```

End Sub
#End Region

```

```

#Region " SUBS "
Public Sub UpdateInfo()
Dim gender As String = ""

```

```

If rbtnMale.Checked = True Then
gender = "Male"
ElseIf rbtnFemale.Checked = True Then
gender = "Female"
End If

```

```

conn.Close()
conn.Open()
Try
cmd.Connection = conn
cmd.CommandText = "UPDATE tbl_Professor SET prof_ID = " & txtEmpID.Text & ", prof_Fname
= " & txtFname.Text & ", prof_Mname = " & txtMname.Text & ", prof_Lname = " & txtLname.Text
& ", prof_Ename = " & txtEname.Text & ", prof_Gender = " & gender & " WHERE prof_TableID =
" & TableID & ""
cmd.ExecuteNonQuery()

```

```

Catch ex As Exception
MsgBox(ex.Message.ToString)

```

```

End Try
conn.Close()

```

```

End Sub
Private Sub LoadSetting()
conn.Close()
conn.Open()
Try
cmd.Connection = conn
cmd.CommandText = "SELECT * FROM tbl_Settings"
dtaReader = cmd.ExecuteReader

```

```

If dtaReader.HasRows Then
While dtaReader.Read
Semester = dtaReader.GetValue(0).ToString

```

```

SchoolYear = dtaReader.GetValue(1).ToString
End While
End If
Catch ex As Exception
Throw ex
End Try
conn.Close()
End Sub
Public Sub LoadAllInformation()
Try
LoadPersonallInformation()
LoadHandledSubject()
LoadAvailableSubject()
Catch ex As Exception
Throw ex
End Try
End Sub
Private Sub LoadPersonallInformation()
Try
txtEmpID.Text = currentID

```

Computer Laboratory Management System for **75** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)
Pamantasan ng Lungsod ng Marikina Appendices

```

txtFname.Text = fName
txtMname.Text = mName
txtLname.Text = lName

```

```

Select Case Gender
Case "Male"
rbtnMale.Checked = True
Case "Female"
rbtnFemale.Checked = True
End Select
Catch ex As Exception
Throw ex
End Try
End Sub
Private Sub LoadHandledSubject()
Try
conn.Close()
conn.Open()
dgvHandledSubject.Rows.Clear()
cmd.Connection = conn
'cmd.CommandText = "SELECT sched.sched_ID, subj.subj_Code, subj.subj_Description,
sched.sched_Section, sched.sched_Day, sched.sched_StartTime, sched.sched_EndTime FROM
tbl_Subject as subj INNER JOIN tbl_Schedule as sched ON subj.subj_Code = sched.sched_Code
WHERE sched.sched_Semester = " & Semester & " AND sched.sched_SchoolYear = " &
SchoolYear & " AND sched.sched_Professor = " & currentID & ""
cmd.CommandText = "SELECT sched.sched_ID, subj.subj_Code, subj.subj_Description,
sched.sched_Section, sched.sched_Day, sched.sched_StartTime, sched.sched_EndTime FROM
tbl_Subject as subj INNER JOIN tbl_Schedule as sched ON subj.subj_Code = sched.sched_Code
WHERE sched.sched_Professor = " & currentID & " AND sched.sched_Semester = " &
CurrentSemester & " AND sched.sched_SchoolYear = " & CurrentSchoolYear & "" dtaReader =
cmd.ExecuteReader

If dtaReader.HasRows Then
While dtaReader.Read

Dim day As String = ""

```

```

If dtaReader.GetValue(4).ToString = "Monday" Then
    day = "M"
ElseIf dtaReader.GetValue(4).ToString = "Tuesday" Then
    day = "T"
ElseIf dtaReader.GetValue(4).ToString = "Wednesday" Then
    day = "W"
ElseIf dtaReader.GetValue(4).ToString = "Thursday" Then
    day = "TH"
ElseIf dtaReader.GetValue(4).ToString = "Friday" Then
    day = "F"
ElseIf dtaReader.GetValue(4).ToString = "Saturday" Then
    day = "S"
End If

Dim startTime As String =
DateTime.Parse(dtaReader.GetValue(5).ToString).ToString("hh:mm tt")
Dim endTime As String =
DateTime.Parse(dtaReader.GetValue(6).ToString).ToString("hh:mm tt")
Dim schedule As String = day & " \ " & startTime & " - " & endTime Dim found

As Boolean = False

```

Computer Laboratory Management System for **76** of **209** Students of Pamantasan ng Lungsod ng Marikina (Green Heights campus)