ONLINE REGISTRATION SYSTEM FOR YALA COMMUNITY COLLEGE

BUKHOREE DOLOHHAMA

IHSAN SALEH

KHOLED LANGSAREE

YALA ISLAMIC UNIVERSITY

1431/2010

ONLINE REGISTRATION SYSTEM FOR YALA COMMUNITY COLLEGE

BUKHOREE DOLOHHAMA

491431036

IHSAN SALEH

491431033

KHOLED LANGSAREE

491431002

A PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF BACHELOR OF TECHNOLOGY

YALA ISLAMIC UNIVERSITY

1431/2010

YALA ISLAMIC UNIVERSITY

FACULTY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF INFORMATION TECHNOLOGY

TITLE

ONLINE REGISTRATION SYSTEM FOR YALA COMMUNITY COLLEGE

PRESENT BY

BUKHOREE DOLOHHAMA

IHSAN SALEH

KHOLED LANGSAREE

……..ADVISOR

(MR.SAFDAR ALI)

DATE…./……/1432

……./……./2011

DEPARTMENT OF INFORMATION TECHNOLOGY APPROVES THIS PROJECT REPORT AS PARTIAL FULFILMENT OF REQUIREMENT FOR THE DEGREE OF BACHELOR OF TECHNOLOGY

ACADEMIC YEAR 1431/2010

…….HEAD DEPARTMENT

(MRS.ROSIDAT SAMAE)

DATE…./……/1432

……/……/2011

…….

(MR.SALEH TALEK)

DEAN, FACULTY OF SCIENCE AND TECHNOLOGY

DATE:…../……/1432

……/……/2011

Title: Online Registration System for Yala Community College

Authors: Mr. Bukhoree Dolohhama

Mr. Kholed Langsaree

Mr. Ihsan Saleh

Department: Information Technology

Academic year: 2010

ABSTRACT

Online registration system for Yala Community College is developed for students register the courses from manual system to be electronically. Online registration system contains three subsystems as administrator or officer, lecturers and students. Each subsystem, there is difference of used and functions, as administrator or officer can control all functions which are concerned with this system such as add, delete, view and update the lecturer, student information, courses modification. Lecturer can view the student who enrolled with his/her courses. Student can register the courses which is available for the specific semester, can view the course details and can update profile. General people who need to register a course, he/she has to register to be student first. This system has developed by using AppServ, in AppServ include Apache as Web server, PHP Script language as a server-side programming language, MySQL for database, phpMyAdmin as administrator tool to control MySQL Database via interface, coding with Dreamweaver CS5 and Editplus3, and Adobe Photoshop CS3 for designing the user interface of the system.

ชื่อโครงงานวิจัย : ระบบการลงทะเบียนออนไลน์สำหรับวิทยาลัยชุมชนยะลา

ผู้เขียน : นายบูคอรี ดอเล๊าะหะมะ

นายอิห์ซาน สาแล๊ะ

นายคอเล๊ะ ลังสารี

อาจารย์ที่ปรึกษา : นายซาฟดาร์ อลี

สารนิพนธ์วิทยาศาสตรบัณฑิต ปีการศึกษา : 2553

บทคัดย่อ

สารนิพนธ์เล่มนี้เป็นการศึกษาและวิจัยเกี่ยวกับการลงทะเบียนออนไลน์ ซึ่งมีเป้าหมายเพื่อพัฒนาระบบจากการลงทะเบียนด้วยกระดาษให้เป็นระบบดิจิตอลหรือในรูปแบบออนไลน์ผ่านระบบเครือข่ายอินเตอร์เน็ต ผู้ที่สามารถใช้ระบบนี้มีสามประเภท ซึ่งประกอบไปด้วย ผู้ดูแลระบบหรือเจ้าหน้าที่ คณาจารย์และนักศึกษาวิทยาลัยชุมชนยะลา การทำงานของผู้ดูแลระบบและเจ้าหน้าที่นั้นสามารถบริหารจัดการและทำการเปลี่ยนแปลงในทุกขั้นตอนของระบบ เช่น เพิ่ม เปลี่ยนแปลง ดูและลบข้อมูลของคณาจารย์ นักศึกษา และรายวิชาต่างๆ การกำหนดระยะเวลาการลงทะเบียนของนักศึกษาของรายวิชาแต่ละเดือน สำหรับคณาจารย์นั้นสามารถเรียกดูรายชื่อของนักศึกษาที่ลงทะเบียนเรียนรายวิชาที่สอน ดูข้อมูลส่วนตัวเพื่อทำการแก้ไขเพิ่มเติม ส่วนนักศึกษานั้นสามารถลงทะเบียนเรียนรายวิชาต่างๆ ที่เปิดสอนของแต่ละเดือน และพิมพ์แบบฟอร์มการสมัครเพื่อไปชำระเงิน และสามารถดาวน์โหดข้อมูลรายละเอียดของแต่ละรายวิชาได้อย่างง่ายดาย สำหรับบุคคลทั่วไปนั้นจะต้องทำการลงทะเบียนก่อนถึงจะใช้ระบบนี้ได้ ระบบนี้พัฒนาขึ้นโดยใช้ AppServ จำลองในการทดสอบระบบ ซึ่งภายใน AppServ จะประกอบด้วย Apache เป็นเว็บเซอร์เวอร์, PHP เป็นเว็บโปรแกรมมิ่ง, ใช้ MySQL เป็นตัวจัดเก็บข้อมูลและบริหารจัดการโดย phpMyAdmin ส่วนการเขียนโค้ดนั้นใช้ Adobe Dreamweaver CS5 และ EditPlus3 ส่วนการออกแบบหน้าตา รูปภาพ และไอคอนต่างๆใช้ Adobe Photoshop Adobe CS5 ระบบการลงทะเบียนออนไลน์นี้สามารถช่วยนักศึกษาฯในการลงทะเบียนและเพิ่มประสิทธิภาพให้กับองค์กรได้เป็นอย่างดี

ظام التسجيل عبرة الإنترنت لكليةِ شومشون جالا

إعداد : بخاري دوله ەأمأ

إحسان صالح

خالد لنجساري

المشرف: صفدار علي

قسم : تكنولوجي والإعلام

عام الدراسي : **2010**

فإن هذا الباحث التكميلي لنيل درجة الإجازة العالية في دراسة العلوم بعنوان " نظام التسجيل عبرة الإنترنت لكلية شومشون جالا " لقد اتجهت الباحثة عن نظام التسجيل عبر الإنترنت الذي يهدف ان ينمو إلى وضع نظام لتسجيل بالورقة الى النظام ديجيتال من الإنترنت الذين يستطيعون استخدام هذا النظام بقسم ثلاثة أقسام وهو مسؤول النظام والاعضاء ،هيئة التدريس والطلاب ؛ عمل المسؤولين والموظفين قادرون على إدارة وإجراء تغييرات في جميع مراحل النظام نحو المزيد إضافة وتغييرات معلومات المدرسين أو والطلاب والمواد مختلف فترة تسجيل الطلاب من عن هذا عام دراسي في خلال شهر فإنه يمكن الحصول على قائمة بأسماء الطلبة المسجلين المواضع التي تدرسها ويمكن للطلاب التسجيل والالتحاق مواضع مختلفة الذي يفتح الدراسة كل اسبوع وطباعة نموذج التسجيل لكي طلب الدفع ويمكن يأخذ المعلومات مواد الدراسة سهولة أما بالنسبة لعامة الناس يمكن أن تسجل قبل استخدام هذا النظام وهذا النظام تطوير لاستخدام AppServ بفروكرام هذه نموذج لاختبار النظام – و AppSer يتضمن Apache و PHP و MySQL ويمكن لنظام التسجيل عبر الإنترنت مساعدة الطلاب للتسجيل وتمكين المنظمة كذلك حسنا

ACKNOWLEDGEMENT

The preparation of this online registration system of Yala Community Colleges would not be completed without the contribution and support of both individual and institutions, and absolutely this project title would not be chosen without the desired of God. First of all development team is particularly grateful to Allah, the Most Gracious and the Most Merciful and only one who helps us to complete this project.

Second, the development team would like to thank to families especially for parents who support in this education. Third, development team satisfy to thank to Mr. Sufdar Ali who suggest to do and advice the development team to complete this project since started until finished and thank to Mr. Tam Sakireen who gives all of knowledge about coding and using PHP script programming languages and thank to all of coordination teams.

Finally, thanks to all of lecturers, brothers and sisters of Faculty of Science and Technology, who give good advice, cheer up and motivate the developer team to complete this project title successfully.

TABLE OF CONTENT

LIST OF ILLUSTRATION

LIST OF TABLES

CHAPTER 1

INTRODUCTION

1.0 INTRODUCTION

Web based application is an application that delivers content to users from a Web server over the internet or an intranet. Today, people use the Web to read the latest news, buy consumer goods, search for information, and obtain stock quotes. With the advent of technology, most government, university and organization activities are carried out electronically. That is why the word electronic-registration, e-government, e-commerce, e-payment etc has become a household name. Online registration can be defined as the electronic way of making application using Internet technology. It is an interactive medium using computer that is connected to the Internet with e-form. Online registration is a modern technique that addresses the needs of school, university and student to reduce the time during registration. Online registration is also known as online registration in which all of processes of registration are done by electronically.

Yala Community College (YCC) is a learning resource in which relate under the Commission on Higher Education, Ministry of Education. It is established on 29 July 2547, since the governments and Executive Director of the Center for Southern Border.

Provinces (SBPAC) are designated a special area in the development of strategic southern provinces of Yala, Narathiwat, Pattani and 4 districts of Songkhla. Therefore, it has established four community colleges in the area. That be an important strategic for communities development. Yala community college supports professional program which gives the facility to the people who have no chance to study in the general university for many reasons. In Yala community college, there are 2 sessions; semester programs and professional programs. The semester programs which are divide into 7 programs; professional programs are dividing into 24 programs; these all programs are all about career program such as basic computer repairing, cocking, and basic Microsoft word and so on.

The management system of the Yala Community College is processing by manual registration on any information forms or documents. Students who want to register in any course student have to apply in the college. Then the candidate/student, they have to fill up the application form about profile, alternative course, define date and days and attach two pictures for register in any type of course. The management has to sort a kind of course session forms which is registered by the students. Yala community college start

each course with minimum number of student registered in course at least 15 students, and management will contact to each student about time and day for study.

Online registration systems are very important to improve the management performance, management can update the information, keep the record about students, delete the file, and search important information that management wants to use by save time.

1.1 PROBLEM STATEMENT

Currently, Yala Community College is processing manually all the documents related to registration of students in any course. All the documents to keep record is very difficult for management of Yala community college. The person who wants to register in any course he/she have to come to college for register that course manually. Furthermore, people don’t know the courses announce by the yala community college, if they want to know they have to come to college to see the list of courses which is open by the yala community college. After that person can choose the course and register manually by fill up the registration form which is provided by the yala community college. Moreover, registered person have to wait until the confirmation from manage of yala community college that the course will be open or not. Because Yala Community College start the course with minimum number of students which is at least 15 students. When management get the registered number minimum 15 then management inform the

registered students that this course will start on which date and time by telephone. Yala community college management has to sort the registration forms for each course for any session and check which course will start or not. As mention above that yala community college starts the course with minimum number of students which is at least 15 students. Also, management has faced difficulty in update the information of students, search information about students or see the bio-data/information about any existing student. Especially, when all the information in hard copy it's difficult to manage, update and search. Hence, this proposed project will help to solve all the problems of yala community college by doing registration online and keep records of students in softcopy and maintain the record easily. This proposed project helps the management of Yala Community College to improve their performance efficiently and effectively.

1.2 RESEARCH QUESTION

- How to implement online registration system for Yala Community College?
- How online registration system can help to provide services for students and management?
- How online registration system will use to improve the management performance?

1.3 RESEARCH OBJECTIVE

- To develop online registration system for Yala Community College.
- To identify the benefit of online registration system.
- To improve the management performance.

1.4 SCOPE AND LIMITATION

The scope of this proposed project is to develop the web-based system for Yala Community College. The web based system will help students and management to register the courses online. Furthermore, the management can store any kind of information related to student, teacher, staff and technicians in this system. The limitation of this proposed project is that it can be use in any other institute, college, school and university for online registration. Some more feature can be add such as online payment for fees and some more features related to need of client.

1.5 SIGNIFICANCE OF STUDY

It is our hope that the work will achieve the followings:

- Save time, cost and effort.
- Expand the body of knowledge.
- Management can manage the registration of courses online, Students can register online in any courses announce by Yala Community College. Easy in searching; Easy to maintain; Keep all type of records related to registered students.
- Improve performance of management.

1.6 ORGANIZATION OF REPORT

This report is presented in five chapters. An overview of the content of the following chapters is as follows: Chapter Two presents the review of the literature on online registration system and its related different techniques. Focus is on the online registration which is the domain of the undertaken work. Chapter Three describes the research methodology and design of the systems used in this study. Chapter Four discusses the findings of this study based on the results of implemented systems. Chapter Five concludes the study with conclusion, challenges, and recommendations for future works.

1.7 SOFTWARE AND HARDWARE REGUIREMENT

Software requirement:

- Adobe Dreamweaver CS3
- Adobe Photoshop CS3
- Apache 2.2.4
- MySQL 5.0.45
- PHP Engine 5.2.3
- phpMyAdmin 2.10.2
- MySQL Workbench 5.2.33
- Microsoft Office 2007
- EditPlus 3.12
- Rational Rose

Hardware requirement:

- Personal Computer

1.8 SUMMARY

Online registration system for Yala Community Colleges is developed to provide students registration from manual system to be electronically. Online registration system contains subsystems as administrator, lecturers and student. The main point of online registration system of Yala Community Colleges is focused on student register the courses through electronically.

CHAPTER 2

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter is presents the overview of existing work related to project topic. All the different techniques will discuss in this chapter about existing work. This will help to understand well the project. This section shows the discussion about technology internet and ideas of the previous work. The following issues will be presented respectively.

2.1 ONLINE REGISTRATION SYSTEM

The students at the Faculty of Engineering manually fill their course registration forms by collecting them from the Assistant Registrar's office. These forms are approved by the student advisers before they are returned to the AR's office again for processing. Therefore, there are several possible places where mistakes could be introduced into the

data related to registration, starting from the students who fill these forms to the staff members at the AR's office who enter the details from the forms into a database for processing. These mistakes bring a number of problems, such as clashes in the timetable that affect the smooth functioning of the Faculty and difficulties added to the student community (Gunawardana *et al.*, 2008). As well, everyone involved in the registration process are under pressure, as every aspect of course registration are checked manually. These entire problems motivated faculty to develop an electronic course registration system, where most of the aspects are verified automatically and therefore could reduce human mistakes.

Managing all exam activities is a very complex and complicated process. In the old era, conventional method, such as the manual registration system, communication between different parties working with exam activities is very difficult. Lack of technologies used in exam activities prevents dealing with it in a modern and simplified way. The main outcome is to computerize everything related to the General Associate Degree Examination. After the deployment of the new system and working with it, all the problems referred to were solved; this is done by adopting the Online Registration System which helped a lot in reducing the errors resulted in different ways (Al-Shaikh, 2010).

Image registration is an important operation in remote sensing applications that basically involves the identification of many control points in the images. As the manual

identification of control points may be time-consuming and boring several automatic techniques have been developed. Fedorov *et al.* (2003) described a system for automatic registration and variety of remote sensing images under development at the Division of Image Processing (National Institute for Space Research) and the Vision Lab (Electrical & Computer Engineering Department). Three registration algorithms, which showed potential for multi-sensor or temporal image registration, have been implemented. The system is designed to accept different types of data and information provided by the user which speed up the processing or avoid mismatched control points.

In comparison with the advanced countries, Nigeria has relatively low utilization of information and communication technology [ICT]. However, within the African continent, it is steadily emerging as a strong force on the platform of electronic governance. This relevance is being achieved through a well articulated National Information Technology [IT] Policy and collaboration between the national IT agencies [the National IT Development Agency and its subsidiary, the National e-Government Strategies] and government ministries, departments and agencies [MDA's]. One of such MDA's is the Teachers Registration Council of Nigeria [TRCN] which has the statutory duty of regulating the teaching profession in both the public and private sectors of Nigeria and at all levels of the education system [from the primary to the university levels]. The TRCN's scope of responsibilities as the regulator of the largest occupational group in Nigeria placed it on the list of priority agencies to transit to electronic governance with the help of the nation's IT agencies. This paper therefore reviews the

innovations, successes and challenges recorded in the transformation of the teaching profession in Nigeria to electronic governance.

Lui & Tang (2007) proposed a novel framework for offline signature verification. Different from previous methods, researchers approach makes use of online handwriting instead of handwritten images for registration. The online registrations enable robust recovery of the writing trajectory from an input offline signature and thus allow effective shape matching between registration and verification signatures. In addition, Liu and Tang proposed several new techniques to improve the performance of the new signature verification system.

Student registration at Newcastle University involved students being registered in a single place, where they would present a form which had previously been filled in by the student and their department. After registration this information was then transferred to a computerized format (Little *et al*., 1995).

An online process is proposed for video registration of dynamic scenes, such as scenes with dynamic textures or with moving objects. This process has three steps: (i) A few frames are assumed to be already registered. (ii) Using the registered frames, the next new frame is extrapolated. (iii) The actual new frame is registered to the extrapolated frame (Rav-Acha, Pritch, & Peleg, 2006). Video extrapolation overcomes the bias introduced by dynamics in the scene, even when the dynamic regions cover almost the

entire image. It can also overcome not only motion, but also many fluctuations in intensity. The traditional “brightness constancy” is now replaced with “dynamics constancy”.

The need for structured storage, modification and maintenance of huge amounts of data has resulted in the emergence of the Database Management System (DBMS) as one of the core fields in the Computer Science industry. DBMS is the system of computer software that is aimed to provide a managing tool for maintaining the data, through various data models. An Online Course Registration system for University of Dataville is to be developed with a front-end web interface and a back-end database. An example of the system would be University of Florida’s ISIS Registration (Newtonraja, & Nafde, 2004).

Registration for NCVPS courses will take place entirely on the web. Now, distance learning advisors (DLAs) and other school-based personnel can each register students, making the registration period easier and quicker. Student will be able to see course enrollments and avoid complicated waitlists (Hui, 2004).

The West African Examinations Council (WAEC) has a mandate to develop and administer public examinations and award certificates. Its operations include test development, candidate registration, test administration and processing of scores culminating in the release of results and printing of certificates (Dr. Adeyegbe, 2004).

The capture, storage, transfer and manipulation of data are therefore, crucial to the operations of WAEC.

The System provides for students the option to register courses offered by their colleges during the scheduled registration periods. Students can modify their course selection by adding and/or dropping courses. However, when the registration period is over, all previously registered courses by the students will be viewable in the system (Abousharkh, 2010).

Birth registration is a continuous, permanent, compulsory, and universal activity to register the vital events and any occurrences related to it. Data to complete records of birth registration come from different forms filled by people attending in the registration offices, either by parents or legally authorized person (Darian, 2007).

Jackrabbit's flexibility and progressive features allow customers' to either: gradually roll out online registration or aggressively debut all the features in one day. Some customers take months to conservatively offer online features successfully. Alternatively, other customers' have "flipped the switch" at 6am and receive over 1000+ registrations in the first day for several locations (Jackrabbit Technologies, 2010).

2.2 WEB BASED MANAGEMENT SYSTEM

In education, teaching and learning using Internet is one of main important medium for lecturer or instructor to provide teaching materials, post announcement, provide online quiz and etc. Interactive Web-Builder (I-WEB) is a web-based system application which runs on Internet Information Services (IIS) developed to assist academician to create a personal website or create a web for teaching and learning purposes. I-Web is a fully dynamic system and provides user-friendly interface to facilitate user to create and manage the web online (Mei *et al*., 2003).

The TRCN's scope of responsibilities as the regulator of the largest occupational group in Nigeria placed it on the list of priority agencies to transit to electronic governance with the help of the nation's IT agencies. Therefore reviews the innovations, successes and challenges recorded in the transformation of the teaching profession in Nigeria to electronic governance (Wokocha & Nwokeocha, 2009).

According to Hadjerrouit (2010) Web-based learning resources (WBLRs) are potentially powerful tools for enhancing teaching and learning processes in school education. They can provide teachers and learners with a wide range of new and exciting experiences that are not possible in a traditional classroom. However, WBLRs are still the domain of technical and software experts rather than teachers and learners. As a result, much of the

development of WBLRs is carried out without a true understanding of issues pertinent to learning and pedagogy (Hadjerrouit, 2010). Also lacking is user involvement in the development process of WBLRs. The aim of this work is to propose a user-centered approach to the development of WBLRs to translate pedagogical issues into a software tool that supports effective learning. The article also reports on the application of the approach in school education.

Conference registration is usually done by email, which is prone to human error and incomplete information. When the University of Florida was selected to host the Institute of Industrial Engineers 2004 Region 3 Conference, the host committee wanted a better way to collect registration information and use it to prepare for the conference. A web-based decision support system was developed, and it helped the conference team assign workshops, order t-shirts, and collect registration dues. The system also allowed attendees to easily register and ensured that their information was accurately collected (Isler, 2004).

The University Study-Oriented System (USOS) is an integrated student management information system for handling student affairs at Polish universities. Its development and deployment is coordinated and supported financially by the consortium of Polish higher education institutions (Ciebiera, Mincer-Daszkiewicz, & Walen, 2004). It is a huge data base oriented software application done partly in Oracle technology and partly using open source products (Internet modules).

2.3 SUMMARY

The discussion and making understanding in related project from previous can help us to understand about how to develop and design online registration system in the best way that respond to user needed. By learning from related project it could make more experience in getting requirement from users to support and complete the project, and make more interesting to develop it.

CHAPTER 3

METHODOLOGY

3.0 INTRODUCTION

Waterfall model is one of the most well known models in software development life cycle. This model is also known as the traditional or classic model used in software development. It is not only simple to understand, but it is also easy to use. The highlight of waterfall model is that, there are defined phases in waterfall model life cycle and the preceding phase must be completed before the next phase starts (as shown in figure 3.1). Although, there are a number of different models that are now used, in the software development, waterfall model still remains one of the top most used model. Waterfall model is divided into five phases are requirement analysis phase, designing phase, coding phase, testing phase and Acceptance phase.

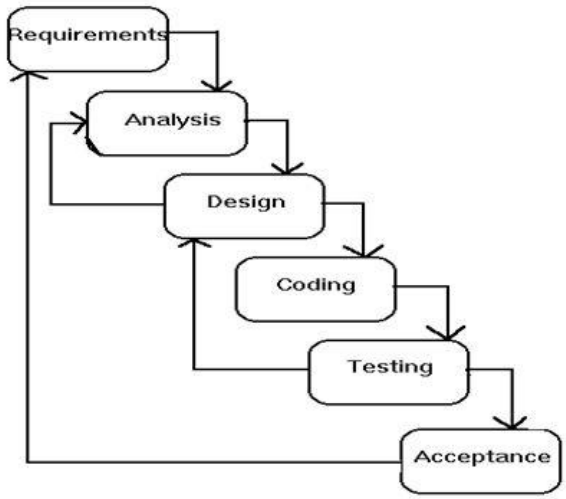


Figure 3.1: *The waterfall model (System Development Life Cycle)*

3.1 REQUIREMENT PHASE

Requirement phase this first stage of Waterfall model (System Development Life Cycle), there is a meeting with the customer, to understand the requirements. The first stage, this is said to be the most crucial stage, as any miscommunication and misinterpretation at this stage may give rise to the software, that is been developed. When the requirements are been noted, it is important to make sure the requirements are detailed and accurate and there is no place for any ambiguity. Understanding the requirements and expectations of the customer properly will ensure that the end product meets the specification.

The purpose of this phase, developers try to make understanding the topic to the project and what are the problems and the needs of Yala Community College during registration. And developers also try to identify the opportunities in which situation that developers can improve the way of registration. After that developers make summarization of the information which had been obtained to estimate the scope of this project. Finally developers document the result to have a feasibility report which state the problems of registration at Yala Community College and summarization of the objective.

3.2 ANALYSIS PHASE

Analysis is the second phase of Waterfall model (System Development Life Cycle) is which analyst studies the organization's current procedure and the information system use to perform organizational tasks. Analysis has two sub phases. *The first phase* is the requirement determination in which the analyst determine the user what for new system and study the current system, manual and computerize that might be replace or enhance part of the project. *And the second phase* is also the study of equipment, structure them according to interrelationships and eliminate any redundancies. The output of this phase is to have a description of the alterative solution recommended by the analysis team.

In this phase, developers make interview with officer and administrators who work with registration system at registration office at Yala Community College for gathering information and requirements to identify the problems occurring during registration at Yala Community College and the needs of the new system. Developers also try to search various books which relate to the field in order to get in dept understand how to develop this system. After making interviewing with the staff at registration office, developers make a summarization to this interviewing by listing the system requirement to identify the function of the new system. After that developers have the list of requirement, developers structure these requirements to produce process modeling and data modeling by using Unified Modeling Language (UML). By using UML language developers design use case diagram, use case specification and sequence.

3.2.1 List of requirements

- M – mandatory requirements (what the system must do)
- D – desirable requirements (what the system preferably should do)
- O – optional requirements (what the system may do)

No	Requirement ID	Requirement Description	Priority
	ER_01	**Login**	

1	ER_01_01	Admin and officer login	M
2	ER_01_02	Student login	M
3	ER_01_03	Lecturer login	M
	ER_02	**Manage courses**	
4	ER_02_01	Admin and officer can add new course	M
5	ER_02_02	Admin and officer can update course	M
6	ER_02_03	Admin and officer can delete course	M
	ER_03	**View course**	
7	ER_03_01	Admin and officer can view course	M
8	ER_03_02	Student can view course	M
9	ER_03_03	Lecturer can view specific course	M
	ER_04	**Manage student**	
10	ER_04_01	Admin and officer can add new student	M
11	ER_04_02	Admin and officer can update student information	M
12	ER_04_03	Admin and officer can delete student from the system	M
	ER_05	**View student information**	

13	ER_05_01	Admin and officer can view student information	M
14	ER_05_02	Student can view student information	M
15	ER_05_03	Lecturer can view student information	M
	ER_06	**Register course**	
16	ER_06_01	Student can register course	M
17	ER_06_02	Admin and officer can register course for student in specific condition	M
	ER_07	**Manage student status**	
18	ER_07_01	Admin and officer can change student status	M
	ER_08	**View student status**	
19	ER_08_01	Admin and officer can view student status	M
	ER_09	**Manage Lecturer**	
20	ER_09_01	Admin and officer can add new lecturer	M
21	ER_09_02	Admin and officer can delete lecturer	M
22	ER_09_03	Admin and officer can update lecturer	M

	ER_10	**View lecturer information**	
23	ER_10_01	Admin and officer view lecturer information	M
24	ER_12_02	Lecture view lecturer information	M
25	ER_10_03	Student view lecturer information	M
	ER_11	**Manage Registration Form**	M
26	ER_11_01	Admin and officer can check register form	M

Table 3.1: *List of requirement table*

3.2.2 Use case diagram

Figure 3.2: *The admin management whole task and login*

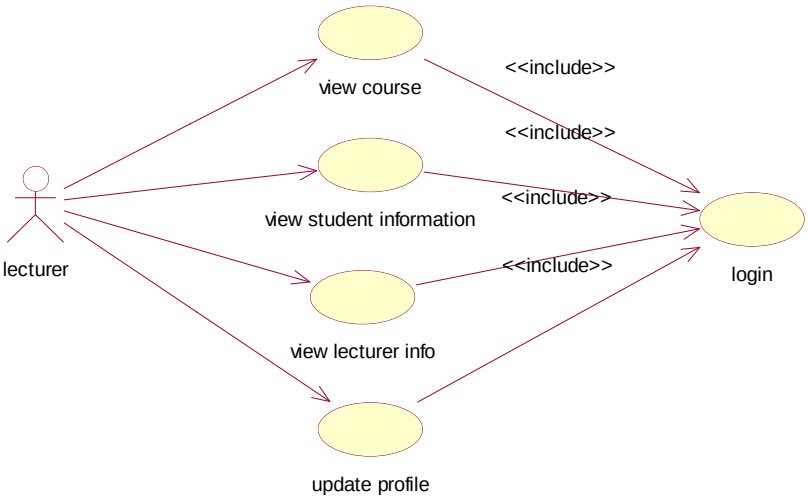


Figure 3.3: *The lecturer management tasks and login*

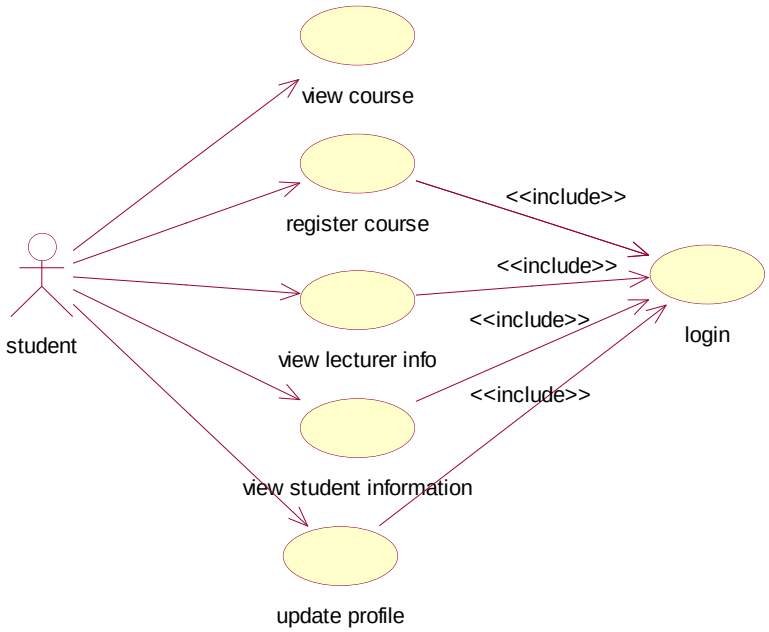


Figure 3.4: *The student management tasks and login*

3.3.3 Use case specification

Use Case: Login (ER_01)

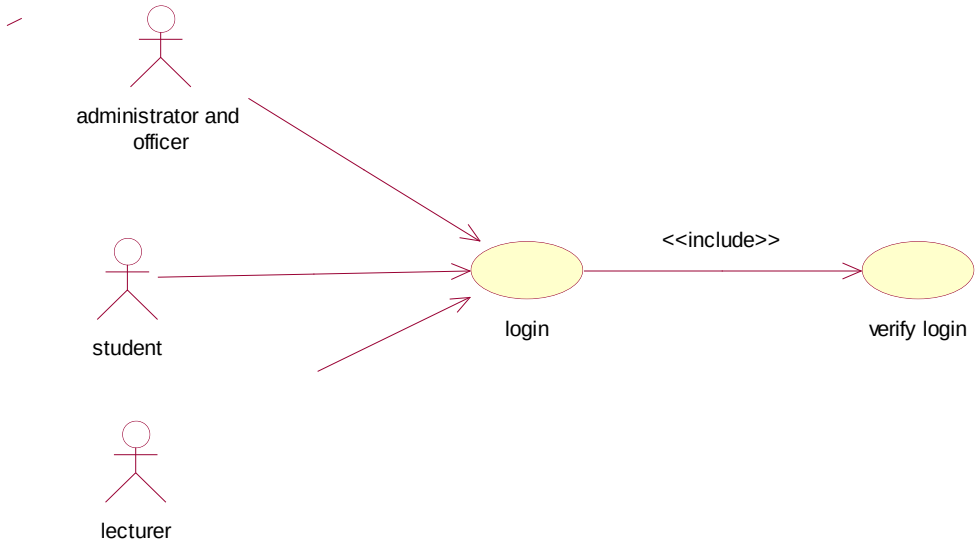


Figure 3.5: *The user's login*

1) Brief Description

This use case will be used to allow users (Administrator and Officer, Student and Lecturer) to enter the system.

2) Precondition

The users must have user id and password to perform this task.

3) Characteristic of Activation

Execution depends on users demand.

4) Flow of Events

4.1 Basic Flow (ER_01_01), (ER_01_02), (ER_01_03)

- This use case begins when users key in user id and password on the user login page.
- Users press login button. [A-1: Cancel]
- The system shall validate the user id and password. [E-1: Invalid id and password]
- This use case finish when the system displays the control panel.

4.2 Alternative Flow

A-1: Cancel

This system shall cancel the login process.

4.3 Exception Flow

E-1: Invalid id and password

This system shall display error message to the user.

5) Post Condition

The users can enter the system.

6) Limitation

User ID and password must length more than 6 characters

Use Case: Manage Course (ER_02)

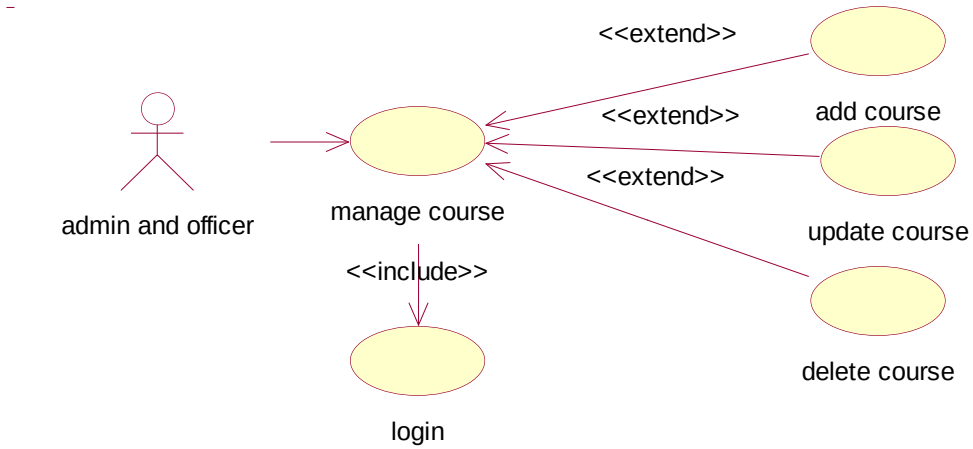


Figure 3.6: *Administrator and officer manage (add) course*

1) Brief Description

This use case will be used to allow users (administrator and officer) to manage the course such as add new course, update course and delete the course.

2) Precondition

The user must login first at user page.

3) Characteristic of Activation

Execution depends on users demand.

4) Flow of Events

4.1 Basic Flow (ER_02_01)

- User select manage course on the control panel.
- User select add new course. [A-1: Update course], [A-2: Delete course]

- The system displays the add course form page to allow the user to add course detail.
- Users key in the course's information.
- Users press OK button. [A-3: Cancel]
- The system shall validate the entering data.[E-1: Invalid entering data]
- This use case end when the system displays acknowledge message that new course has been added.

4.2 Alternative Flow

A-1: Update course (ER_02_02)

This system shall update course process.

A-2: Delete course (ER_02_03)

This system shall delete course process.

A-3 Cancel

This system shall cancel the add course process.

4.3 Exception Flow

E-1: Invalid entering data

The system will display error message and the User have to reenter information.

5) **Post Condition**

The users can manage the course information.

6) **Limitation**

No limitation

Use Case: Manage Course (ER_02)

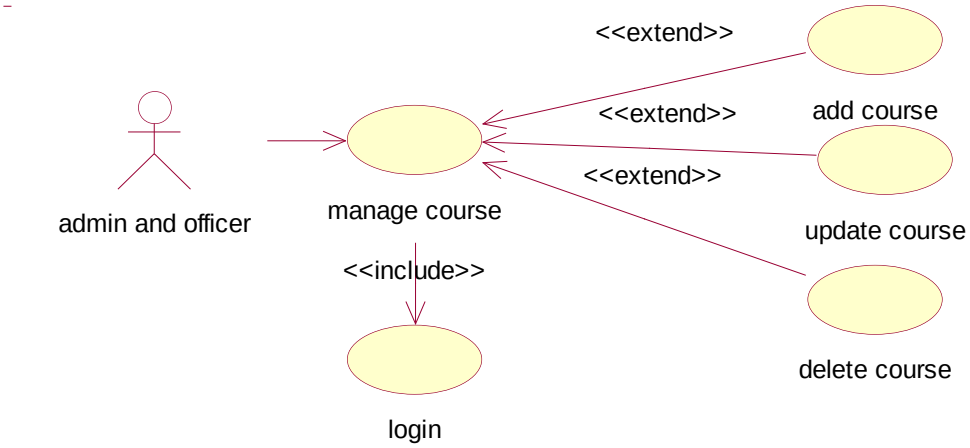


Figure 3.7: *Administrator and officer manage (update) course*

1) **Brief Description**

This use case will be used to allow users (administrator and officer) to manage the course such as add new course, update course and delete the course.

2) **Precondition**

The user login must login first at user page.

3) Characteristic of Activation

Execution depends on users demand.

4) Flow of Events

4.1 Basic Flow (ER_02_02)

- User select manage course on the control panel.
- User select update course. [A-1: Add new course], [A-2: Delete course]
- The system displays the update course page to allow the user to update course.
- Users select particular course.
- Users key in course information.
- Users press OK button. [A-3: Cancel]
- The system shall validate the entering data.[E-1: Invalid entering data]
- This use case end when the system displays acknowledge message that new course has been updated.

4.2 Alternative Flow

A-1: Add new course (ER_02_01)

This system shall add new course process.

A-2: Delete course (ER_02_03)

This system shall delete course process.

A-3 Cancel

This system shall cancel the update course process.

4.3 Exception Flow

E-1: Invalid entering data

The system will display error message and the admin and officer have to reenter data.

5) Post Condition

The users can manage the course information.

6) Limitation

No limitation

Use Case: Manage Course (ER_02)

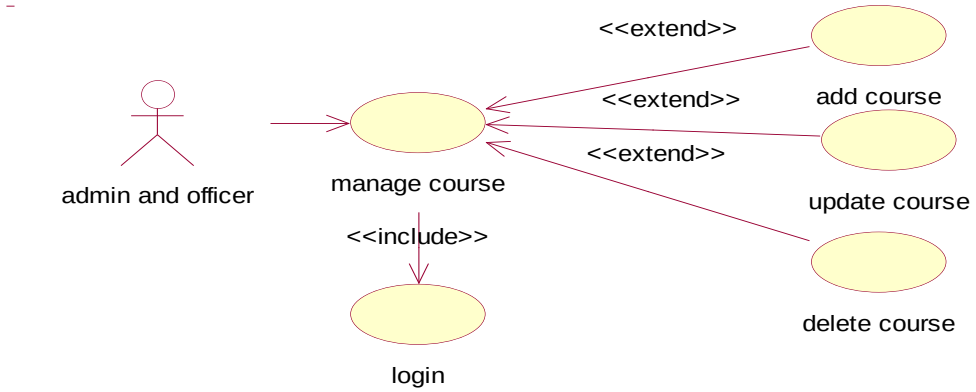


Figure 3.8: *Administrator and officer manage (delete) course*

1) **Brief Description**

   This use case will be used to allow users (administrator and officer) to manage the course such as add new course, update course and delete the course.

2) **Precondition**

   The user's login must login first at user page.

3) **Characteristic of Activation**

   Execution depends on users demand.

4) **Flow of Events**

   4.1 Basic Flow (ER_02_03)

   - User select manage course on the control panel.
   - User select delete course. [A-1: Add new course], [A-2: Update course]
   - The system displays the delete course page to allow the admin and officer to delete course.
   - Users select particular course.
   - Users press OK button. [A-3: Cancel]
   - The system shall validate the entering data.[E-1: Invalid entering data]
   - This use case end when the system displays acknowledge message that course has been deleted.

   4.2 Alternative Flow

   A-1: Add new course (ER_02_01)

   This system shall add new course process.

   A-2: Update course (ER_02_02)

   This system shall update course process.

   A-3: Cancel

   This system shall cancel the delete course process.

4.3 Exception Flow

E-1: Invalid entering data

The system will display error message and the admin and officer have to reenter data.

5) Post Condition

The users can manage the course information.

6) Limitation

No limitation

Use Case: View Course (ER_03)

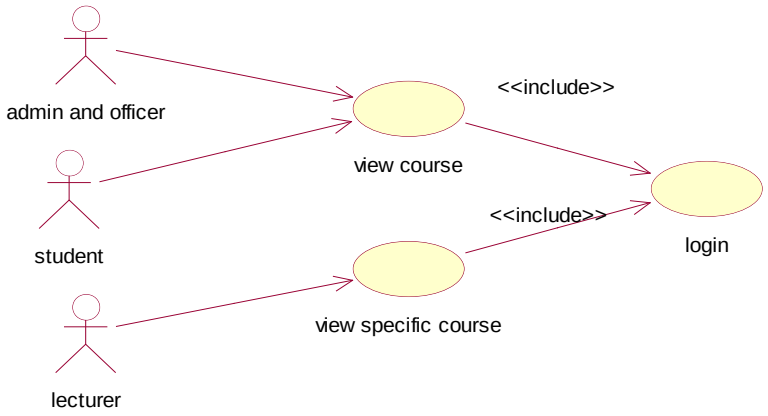


Figure 3.9: *Administrator and officer view course*

1) Brief Description

This use case allows users (admin && officer and student) to view the course.

2) Precondition

The user's login must login first at user page.

3) Characteristic of Activation

Execution depends on users demand.

4) Flow of Events

4.1 Basic Flow (ER_03_01), (ER_03_02)

- Users press course link on main page.
- This use case end when the system displays the course page.

4.2 Alternative Flow

No, alternative Flow

4.3 Exception Flow

No, exception Flow

5) Post Condition

The users can view the course.

6) Limitation

No limitation

Use Case: View Course (ER_03)

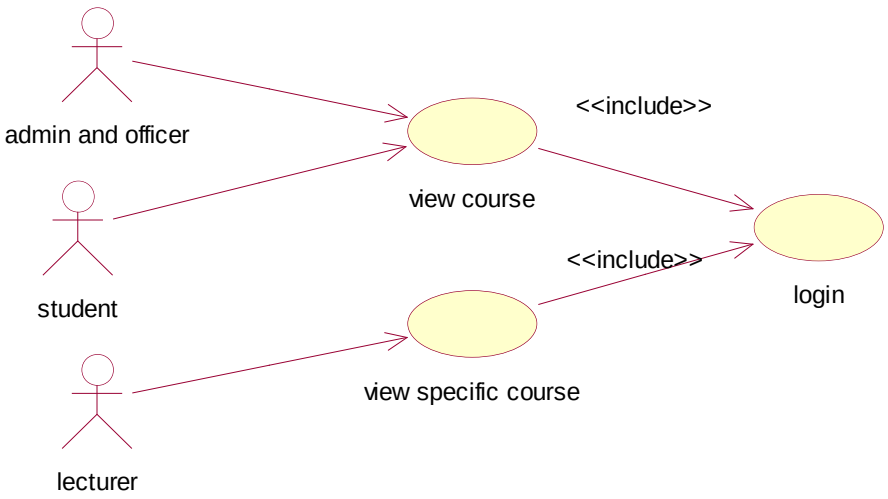


Figure 3.10: *Lecturer view specific course*

7) Brief Description

This use case allows users (lecturer) to view the course.

8) Precondition

The user's login must login first at user page.

9) Characteristic of Activation

Execution depends on users demand.

10) Flow of Events

4.1 Basic Flow (ER_03_03)

- Users press course link on main page.
- This use case end when the system displays the course page.

4.2 Alternative Flow

No, alternative Flow

4.3 Exception Flow

No, exception Flow

11) Post Condition

The users can view the course.

6) Limitation

No limitation

Use Case: Manage student (ER_04)

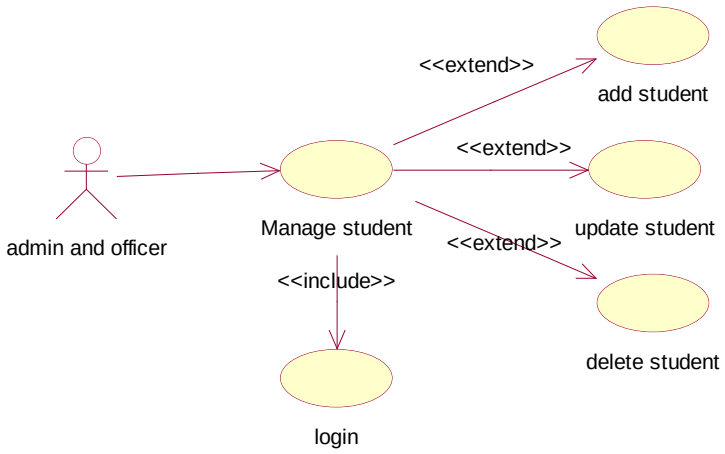


Figure 3.11: *Administrator and office manage (add) student*

1) Brief Description

This use case will be used to allow users (administrator and office) to manage the student such as add new student, update and delete the student.

2) Precondition

The user login must login first at user page.

3) Characteristic of Activation

Execution depends on user demand.

4) Flow of Events

4.1 Basic Flow (ER_04_01)

- User select manage student on the control panel.
- User select add new student. [A-1: Update student], [A-2: Delete student]
- The system displays the add student form to allow the user to add student detail.
- Users key in the student information
- Users press OK button. [A-3: Cancel]
- The system shall validate the entering data.[E-1: Invalid entering data]
- This use case finish when the system displays acknowledge message that new student has been added.

4.2 Alternative Flow:

A-1: Update student (ER_04_02)

This system shall update student process.

A-2: Delete student (ER_04_03)

This system shall delete student process.

A-3: Cancel

This system shall cancel add student process.

4.3 Exception Flow:

E-1: Invalid entering data

The system will display error message and the admin and officer have to reenter data.

5) Post Condition

The users can manage student.

6) Limitation

Admin can manage one student per time

Use Case: Manage student (ER_04)

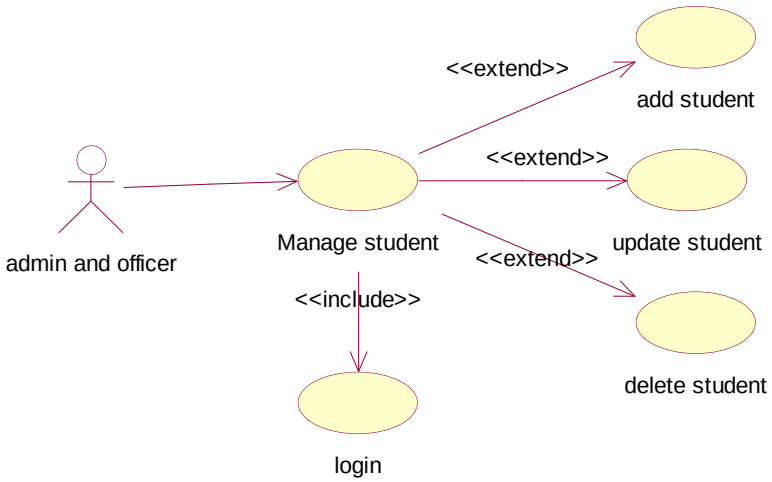


Figure 3.12: *Administrator and office manage (update) student*

1) Brief Description

This use case will be used to allow users (administrator and office) to manage the student such as add new student, update and delete the student.

2) Precondition

The user login must login first at user page.

3) Characteristic of Activation

Execution depends on users demand.

4) Flow of Events

4.1 Basic Flow (ER_04_02)

- User select manage student on the control panel.
- User select update student. [A-1: Add new student], [A-2: Delete student]

- The system displays the update student page to allow the user to update student detail.
- Users key in the student information
- Users press OK button. [A-3: Cancel]
- The system shall validate the entering data.[E-1: Invalid entering data]
- This use case finish when the system displays acknowledge message that the student has been updated.

4.2 Alternative Flow:

A-1: Add new student (ER_04_01)

This system shall add new student process.

A-2: Delete student (ER_04_03)

This system shall delete student process.

A-3: Cancel

This system shall cancel update student process.

4.3 Exception Flow:

E-1: Invalid entering data

The system will display error message and the admin and officer have to reenter data.

5) **Post Condition**

The users can manage student.

6) **Limitation**

Admin can manage one user per time

Use Case: Manage student (ER_04)

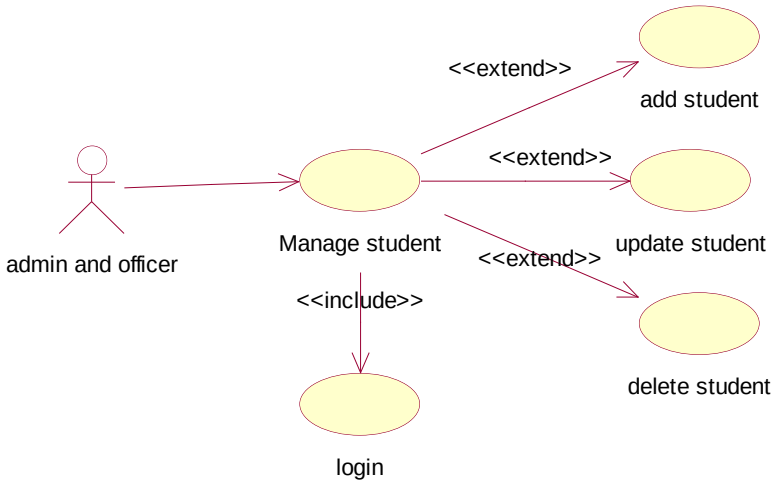


Figure 3.13: *Administrator and office manage (delete) student*

1) **Brief Description**

This use case will be used to allow users (administrator and office) to manage the student such as add new student, update and delete the student.

2) **Precondition**

The user login must login first at user page.

3) Characteristic of Activation

Execution depends on users' demand.

4) Flow of Events

4.1 Basic Flow (ER_04_03)

- Users' select manage student on the control panel.
- Users' select delete student link. [A-1: Add new student], [A-2: Update student]
- The system displays delete student page to allow the user to delete student.
- Users select particular student.
- Users press OK button. [A-3: Cancel]
- The system shall validate the entering data.[E-1: Invalid entering data]
- This use case finfish when the system displays acknowledge message that the student has been deleted.

4.2 Alternative Flow:

A-1: Add new student (ER_04_01)

This system shall add new student process.

A-2: Update student (ER_04_02)

This system shall update student process.

A-3: Cancel

This system shall cancel delete student process.

4.3 Exception Flow:

E-1: Invalid entering data

The system will display error message and the admin and officer have to reenter data.

5) Post Condition

The users can manage student.

6) Limitation

Admin can manage one user per time

Use Case: View Student (ER_05)

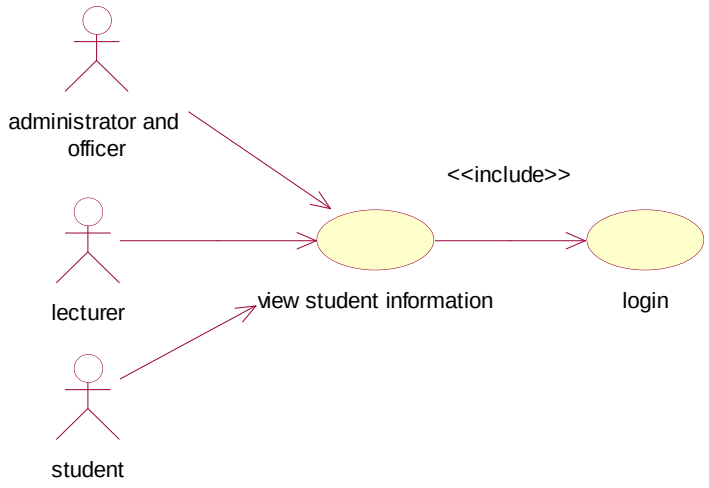


Figure 3.14: *User view student information*

1) **Brief Description**

This use case allows users (admin && officer, lecturer and student) to view the student information.

2) **Precondition**

The user's login must login first at user page.

3) **Characteristic of Activation**

Execution depends on users' demand.

4) **Flow of Events**

4.1 Basic Flow (ER_05_01), (ER_05_02), (ER_05_03)

- User press on view student information link.
- This use case finish when the system displays the student page.

4.2 Alternative Flow:

No, alternative Flow

4.3 Exception Flow:

No, exception Flow

5) **Post Condition**

The users can view the student information.

6) **Limitation:**

No limitation

Use Case: Register Course (ER_06)

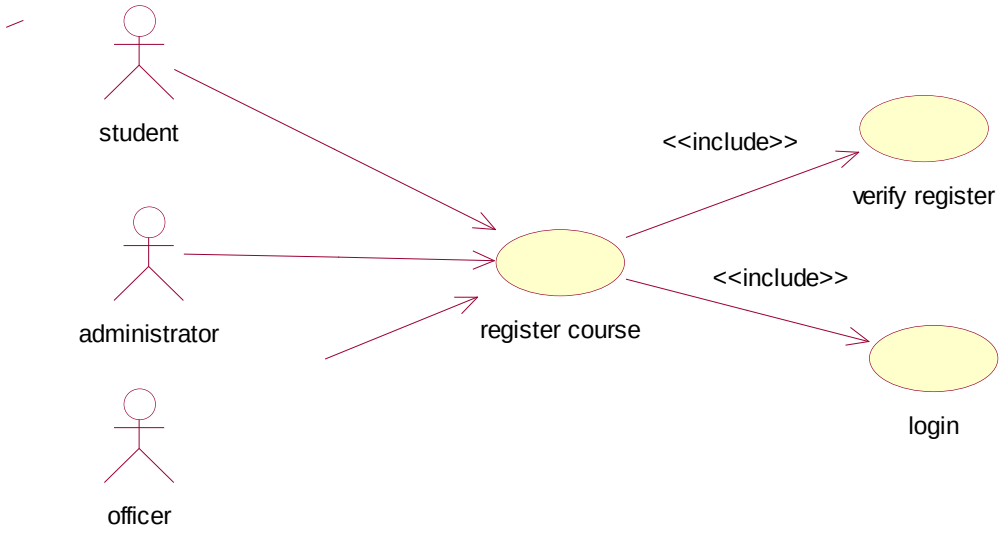


Figure 3.15: *User register course*

1) Brief Description

This use case is used to allow users (administrator, student and officer) to register course.

2) Pre-Condition

The users must login first at login page.

3) Characteristic of Activation

Execution depends on users demand.

4) Flow of Events

4.1 Basic Flow

- User select register course on the control panel page.
- User selects the courses and their section.
- User press OK button. [A-1: Cancel]
- The system shall validate the selection of the course.[E-1: Invalid selection]
- This use case end when the system displays acknowledge message that user have already register.

4.2 Alternative Flow

A-1: Cancel

This system shall cancel the registration process.

4.3 Exception Flow

E-1: Invalid selection

The system will display error message and the user have to reselect the course and section.

5) Post-Conditions

The users can register the course.

6) Limitation

User can register only open course

Use Case: Manage Student Status (ER_07)

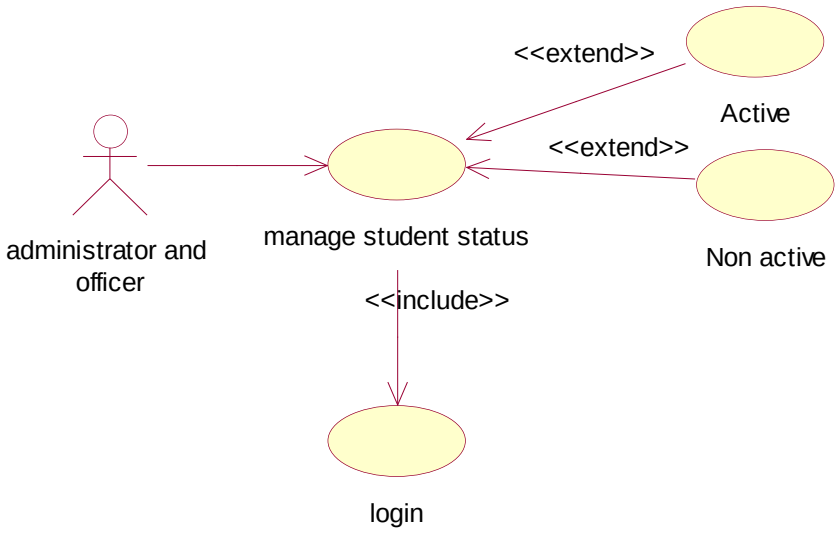


Figure 3.16: *Admin and officer manage (active) student status*

1) Brief Description

This use case is used to allow users (administrator and officer) to manage the student status such as change the student status**.**

2) Pre-condition

The users must login first at the login page.

3) Characteristic of Activation

Execution depends on users demand.

4) Flow of Events

4.1) Basic Flow

- User select manage student status on the control panel.
- Users enter student ID.
- Users press OK button. [A-1: Cancel]
- The system shall validate the student ID.[E-1: Invalid student ID]
- Users select active. [A-2: Non active]
- This use case end when the system displays acknowledge message that the student status has been changed.

4.2) Alternative Flow

A-1: Cancel

This system shall cancel the system process.

A-2: Non active

This system shall perform non active process.

4.3) Exception Flow

E-1: Invalid student ID

The system will display error message and the administrator and officer have to reenter student ID.

5) Post-Conditions

The users can manage student status.

6) Limitation

Student status can be change to Active or Non-active only

Use Case: Manage Student Status (ER_08)

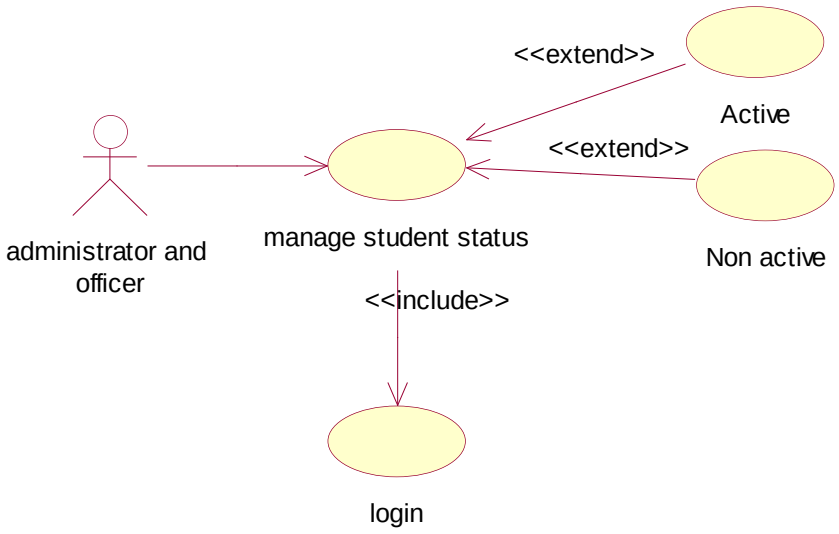


Figure 3.17: *Admin and officer manage (non-active) student status*

1) Brief Description

This use case is used to allow users (administrator and officer) to manage the student status such as change the student status

2) Pre Condition

The users must login first at the login page.

3) Characteristic of Activation

Execution depends on users demand.

4) Flow of Events

4.1) Basic Flow

- User select manage student status on the control panel.
- User enter student ID.
- User press OK button. [A-1: Cancel]
- The system shall validate the student ID.[E-1: Invalid student ID]
- User select non-active. [A-2: Active]
- This use case end when the system displays acknowledge message that the student status has been changed.

4.2) Alternative Flow

A-1: Cancel

This system shall cancel the system process.

A-2: Active

This system shall perform active process.

4.3) Exception Flow

E-1: Invalid student ID

The system will display error message and the administrator and officer have to reenter student ID.

5) Post-Conditions

The users can manage student status.

6) Limitation

Student status can be change to Active or Non-active only

Use Case: View Student Status (ER_9)

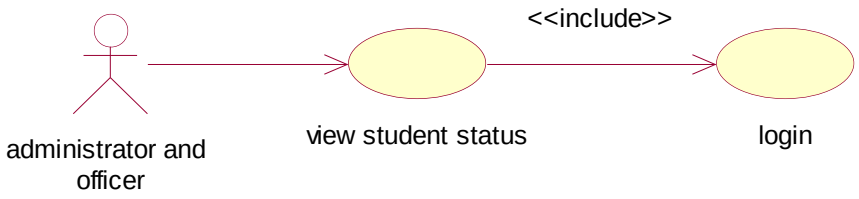


Figure 3.18: *Admin and officer view student status*

1) Brief Description

This use case is used to allow users (administrator and officer) to view the student status.

2) Pre-Condition

The user must login at the user page.

3) Characteristic of Activation

Execution depends on users demand.

4) Flow of Events

4.1) Basic Flow

- Users press on view student status link.
- This use case finish when the system displays the student status page.

4.2) Alternative Flow

No alternative Flow

4.3) Exception Flow

No exception Flow

5) Post-Conditions

The users can view the student status.

6) Limitation

No limitation

Use Case: Manage Lecturer (ER_10)

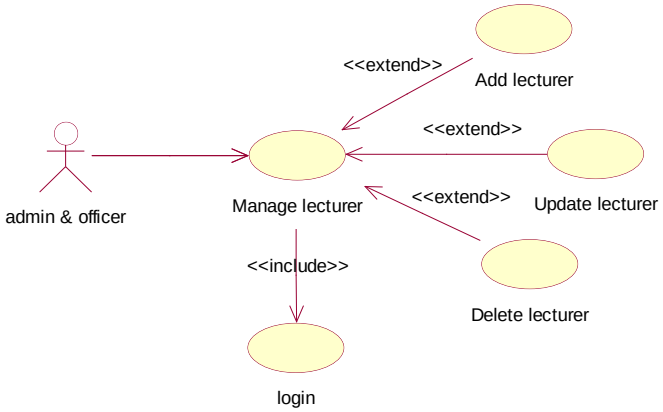


Figure 3.19: *Admin and officer manage (Add) lecturer*

1) Brief description

The use case is used to allow admin and officer to add lecturer and information.

2) Pre- condition

The admin and officer has to login to perform this task.

3) Characteristic of Activation

Execution depends on user demand.

4) Flow of event

4.1) Basic flow (ER_10_01)

- This use case begin when admin and officer press on add lecturer link on the control panel page.
- Then, admin and officer can insert a lecture's ID and detail.
- Admin and officer decide to press OK button. [A-1: Cancel]
- The system will appear successful for added.
- This use case add lecturer complete when system occur massage "Adding successfully".

4.2) Alternative flow

A-1: Cancel

This system will cancel adding lecturer.

4.3) Exceptional flow

No exceptional

5) Post Condition

The admin and officer can manage lecturer information.

6) Limitation

Admin and officer can add one lecturer at a time.

Use Case: Manage Lecturer (ER_10)

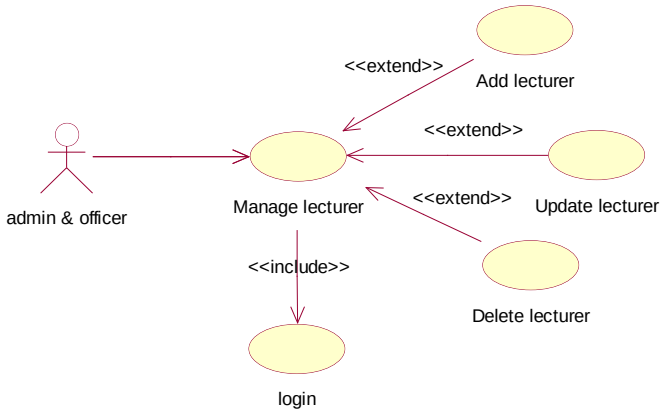


Figure 3.20: *Admin and officer manage (update) lecturer*

1) Brief description

The use case is used to allow admin and officer to update lecturer information.

2) Pre- condition

The admin and officer has to login to perform this task.

3) Characteristic of Activation

Execution depends on user demand.

4) Flow of event

4.1) Basic flow (ER_10_01)

- This use case begin when admin and officer press on update lecturer link on the control panel page.
- admin and officer select particular lecturer.
- Then, admin and officer update lecturer information.

- Admin and officer press OK button. [A-1: Cancel]
- The system will appear successful for update.
- This use case add lecturer complete when system occur massage "Adding successfully".

4.2) Alternative flow

A-1: Cancel

This system will cancel updating lecturer.

4.3) Exceptional flow

No exceptional

5) Post Condition

The admin and officer can manage lecturer information.

6) Limitation

Admin and officer can update one lecturer at a time.

Use Case: Manage Lecturer (ER_10)

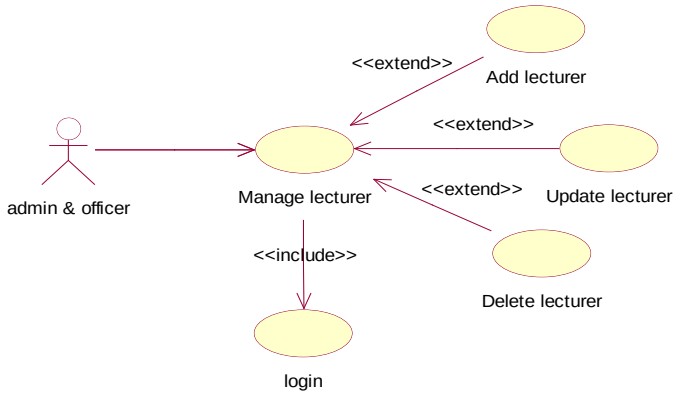


Figure 3.21: *Admin and officer manage (delete) lecturer*

1) Briefly description

This use case used to allow admin and officer to delete lecturer from system.

2) Pre- condition

Admin and officer has to login to perform a task.

3) Characteristic of Activation

Execution depends on user demand.

4) Flow of event

4.1) Basic flow (ER_10_03)

- This use case begins when admin and officer press on delete function on the control panel page.
- The system will appear all course and lecturer name.

- Admin and officer can select specific name which admin and officer want to delete lecturer from the system.
- Admin and officer have to press on OK button to delete lecturer. [A-1:Cancel]
- The system will appear massage box “system will delete this lecturer, Make confirm”.
- Admin and officer has to press on OK button to make a confirm delete lecturer. [A-2:Cancel]
- This use case successfully deleted when system delete completed.

4.2) Alternative flow

A-1: Cancel

This system will cancel delete for this function.

A-2: Cancel

This system will cancel delete for this function.

4.3) Exceptional flow

- No Exceptional flow.

5) Post-Conditions

- Admin and officer can manage lecturer information.

6) Limitation

- No limitation.

Use Case: View lecturer information (ER_11)

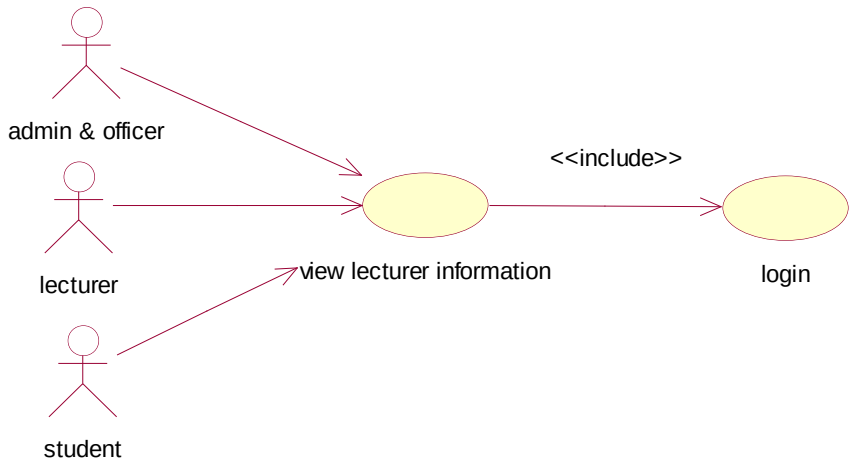


Figure 3.22: *Admin and officer view lecturer information*

1) **Brief description**

   This use case is used to allow admin and officer to view lecturer information.

2) **Pre-condition**

   Admin and officer has to login to perform a task.

3) **Characteristic of Activation**

   Execution depends on user demand.

4) **Flow of event**

   4.1) Basic flow (ER_11_01)

- This use case begins when admin and officer press on view of the lecturer information on the admin and officer control panel page.
- The system will appear all lecturer members with course.
- Then, admin and officer has to select the specific name of lecturer which wants to view lecturer information.
- This use case will complete when system view lecturer information.

4.2) Alternative flow

- No Alternative flow

4.3) Exceptional flow

- No Exception flow

5) Post condition

- Admin and officer can view lecturer information.

6) Limitation

- Admin and officer possible view one lecturer per time

Use Case: View lecturer information (ER_11)

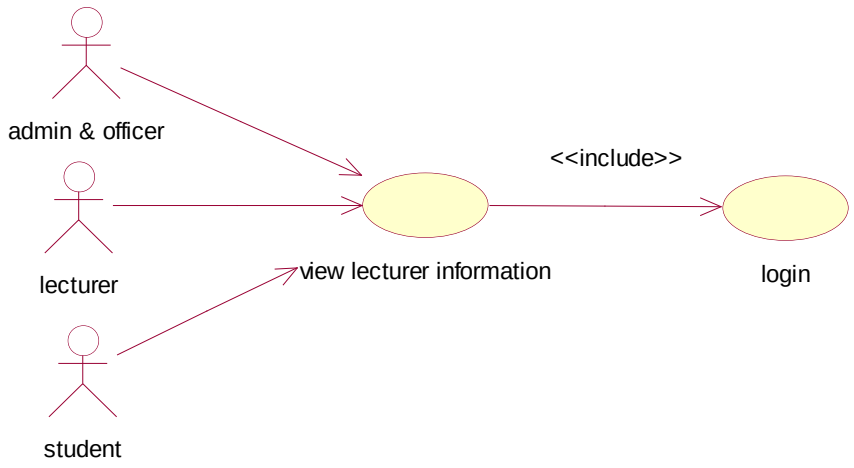


Figure 3.23: *Lecturer view lecturer information*

1) Brief description

This use case is used to allow a lecturer can view lecturer information on a system.

2) Pre-condition

Lecturer has to login to perform a task.

3) Characteristic of Activation

Execution depends on user demand.

4) Flow of event

4.1) Basic flow (ER_11_02)

- This use case begin when lecturer press on view of lecturer link on the lecturer profile course page.

- Then, system will appear lecturer information.
- This use case will complete when system view lecturer information.

4.2) Alternative flow

- No Alternative flow

4.3) Exceptional flow

- No Exceptional flow

5) Post condition

- Lecturer can view lecturer information.

6) Limitation

- Lecturer possible view only his/her profile.

Use Case: View lecturer information (ER_11)

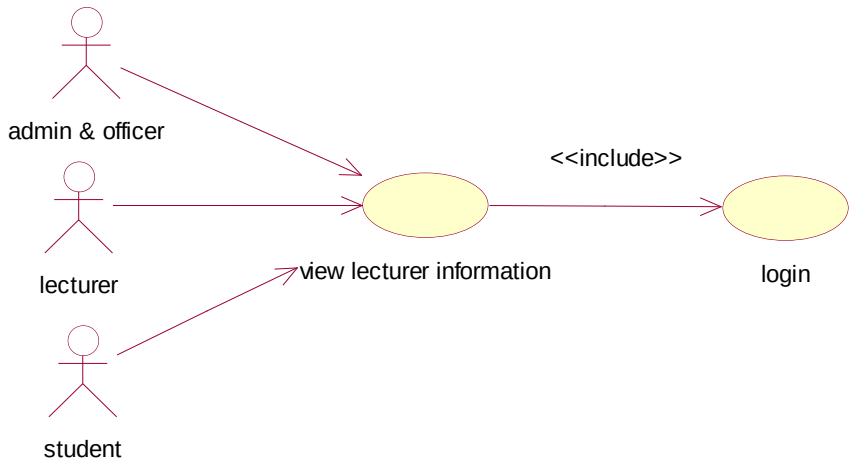


Figure 3.24: *Student view lecturer information*

1) Brief description

This use case is used to allow a student can view lecturer information.

2) Pre-condition

Student has to login to perform this task.

3) Characteristic of Activation

Execution depends on user demand.

4) Flow of event

4.1) Basic flow (ER_11_03)

- This use case begin when student press on view of lecturer link on the student course page.
- Then, system will appear lecturer information.

- This use case will complete when system view lecturer information.

4.2) Alternative flow

- No alternative flow

4.3) Exceptional flow

- No exceptional flow

5) Post condition

- Student can view lecturer information.

6) Limitation

- No limitation.

Use Case: Manage registration form (ER_12)

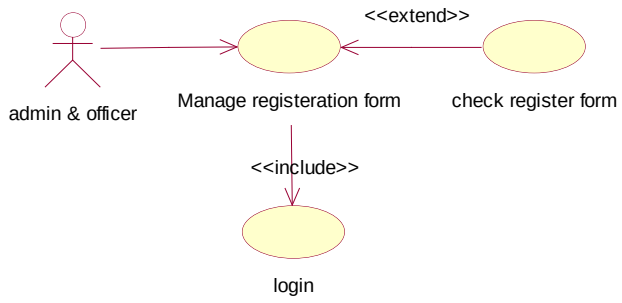


***Figure 3.25**: Manage registration form*

1) Brief Description

This use case is allowed admin and officer to check any student registration form.

2) Pre-condition

Admin and officer has to login to perform a task.

3) Characteristic of Activation

Execution depends on user demand.

4) Flow of event

4.1) Basic flow

- This use case begins when he/she press on check register form on control panel page.
- The system will appear any student registered.
- Then he/she select specific student and check register form.
- This process will complete when he/she accept register form by press on OK button. [A-1: Cancel]

4.2) Alternative flow

A-1: Cancel

This system will cancel delete for this function.

4.3) Exceptional flow

- No exceptional flow

5) Post condition

- Admin and officer can check register form.

6) Limitation

- No limitation.

3.2.4 SEQUENCE DIAGRAM

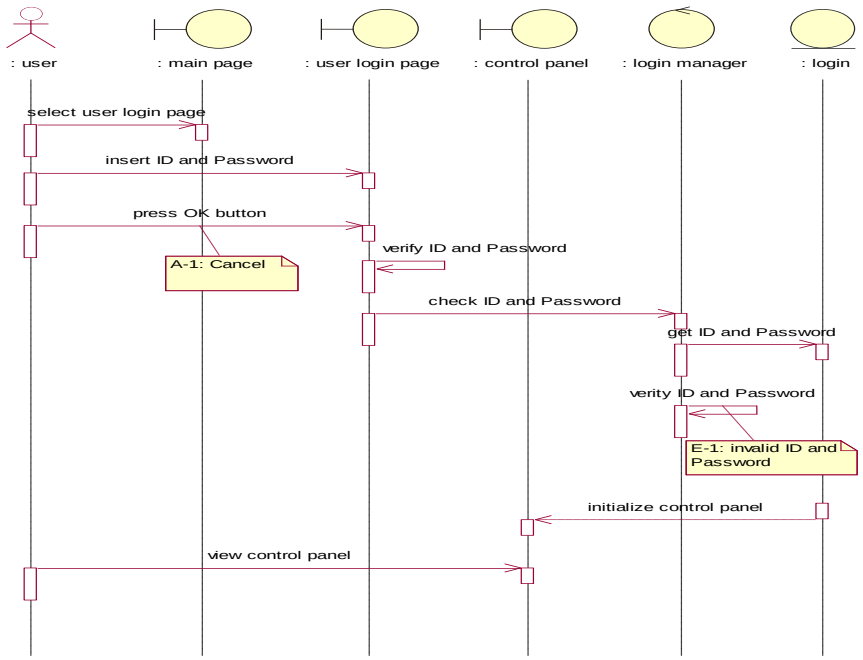


Figure 3.26: *Sequence diagram of user's login page*

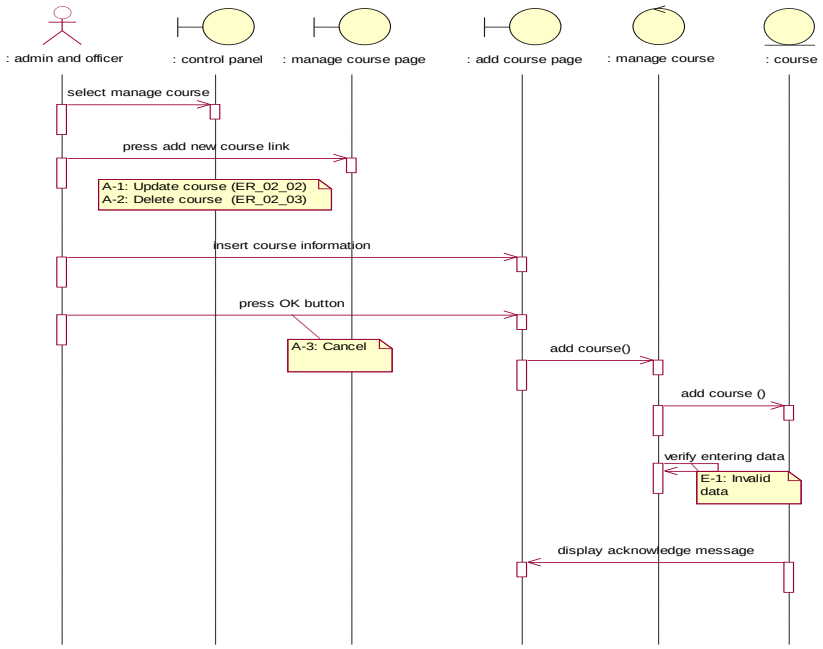


Figure 3.27: *Sequence diagram of admin and officer's add course*

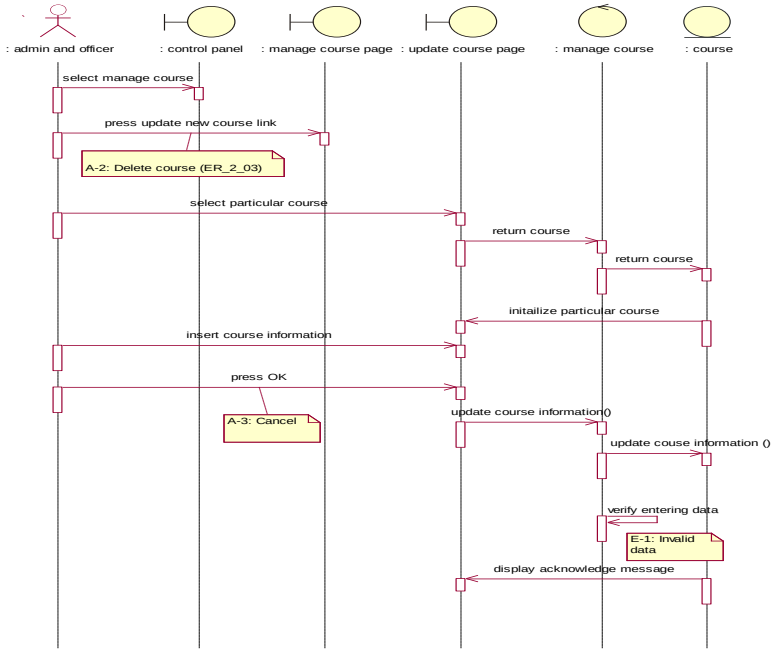


Figure 3.28: *Sequence diagram of admin and officer's update course*

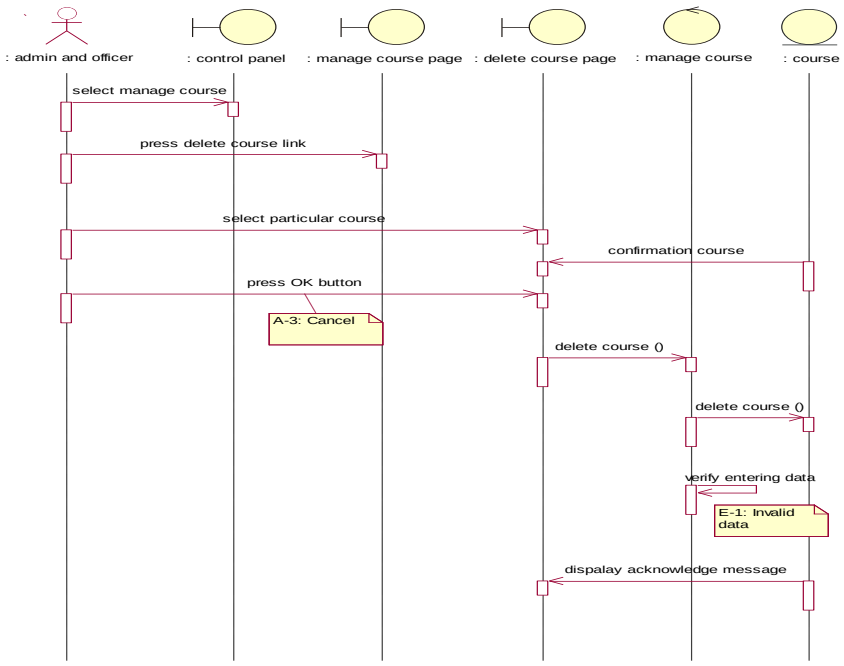


Figure 3.29: *Sequence diagram of admin and officer's delete course*

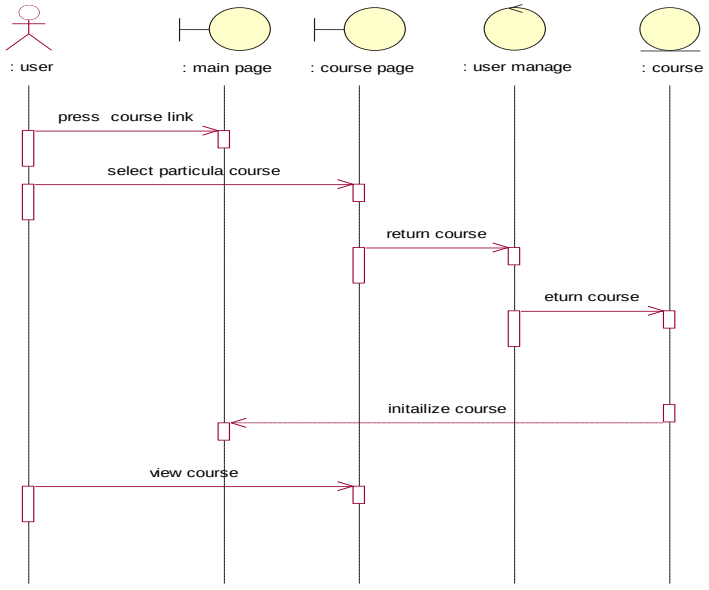


Figure 3.30: *Sequence diagram of user's view course*

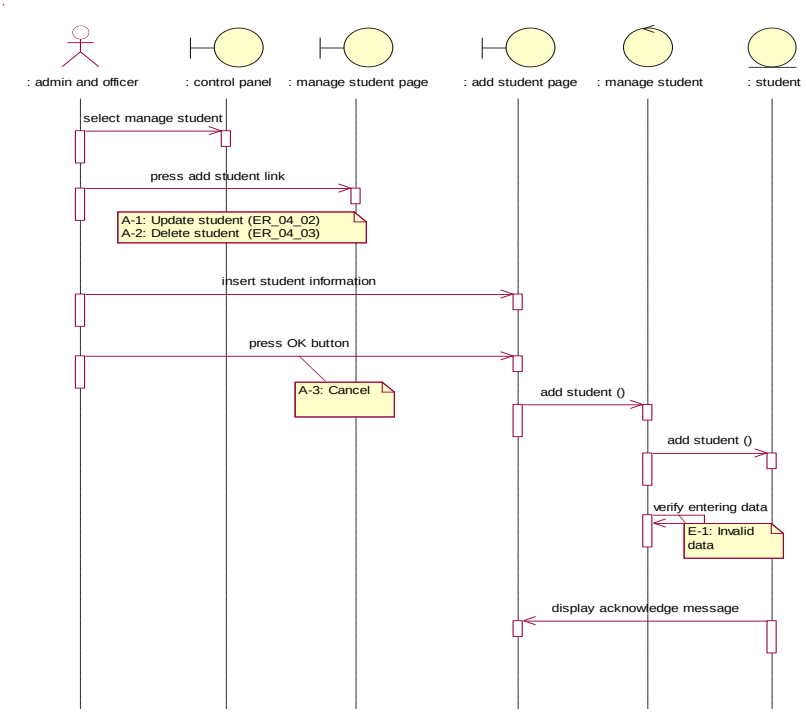


Figure 3.31: *Sequence diagram of admin and officer's add course*

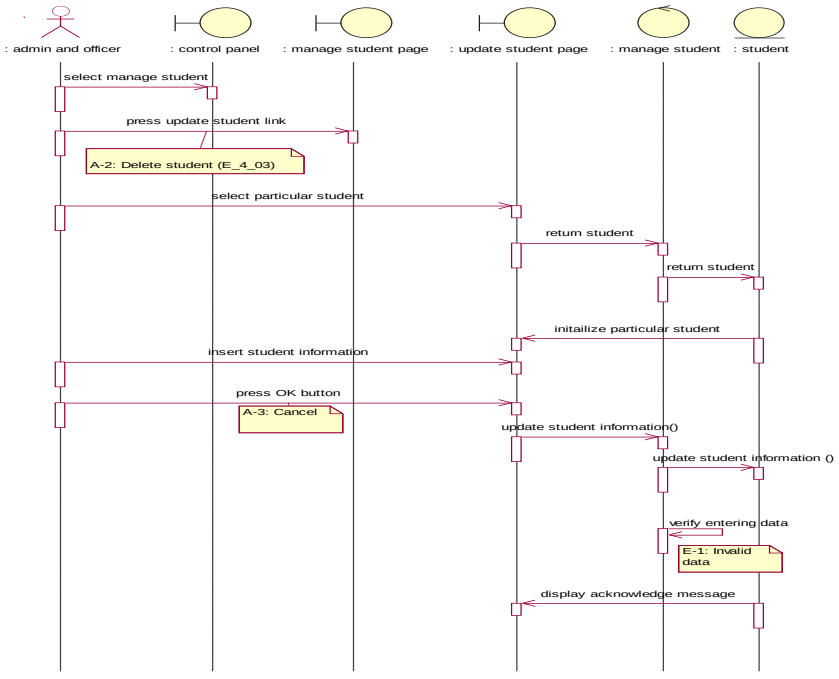


Figure 3.32*: Sequence diagram of admin and officer's update course*

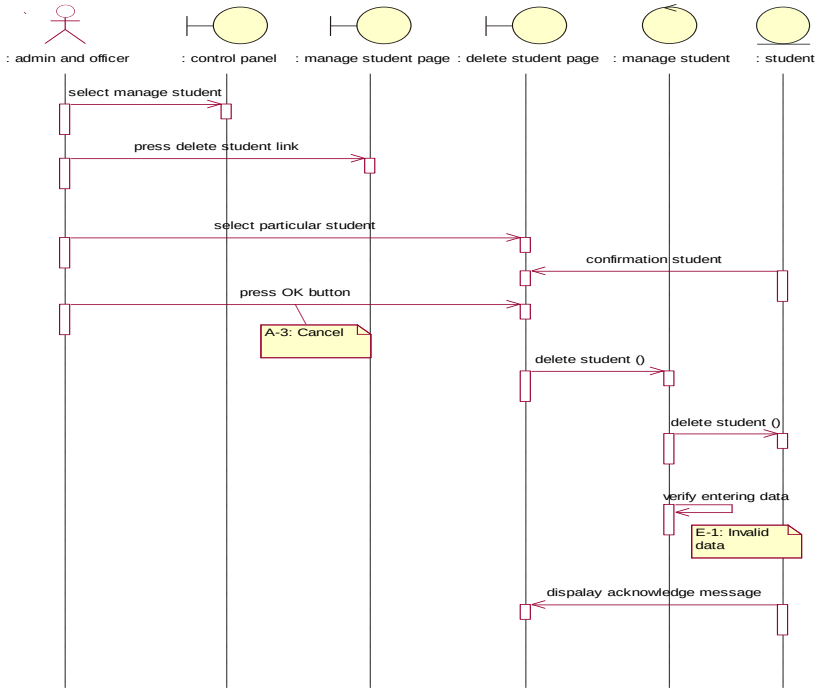


Figure 3.33: *Sequence diagram of admin and officer's delete course*

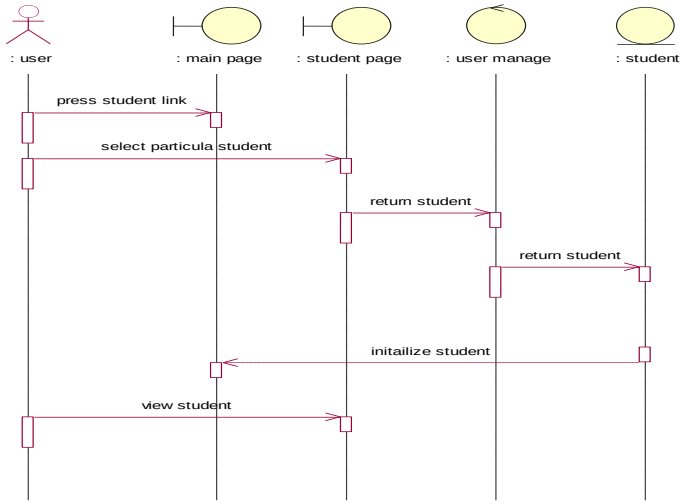


Figure 3.34: *Sequence diagram of user's view student information*

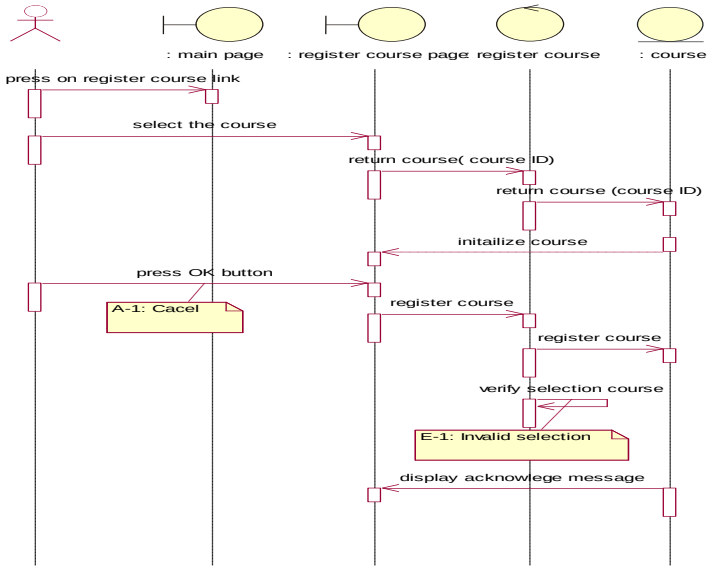


Figure 3.35: *Sequence diagram of student register course*

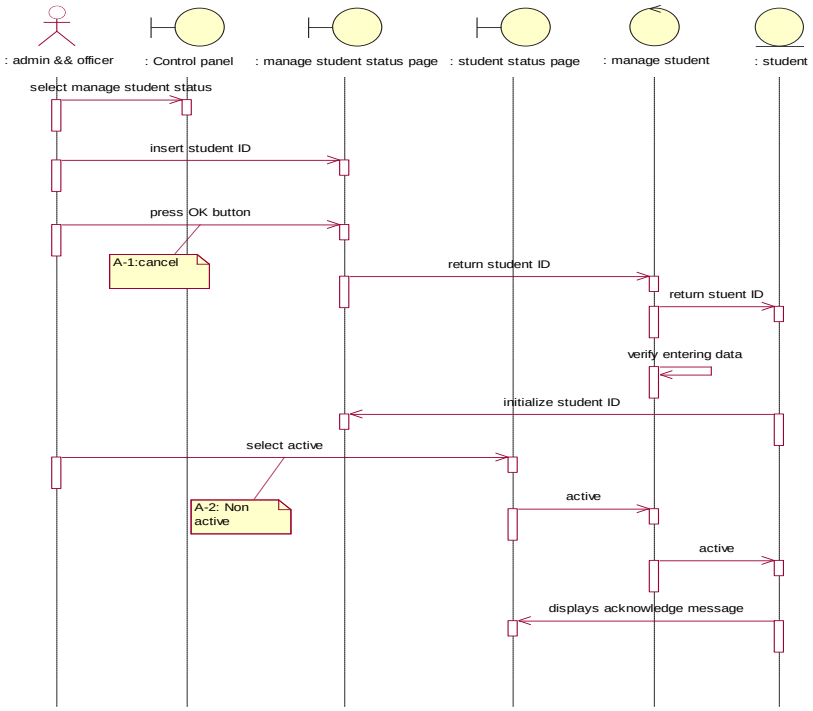


Figure 3.36: *Sequence diagram of admin and officer register course for student in specific condition*

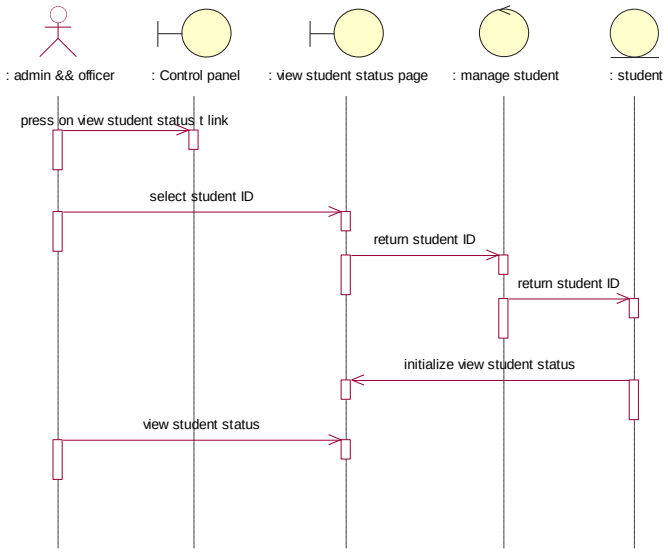


Figure 3.37: *Sequence diagram of admin and officer change student status*

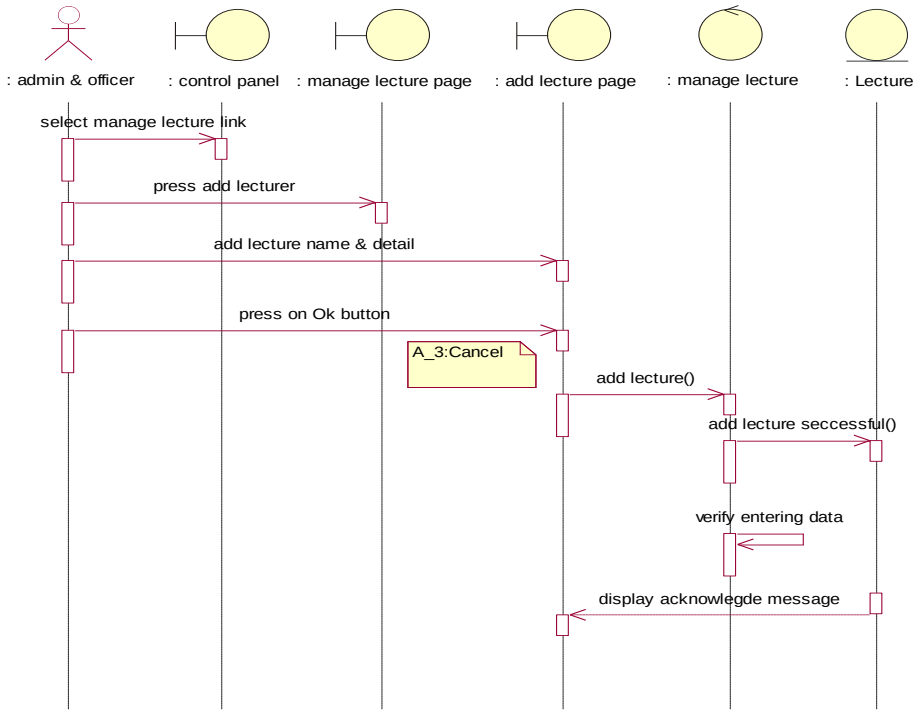


Figure 3.38: *Sequence diagram of admin and officer add lecturer*

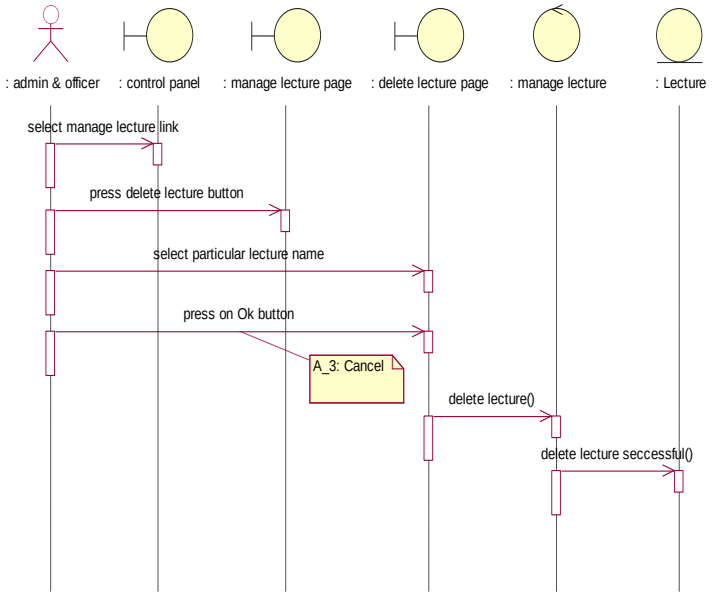


***Figure 3.39**: Sequence diagram of admin and lecturer delete lecturer*

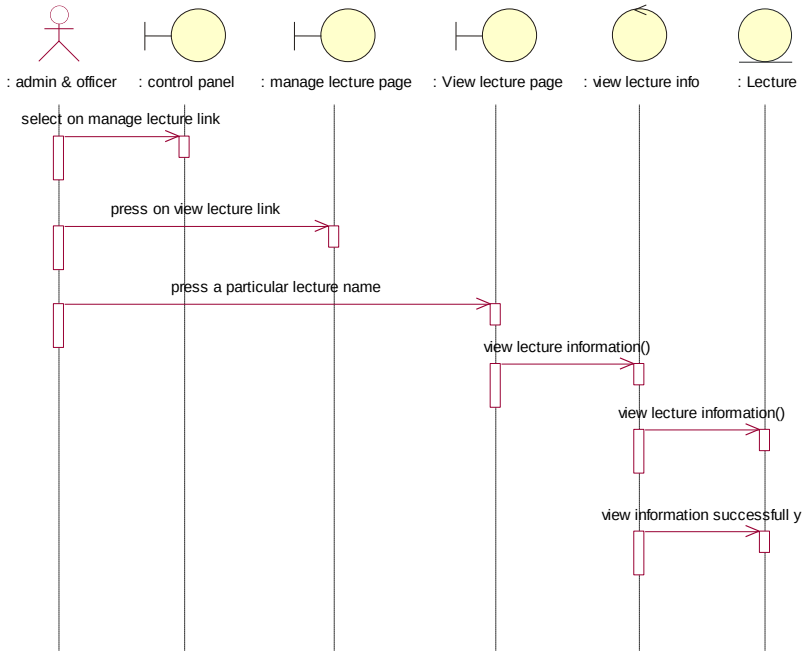


***Figure 3.40**: Sequence diagram of admin and officer view lecturer*

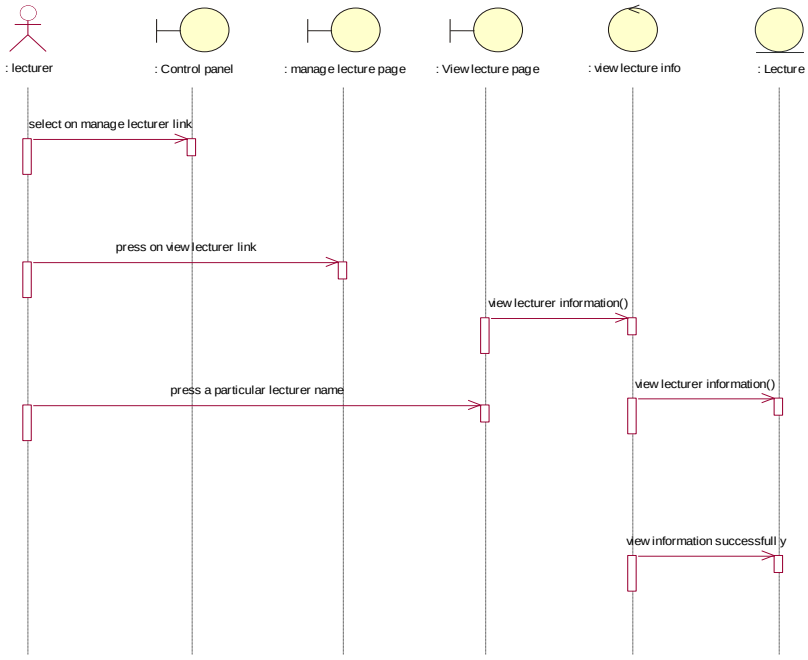


***Figure 3.41**: Sequence diagram of lecturer view lecturer*

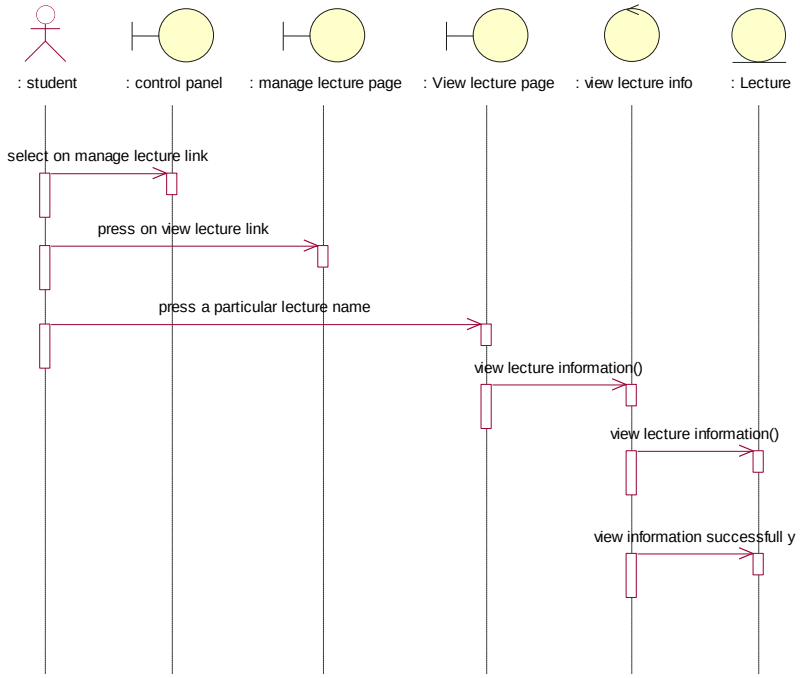


***Figure 3.42**: Sequence diagram of student view lecturer*

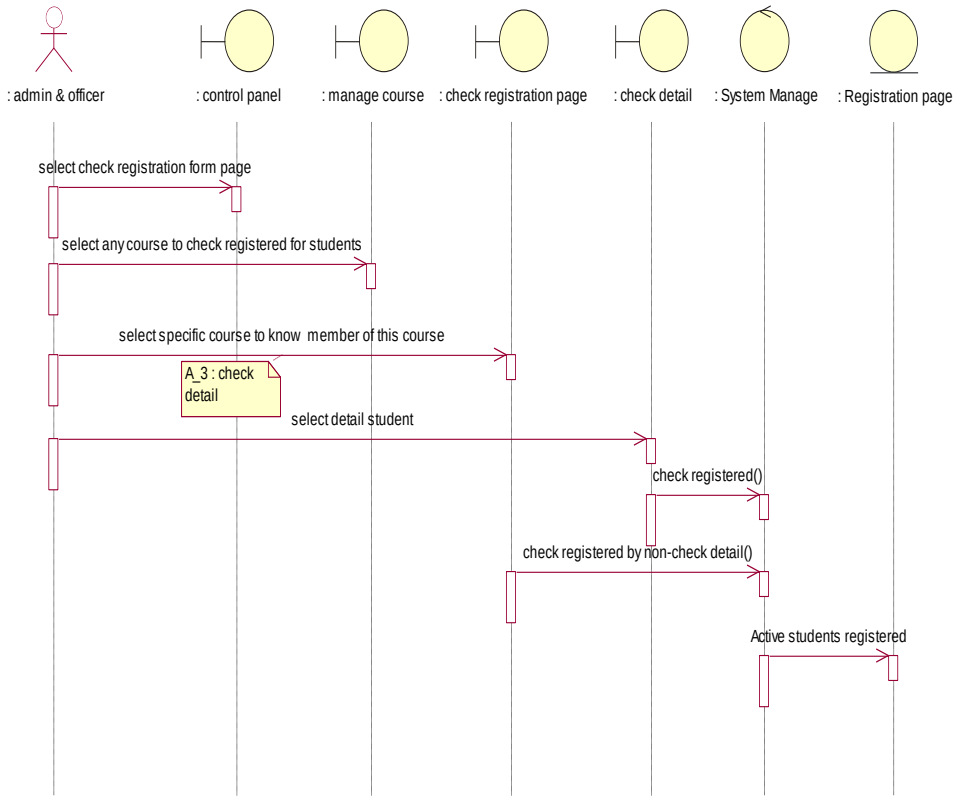


***Figure 3.43**: Sequence diagram of Admin and officer check register form*

3.3 DESIGN PHASE

In design phase the system function and operation are describe in detail, including screen layout process diagrams and other documentation. The output of this stage will describe the new system as the collection of module or subsystem. The system design phase is mean to describe how the system development team will create the online registration

system. According to this phase, developer begun after the collected the requirement then analyzed the requirement. Developers will examine what function that system will contain about. The designing phase, developer divided into two things as design the database and user interface of the online registration system. Database is described the collection of interrelated data or information and how those data store to database. In online registration system developer decided to have 5 tables for the database. These 5 tables can cover the complete process of online registration at Yala Community College. The database architecture of online registration consisted of various tables as shown below:

Figure 3.44: *The database of online registration*

	ตาราง	กระทำการ	ระเบียน	ชนิด	การเรียงลำดับ	ขนาด	เกินความจำเป็น
☐	admin		2	MyISAM	utf8_unicode_ci	2.0 กิโลไบต์	-
☐	course		21	MyISAM	utf8_unicode_ci	6.3 กิโลไบต์	-
☐	lecture		3	MyISAM	utf8_unicode_ci	2.2 กิโลไบต์	-
☐	register		0	MyISAM	utf8_unicode_ci	1.0 กิโลไบต์	-
☐	student		9	MyISAM	utf8_unicode_ci	4.7 กิโลไบต์	-
	5 ตาราง	ผลรวม	35	MyISAM	tis620_thai_ci	16.2 กิโลไบต์	0 ไบต์

Figure 3.45: *The Database tables of online registration*

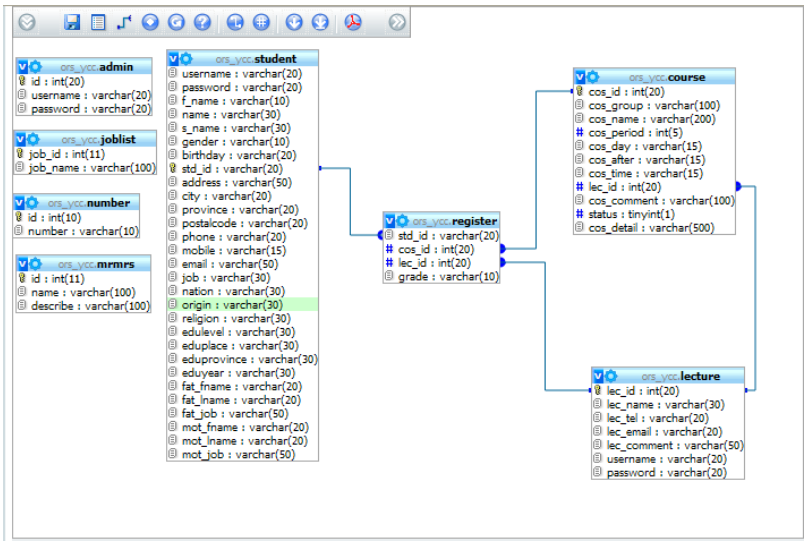


Figure 3.46: *The relationship between tables of online registration database*

	ฟิลด์	ชนิด	การเรียงลำดับ	แอตทริบิวต์	ว่างเปล่า (null)	ค่าปริยาย	เพิ่มเติม	กระทำการ
☐	id	int(20)			ไม่			
☐	username	varchar(20)	utf8_unicode_ci		ไม่			
☐	password	varchar(20)	utf8_unicode_ci		ไม่			

Figure 3.47: *Administrator and officer table*

	ฟิลด์	ชนิด	การเรียงลำดับ	แอตทริบิวต์	ว่างเปล่า (null)	ค่าปริยาย	เพิ่มเติม	กระทำการ
☐	cos_id	int(20)			ไม่			
☐	cos_group	varchar(100)	utf8_unicode_ci		ไม่			
☐	cos_name	varchar(200)	utf8_unicode_ci		ไม่			
☐	cos_period	int(5)			ไม่			
☐	cos_day	varchar(15)	utf8_unicode_ci		ไม่			
☐	cos_after	varchar(15)	utf8_unicode_ci		ไม่			
☐	cos_time	varchar(15)	utf8_unicode_ci		ไม่			
☐	lec_id	int(20)			ไม่			
☐	cos_comment	varchar(100)	utf8_unicode_ci		ไม่			
☐	status	tinyint(1)			ไม่	0		
☐	cos_detail	varchar(500)	utf8_unicode_ci		ไม่			

Figure 3.48: *Course table*

	Field	Type	Collation	Attributes	Null	Default	Extra	Action
☐	lec_id	int(20)			No			
☐	lec_name	varchar(30)	utf8_unicode_ci		No			
☐	lec_tel	varchar(20)	utf8_unicode_ci		No			
☐	lec_email	varchar(20)	utf8_unicode_ci		No			
☐	lec_comment	varchar(50)	utf8_unicode_ci		No			
☐	username	varchar(20)	utf8_unicode_ci		No			
☐	password	varchar(20)	utf8_unicode_ci		No			

Figure 3.49: *Lecturer table*

	ฟิลด์	ชนิด	การเรียงลำดับ	แอตทริบิวต์	ว่างเปล่า (null)	ค่าปริยาย	เพิ่มเติม	กระทำการ
☐	std_id	varchar(20)	utf8_unicode_ci		ไม่			
☐	cos_id	int(20)			ไม่			
☐	lec_id	int(20)			ไม่			
☐	grade	varchar(10)	utf8_unicode_ci		ไม่			

Figure 3.50: *Registration table*

	Field	Type	Collation	Attributes	Null	Default	Extra	Action
☐	username	varchar(20)	utf8_unicode_ci		No			
☐	password	varchar(20)	utf8_unicode_ci		No			
☐	f_name	varchar(10)	utf8_unicode_ci		No			
☐	name	varchar(30)	utf8_unicode_ci		No			
☐	s_name	varchar(30)	utf8_unicode_ci		No			
☐	gender	varchar(10)	utf8_unicode_ci		No			
☐	birthday	varchar(20)	utf8_unicode_ci		No			
☐	std_id	varchar(20)	utf8_unicode_ci		No			
☐	address	varchar(50)	utf8_unicode_ci		No			
☐	city	varchar(20)	utf8_unicode_ci		No			
☐	province	varchar(20)	utf8_unicode_ci		No			
☐	postalcode	varchar(20)	utf8_unicode_ci		No			
☐	phone	varchar(20)	utf8_unicode_ci		No			
☐	mobile	varchar(15)	utf8_unicode_ci		No			
☐	email	varchar(50)	utf8_unicode_ci		No			
☐	job	varchar(30)	utf8_unicode_ci		No			
☐	nation	varchar(30)	utf8_unicode_ci		No			
☐	origin	varchar(30)	utf8_unicode_ci		No			
☐	religion	varchar(30)	utf8_unicode_ci		No			
☐	edulevel	varchar(30)	utf8_unicode_ci		No			
☐	eduplace	varchar(30)	utf8_unicode_ci		No			
☐	eduprovince	varchar(30)	utf8_unicode_ci		No			
☐	eduyear	varchar(30)	utf8_unicode_ci		No			
☐	fat_fname	varchar(20)	utf8_unicode_ci		No			

Figure 3.51: *Student table*

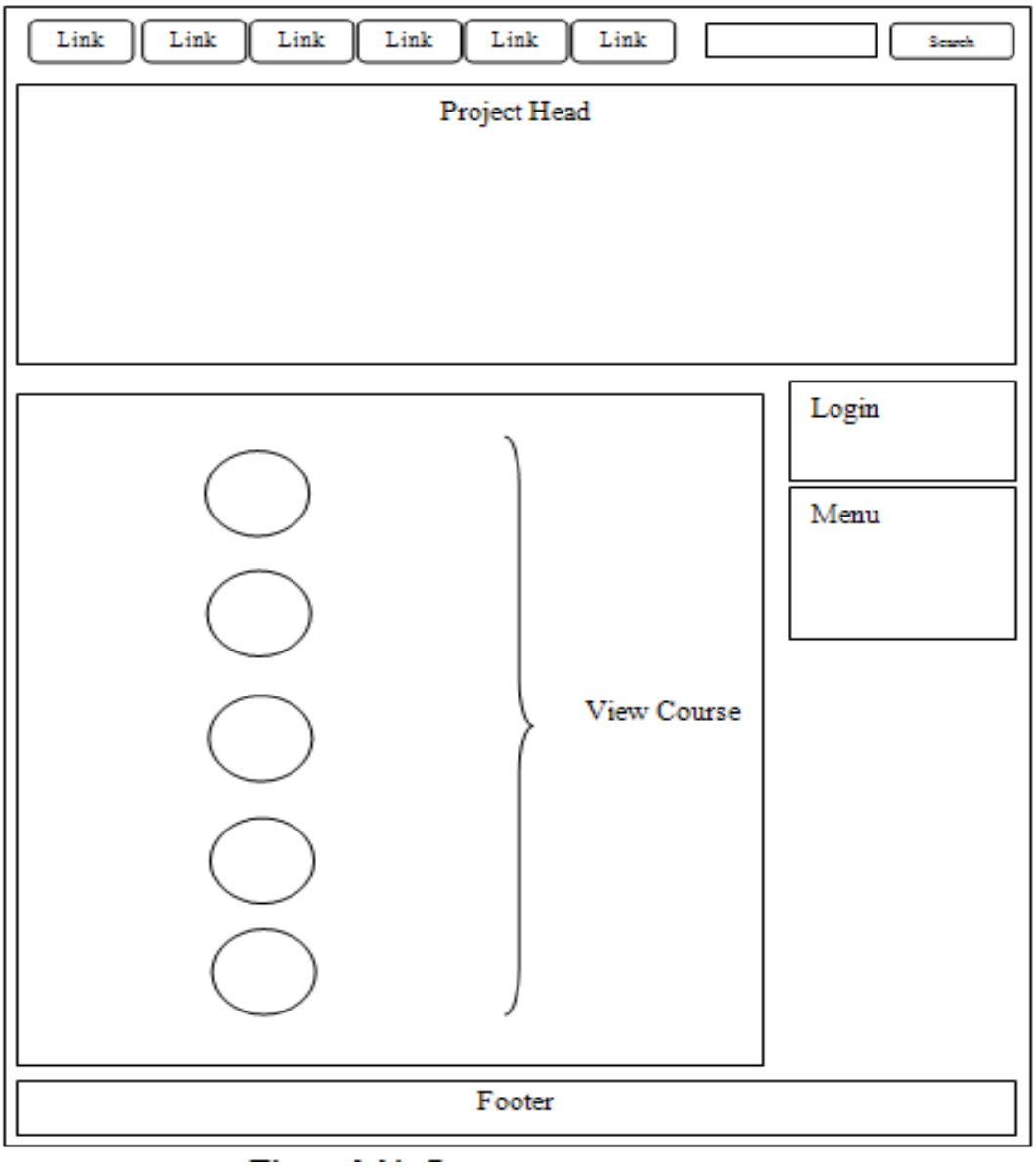


Figure 3.52: *Design main page*

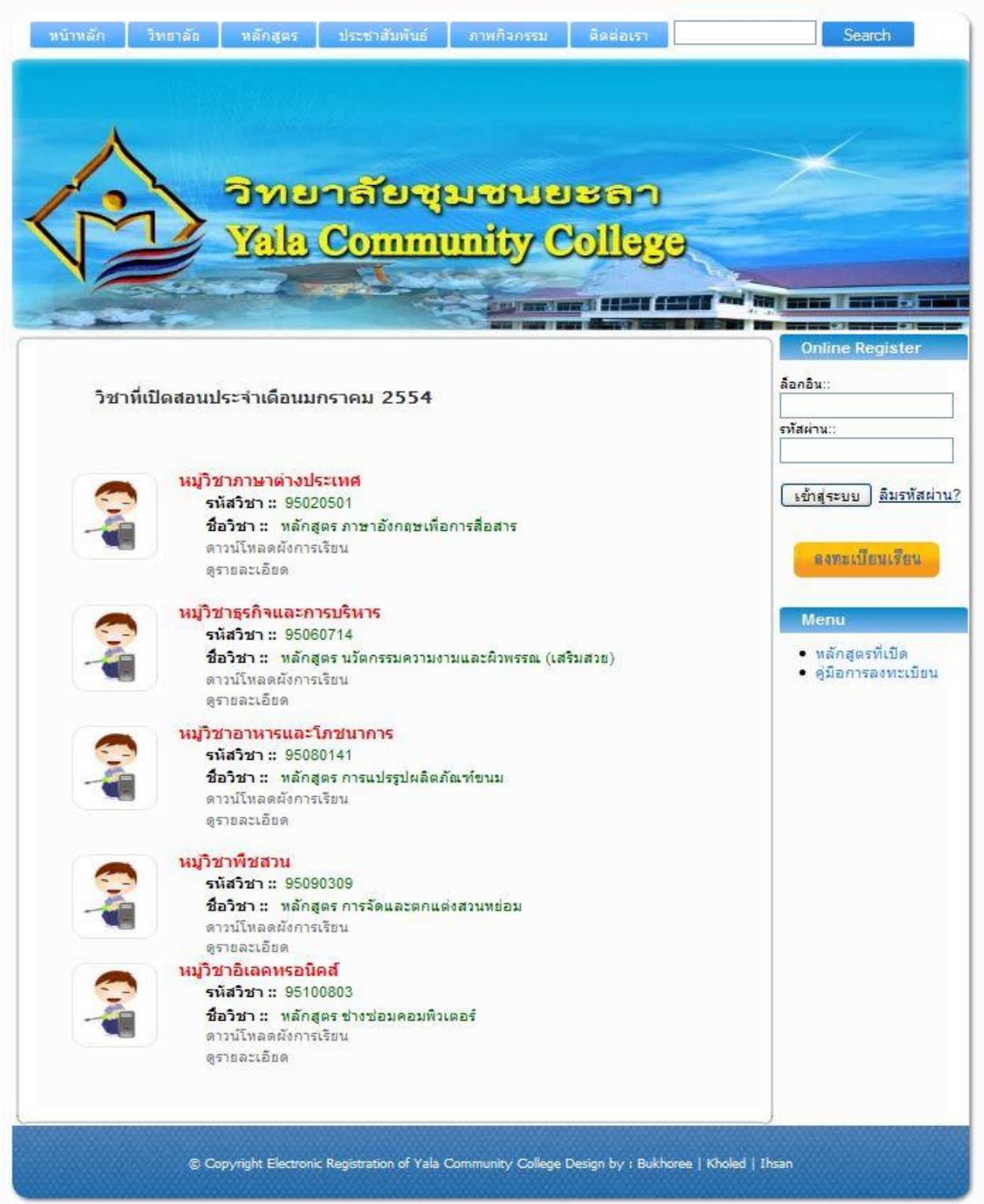


Figure 3.53: *Online registration student main interface*

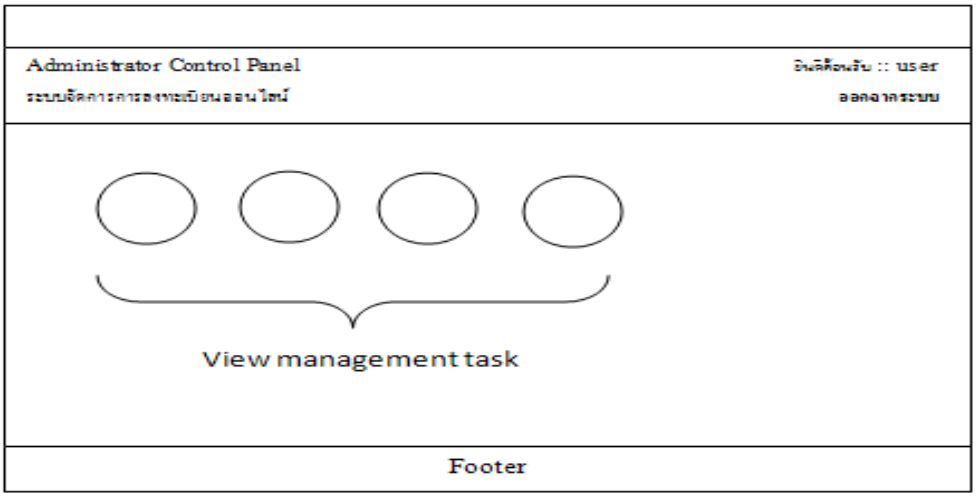


Figure 3.54: *Design administrator control panel*

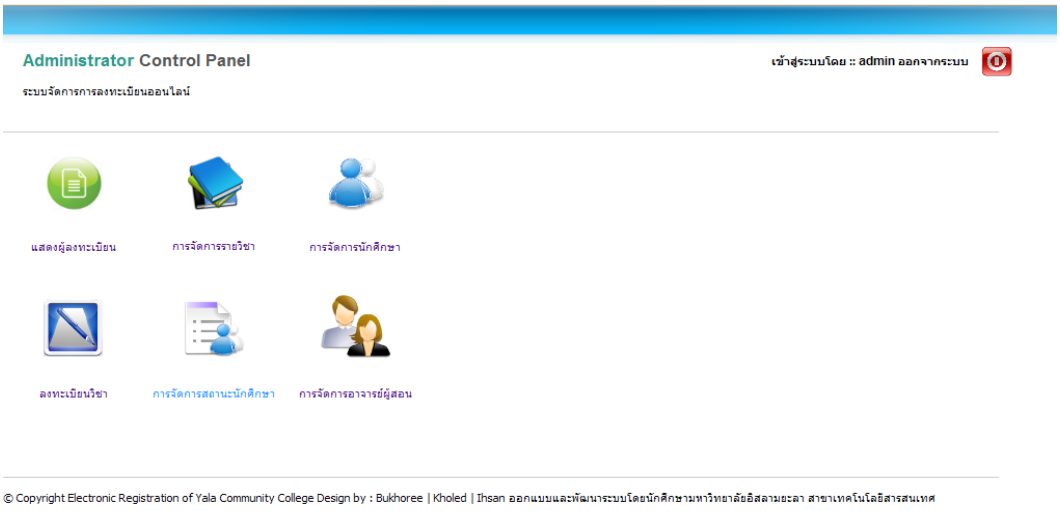


Figure 3.55: *Administrator control panel interface*

3.4 CODING PHASE

Coding is the fourth phase of Waterfall model System Development Life Cycle. Once the design is complete, most of the major decisions about the system have been made. The goal of the coding phase is to translate the design of the system into code in a given programming language. For a given design, the aim of this phase is to implement the design in the best possible manner. The coding phase affects both testing and maintenance profoundly. A well written code reduces the testing and maintenance effort. Since the testing and maintenance cost of software are much higher than the coding cost, the goal of coding should be to reduce the testing and maintenance effort. Hence, during coding the focus should be on developing programs that are easy to write. Simplicity and clarity should be strived for, during the coding phase.

An important concept that helps the understandability of programs is structured programming. The goal of structured programming is to arrange the control flow in the program. That is, program text should be organized as a sequence of statements, and during execution, the statements are executed in the sequence in the program. For structured programming, a few single-entry-single-exit constructs should be used. These constructs includes selection (if-then-else), and iteration (while - do, repeat - until etc). With these constructs it is possible to construct a program as sequence of single - entry -

single - exit constructs. PHP is one programming language that support structured programming.

According to the official PHP Web site (www.php.net), PHP is “a server-side, cross-platform, and HTML embedded scripting language.” PHP is cross-platform, meaning that it can be used on machines running almost any operating system--Unix, Windows NT, Macintosh, OS/2, to name the most popular ones. PHP is HTML embedded means you can put it into your HTML code--HTML being the code with which all Web pages are built. Therefore, scripting with PHP can be only slightly more complicated than hand-coding HTML. If you can make a basic HTML Web page, you can make a dynamic one, too.

```php
<?php
session_start();
include 'db.php';
if(session_is_registered(lec_user)){
    $lec_user=$lec_user;
}
if(!session_is_registered(username)) // To check login user if already login then hide login form
    {

     $username = "";
     $password = "";
     if(!isset($_SESSION['logined'])) {
      if(isset($_REQUEST['username'])) {
        $username = $_REQUEST['username'];
        $password = $_REQUEST['password'];
            if(empty($_REQUEST['username']) && empty($_REQUEST['password'])) {
                $message = '<span style="color:red">กรุณากรอกชื่อผู้ใช้และรหัสผ่านของท่านด้วย</span>';
            } else if(empty($_REQUEST['username']) && !empty($_REQUEST['password'])) {
                $message = '<span style="color:red">กรุณากรอกชื่อผู้ใช้ของท่านด้วย</span>';
            } else if(!empty($_REQUEST['username']) && empty($_REQUEST['password'])) {
                $message = '<span style="color:red">กรุณากรอกรหัสผ่านของท่านด้วย</span>';
            } else {
                  $sql = "select * from student where username='$username' and password='$password'";
                  $result=mysql_query($sql);
                  $count=mysql_num_rows($result);

                  $sql1 = "select lec_id,username,password from lecture where username='$username' and
                  password='$password'";
                  $result1=mysql_query($sql1);
                  $count1=mysql_num_rows($result1);
```

Figure 3.56: *PHP validating login script*

3.5 TESTING PHASE

Testing is the major quality control measure employed during software development. Its basic function is to detect errors in the software. During requirement analysis and design, the output is a document that is usually textual and non-executable. After the coding phase, computer programs are available that can be executed for testing phases. This implies that testing not only has to uncover errors introduced during coding, but also errors introduced during the previous phases. Thus, the goal of testing is to uncover requirement, design or coding errors in the programs.

3.6 SUMMARY

Generally, this chapter describes the development process of online registration system at Yala Community College. The development processes in which are including planning, analysis and design. The output of planning phase is the project feasibility or proposal and the output of analysis is the list of requirement and UML diagrams and the output of design phase is the database designing and user interface designing. After completing this chapter the reader will know the number of subsystems and its main function of online registration system. Refer to Online registration of Yala Community College.

Online registration system of Yala Community Colleges is developed to provide students in registration from manually system to be electronically. Online registration system has subsystems as administrator and officer, lecturers and student. The main point of online registration system of Yala Community Colleges is focused on student registers the courses through electronically.

CHAPTER 4

FINDING AND IMPLEMENTATION

4.0 INTRODUCTION

The objective of this chapter is referring to coding and testing phase in order to implement the online registration system for Yala Community College in the validated instruction. The system will be running on to check and correct any errors.

4.1 IMPLEMENTATION

Implementation phase, developers will turn system specifications into a working system that is edit and test repeatedly until the system is completed. Removing errors is one of the activities of implementation.

In analysis and design system mostly create for admin to control the function which will provide to users. Some function team developer creates to providing to users. The function which provide to user and admin will be as following:

User

- Registration → for get student status.
- Login → user can view profile, update profile, view a course, select a course and view lecturer of this course.

Admin

- View Registered
- Manage Course
    - Add Course
    - View Course
    - Course Status
- Manage Student
    - Add New Student
    - View Student

    - View Student Status

- Registered
- Manage Lecturer
    - Add New Lecturer
    - Search Lecturer Information
    - View Lecturer Information

So we will show step of working in each main function in form of picture and description.

This main page, system will update course for each month according to organization and student request. User can see the course and user have to login for he/she account. For who have not registered, he /she have to register by clicking on Registration link.

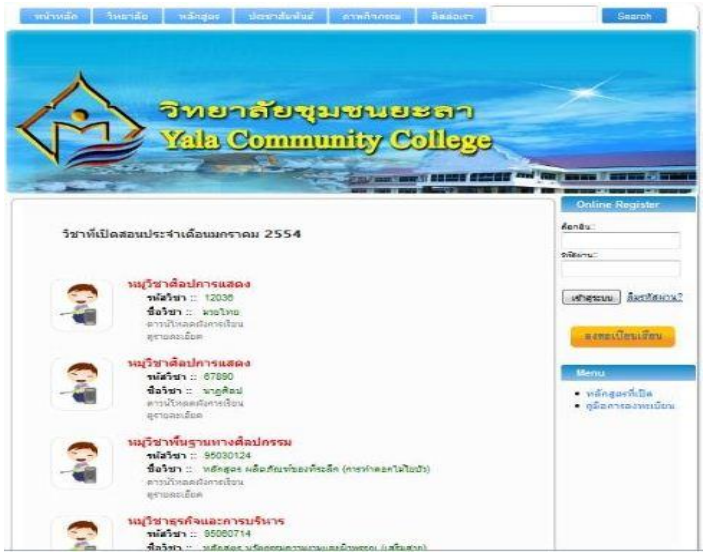


Figure 4.1: *Login page or registration for user*

After login successfully, page will redirect to the user's profile. In this page there are some functions such as update profile, view a course and registration manual.

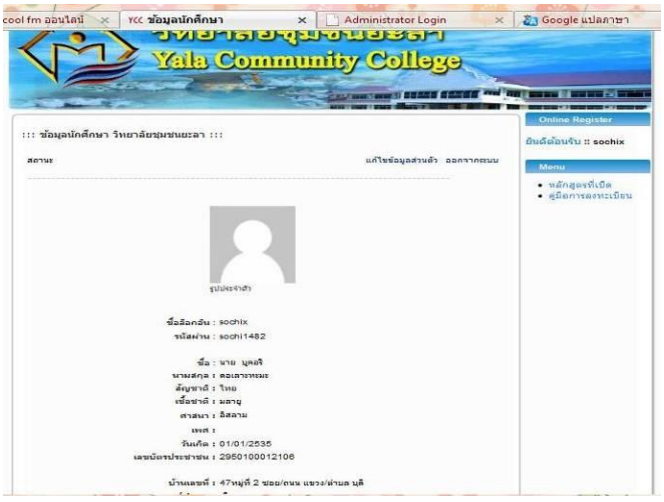


Figure 4.2: *User profile*

For update profile, user can change their information by click on update profile and insert any information they want to change, then click on enter button to confirm. Update will completed and system will redirect on profile page.

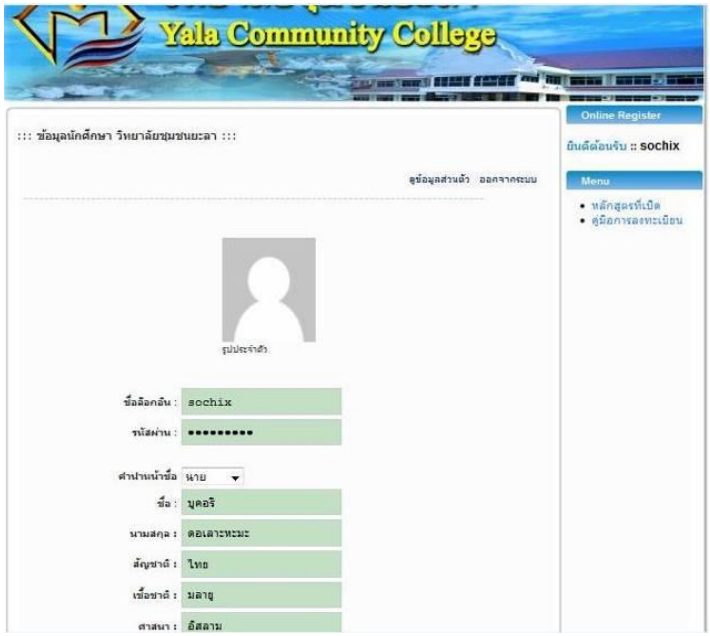


Figure 4.3: *Update profile page*

For view a course: User can view a course through their profile by click on course available on Menu. The course will appear with brief description, then user can know a course as activate.

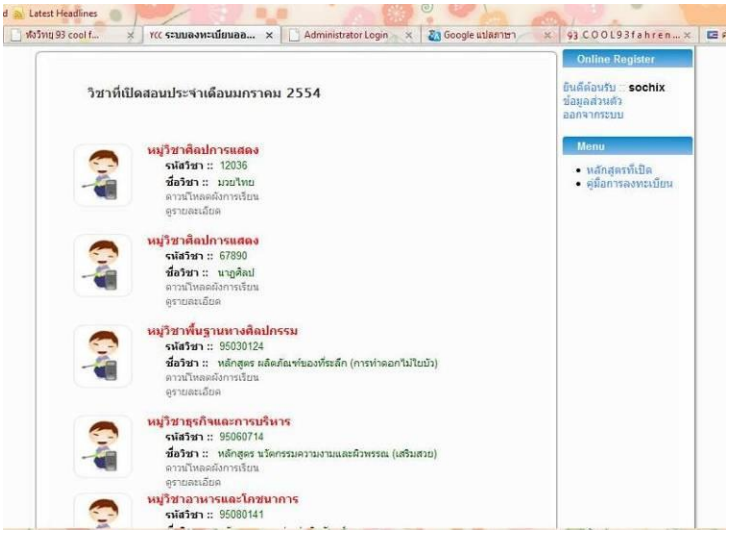


Figure 4.4: *View course page*

Also user can download registration manual by clicking on registration manual link at Menu, then it will appear popup page or direct to download as shown bellow.

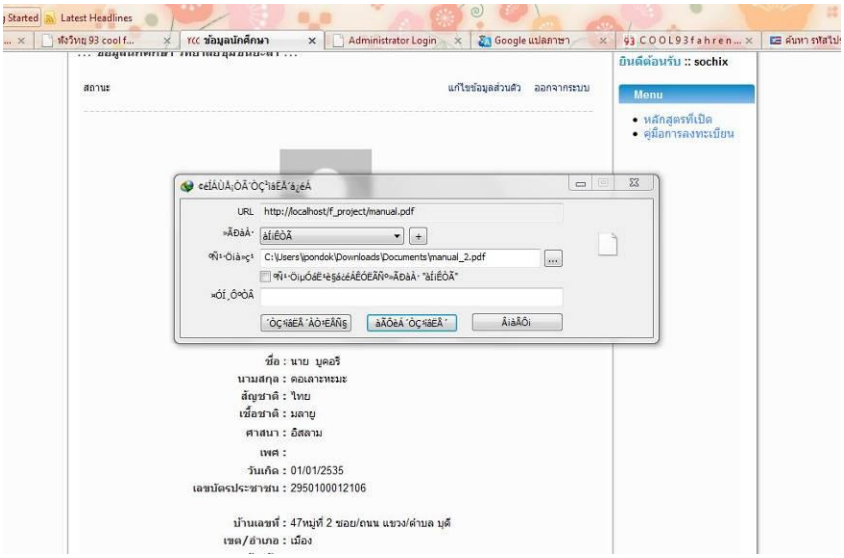


Figure 4.5: *Download register manual page*

For who have not registered, they have to register then can do other function. The register by clicking on Register button, then system will redirect register page as shown bellow.

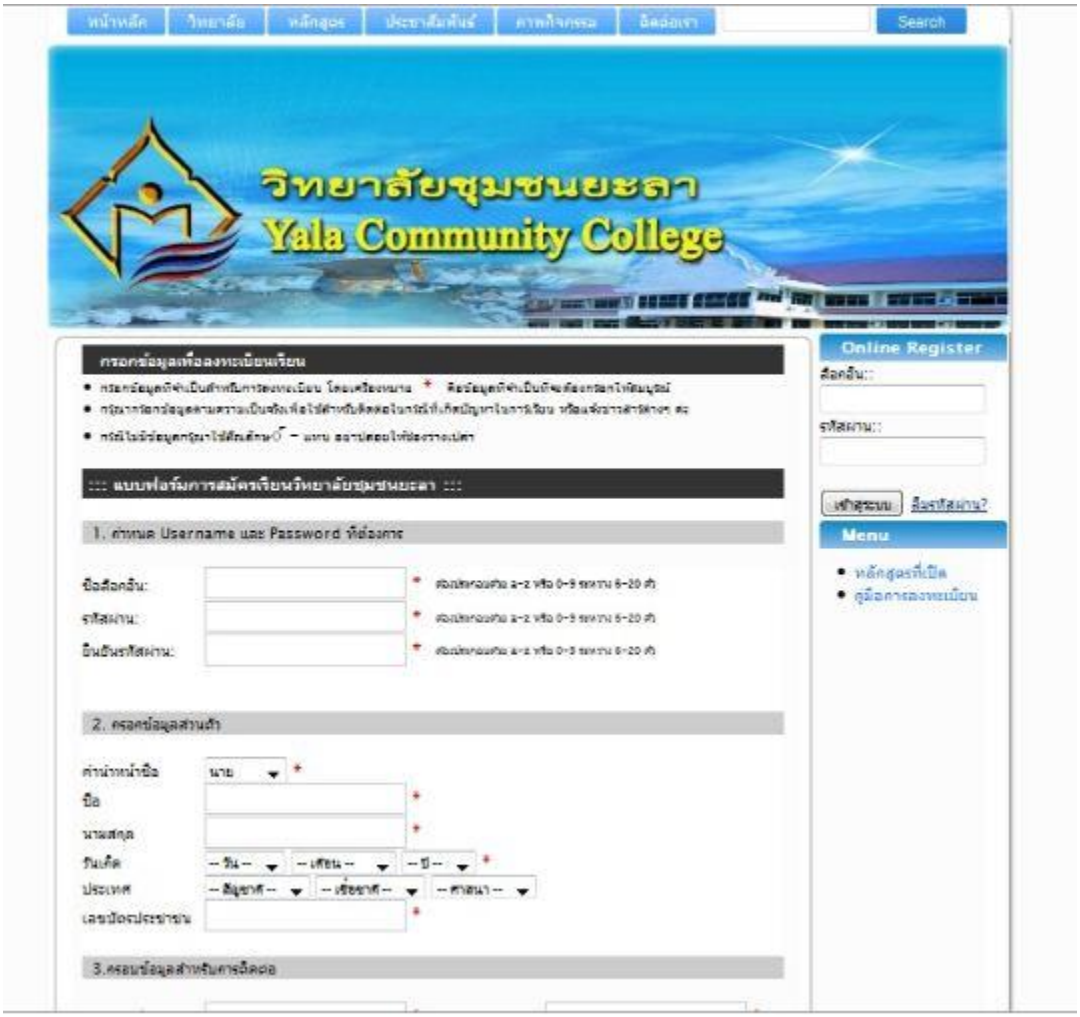


Figure 4.6: *New student Register page*

In this page, system will occur confirm page with specific detail of that course after they decide to select on each course and appear as shown bellow.

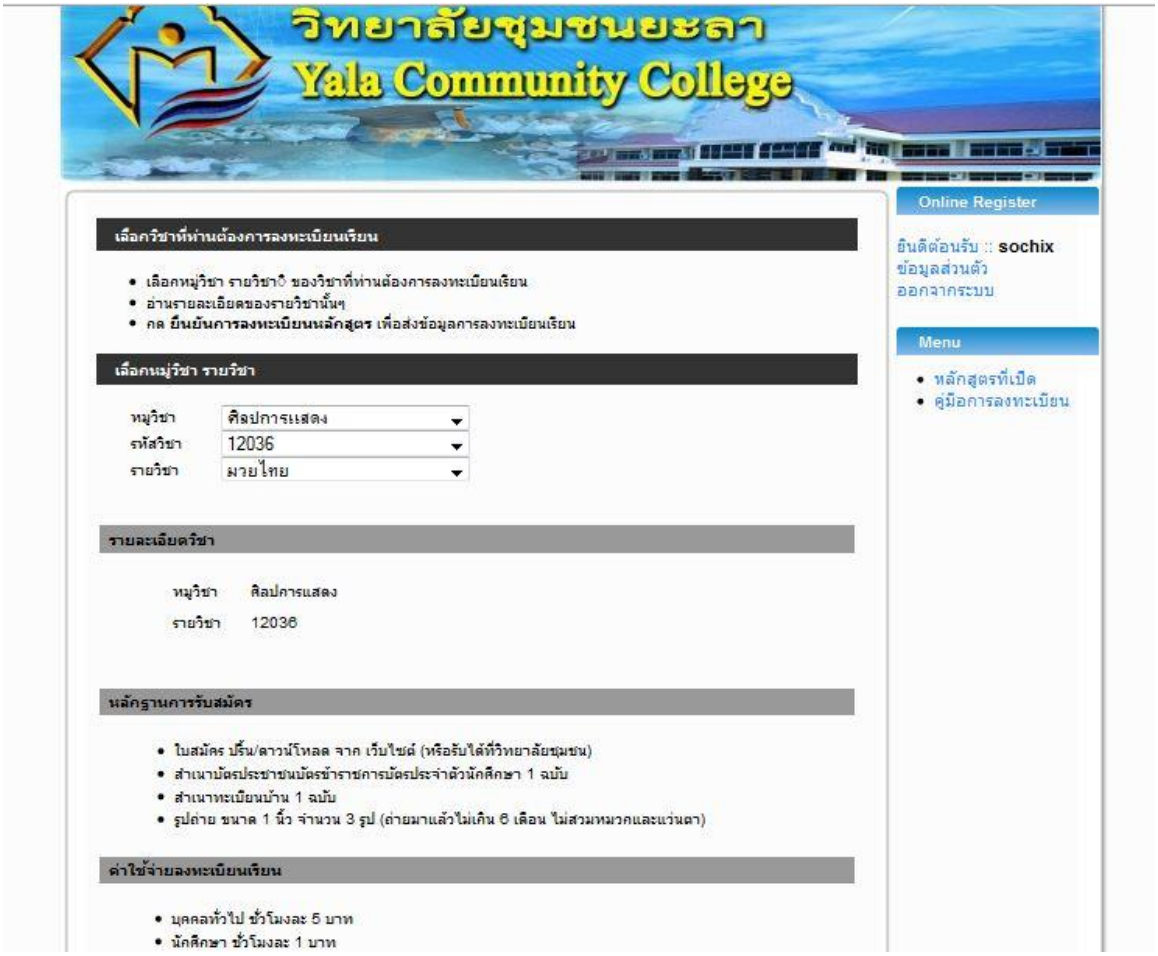
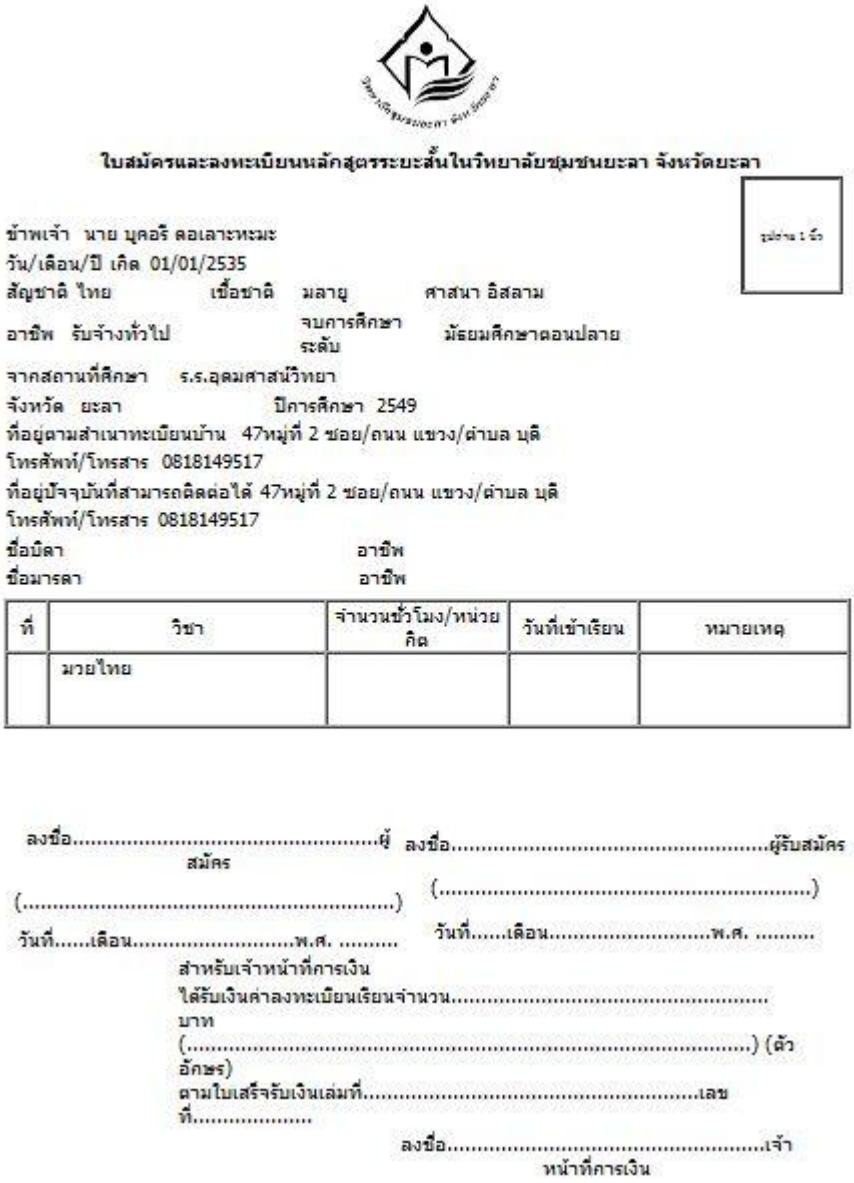


Figure 4.7: *Confirm register course page*

When user confirmed a course, registration is not complete until he/she print out this confirm register paper. This page is last page that they have to print out by hard copy and take to organization to confirm again.



ใบสมัครและลงทะเบียนหลักสูตรระยะสั้นในวิทยาลัยชุมชนยะลา จังหวัดยะลา

รูปถ่าย 1 นิ้ว

ข้าพเจ้า นาย บุคอรี ดอเลาะหะมะ
วัน/เดือน/ปี เกิด 01/01/2535
สัญชาติ ไทย เชื้อชาติ มลายู ศาสนา อิสลาม
อาชีพ รับจ้างทั่วไป จบการศึกษาระดับ มัธยมศึกษาตอนปลาย
จากสถานที่ศึกษา ร.ร.อุดมศาสน์วิทยา
จังหวัด ยะลา ปีการศึกษา 2549
ที่อยู่ตามสำเนาทะเบียนบ้าน 47หมู่ที่ 2 ซอย/ถนน แขวง/ตำบล บุดี
โทรศัพท์/โทรสาร 0818149517
ที่อยู่ปัจจุบันที่สามารถติดต่อได้ 47หมู่ที่ 2 ซอย/ถนน แขวง/ตำบล บุดี
โทรศัพท์/โทรสาร 0818149517
ชื่อบิดา อาชีพ
ชื่อมารดา อาชีพ

ที่	วิชา	จำนวนชั่วโมง/หน่วยกิต	วันที่เข้าเรียน	หมายเหตุ
	มวยไทย			

ลงชื่อ.....ผู้สมัคร
(.....)
วันที่.....เดือน.....พ.ศ. .....

ลงชื่อ.....ผู้รับสมัคร
(.....)
วันที่.....เดือน.....พ.ศ. .....

สำหรับเจ้าหน้าที่การเงิน
ได้รับเงินค่าลงทะเบียนเรียนจำนวน.....บาท
(.....) (ตัวอักษร)
ตามใบเสร็จรับเงินเล่มที่.....เลขที่.....

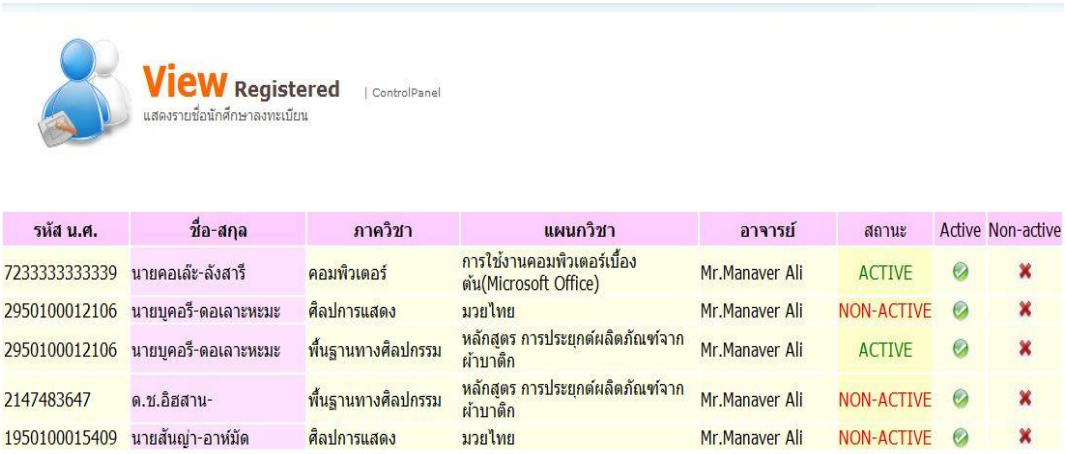
ลงชื่อ.....เจ้าหน้าที่การเงิน

Figure 4.8: *Print confirms register paper*

This is all functions which admin can perform.

Figure 4.9: *Administration control panel page*

This function use for view register about user's registered. The administrator can know and control for user active or non-active.



รหัส น.ศ.	ชื่อ-สกุล	ภาควิชา	แผนกวิชา	อาจารย์	สถานะ	Active	Non-active
7233333333339	นายคอเล๊ะ-ลังสารี	คอมพิวเตอร์	การใช้งานคอมพิวเตอร์เบื้องต้น(Microsoft Office)	Mr.Manaver Ali	ACTIVE		
2950100012106	นายบูคอรี-ดอเลาะหะมะ	ศิลปการแสดง	มวยไทย	Mr.Manaver Ali	NON-ACTIVE		
2950100012106	นายบูคอรี-ดอเลาะหะมะ	พื้นฐานทางศิลปกรรม	หลักสูตร การประยุกต์ผลิตภัณฑ์จากผ้าบาติก	Mr.Manaver Ali	ACTIVE		
2147483647	ด.ช.อิฮสาน-	พื้นฐานทางศิลปกรรม	หลักสูตร การประยุกต์ผลิตภัณฑ์จากผ้าบาติก	Mr.Manaver Ali	NON-ACTIVE		
1950100015409	นายสันญ่า-อาห์มัด	ศิลปการแสดง	มวยไทย	Mr.Manaver Ali	NON-ACTIVE		

Figure 4.10: *View registered for administrator*

This function use for manage course, there are three types such as Add Course, View Course, and Course Status.

Figure 4.11: *Manage course for administrator*

This function is admin who can add course and detail.

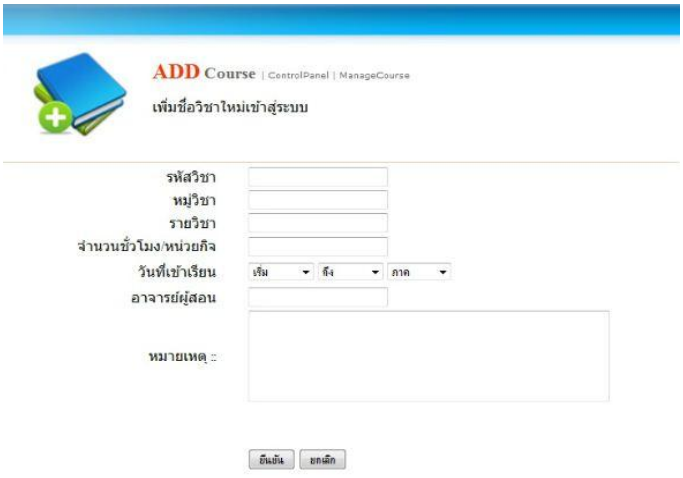


Figure 4.12: *Add course for administrator*

This function is about view course information and admin can be update by clicking on update button and drop out a course by clicking on delete button.

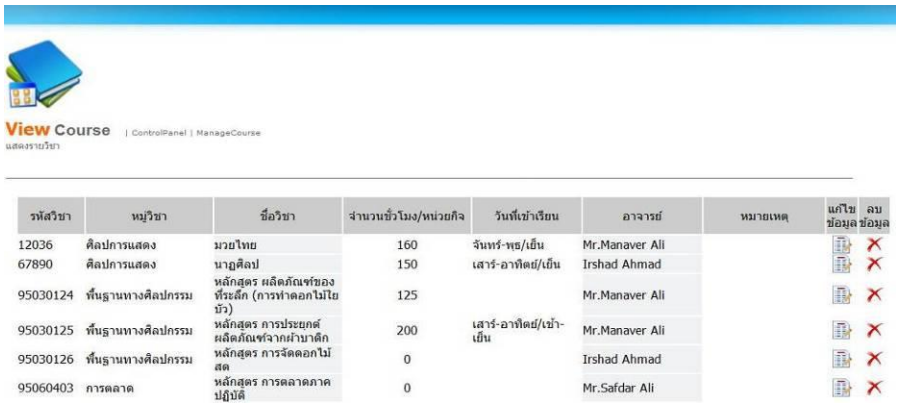


Figure 4.13: *View course for administrator*

This function admin can active or un-active a course. Admin can control a course, if active course will display on main page of user or general page.

Figure 4.14: *Course status for administrator*

This function is use for manage student, there are three types such as Add student, View student, and view student status.

Figure 4.15: *Manage course for administrator.*

This function admin can add student through admin panel.

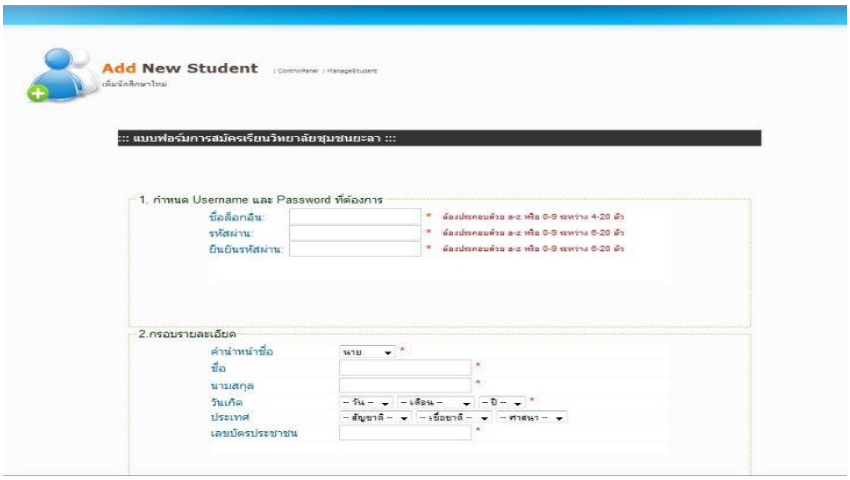


Figure 4.16: *Add student for administrator*

This function admin can display student who already registered and admin can update student detail, drop out, search specific student and view specific student information.

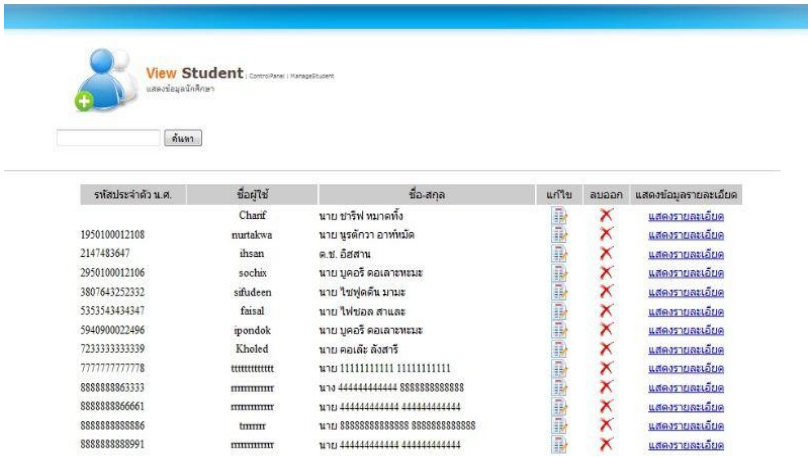


Figure 4.17: *View student for administrator*

This function admin used to active or inactive student profile.

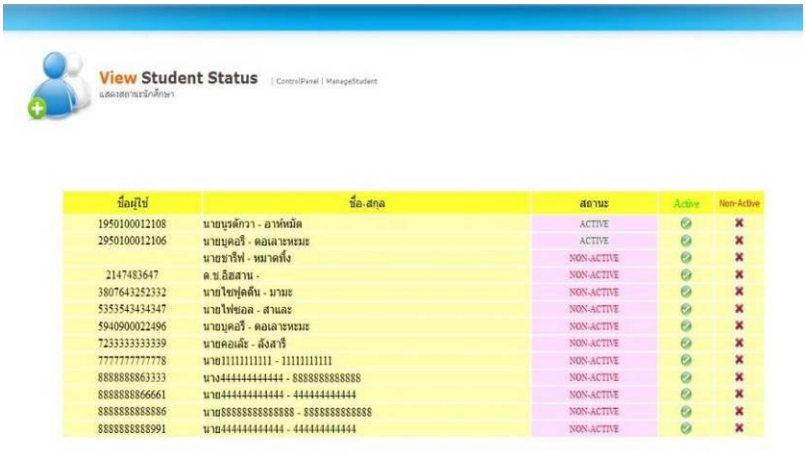


Figure 4.18: *View student status for administrator*

This function use for user who cannot register by themselves or got any problem about registrations, admin can help them to register through the admin control panel to get username and password.

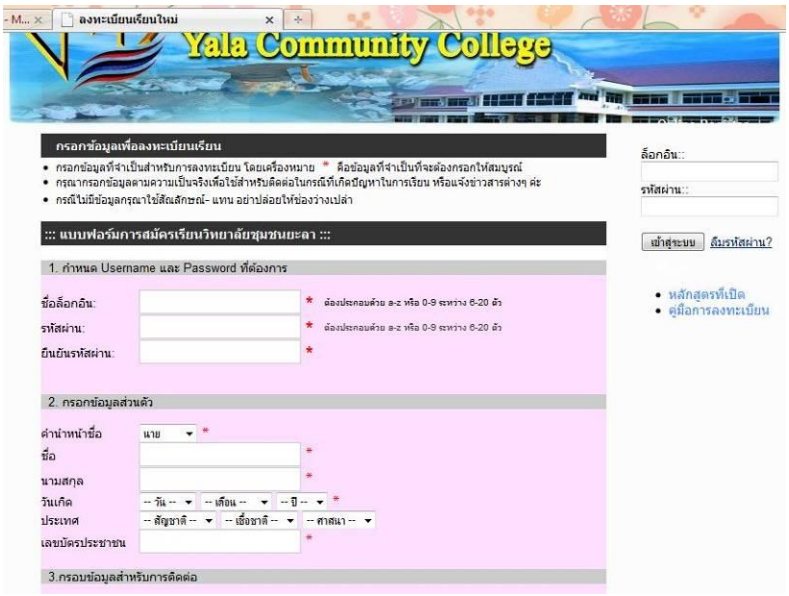


Figure 4.19: *Registration for administrator*

This function user for admin can manage lecturer. There are three functions of it, such as add lecturer, search lecturer and view lecturer.

Figure 4.20: *Manage lecturer for administrator*

This function admin can add lecturer on the database. Admin can carry out username, password and detail of lecturer.

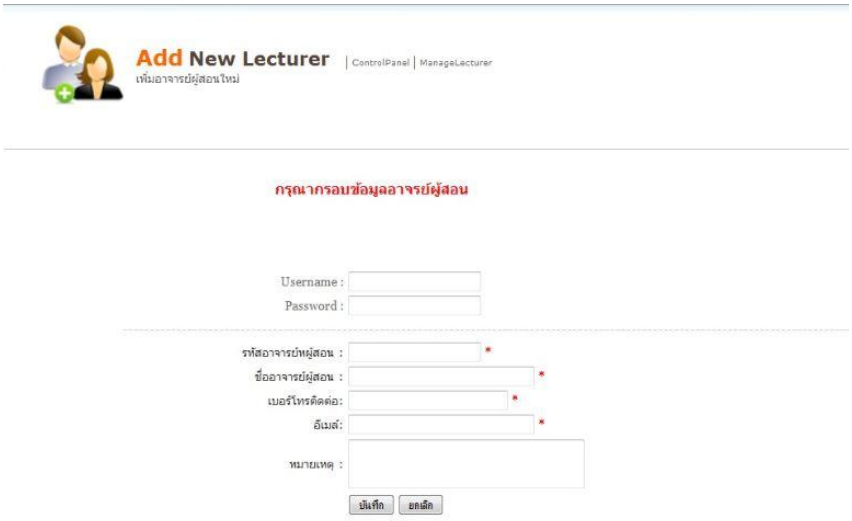


Figure 4.21: *Add lecturer for administrator*

This function admin can search lecturer information with ID number and click on search lecturer information, then system will appear lecturer information.

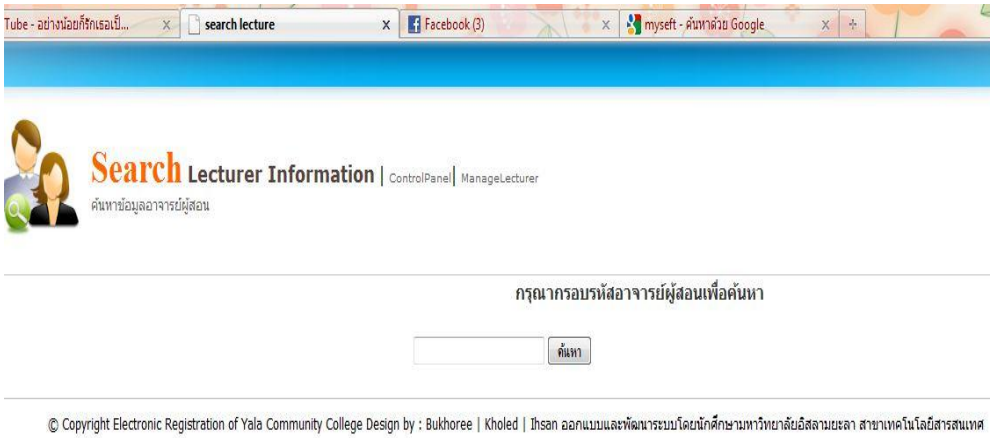


Figure 4.22: *Search lecturer information for administrator*

This function admin can view all lecturers' information and also admin can view specific lecturer information, update lecturer profile and drop out.

Figure 4.23: *View lecturer information for administrator*

4.2 SUMMARY

Normally, this chapter describes about the implementation of online registration system for Yala Community College. The implementation is learning how to coding and correct error with PHP script language programming and testing by using AppServ. The output of this chapter is to have a complete online registration system.

CHAPTER 5

CONCLUSION

1.0 INTRODUCTION

This chapter will discuss about the result from design, develops and implement online registration system for Yala Community College. Problems and solutions during develop online registration system. The project has been done and mentioned through previous chapter this chapter will conclude the study of this project as well as recommendation and limitation form development team.

1.1 RECOMMENDATION

Currently, the online registration system for Yala Community College is providing student to register the courses based on organization provide for each month and student require. This project is developed by using PHP script programming each step of coding

user should understand for each line to make more flexible and security. When user uploaded this system to real web server they should monitor the system and always update for security. The important thing during developing the system, developer must draw structure of the system with clearly; mean collect requirements and planning before start developing. This system develop without using Framework and Object Oriented concept, so for more flexible and secure developer should use Framework as CakePHP, Codeiniter or Zend Framework and should program with Object Oriented concept by those thing developer can develop the system thought team work with understanding. The concept WEB 2.0 should apply to the system for more interactive between system and users might use AJAX technology in this field. After the system is developed complete, developer try to run the system in virtual host, in this point we suggest that developer have to upload the system to real web server to make sure that the system working properly. One more suggestion that can bring online registration system be more acceptable is online payment.

1.2 LIMITATION

This online registration system is developed according to list of requirements that collecting from Yala Community College. So, the implementation of this system is limited in function for Yala Community College only. General person who need to register a course, he need to register to be a student for college first, and then he can

register a course. Administrator and officer can manage whole functions only. During developing this project development faces several problems as following:

- Lack of programming skill (PHP).
- Lack of database design skill (SQL skill).
- The requirement always change because of developers have not enough analysis skill.

1.3 CONCLUSION

Online registration system for Yala Community Colleges is developed to provide students registration course via internet. Online registration system contains subsystems as administrator, lecturers and student. The main point of online registration system of Yala Community Colleges is focused on student register a courses through electronically.

BIBLIOGRAPHY

Abousharkh, I. (2010). Advisor Online Registration System Manual. *Ajman University of Science and Technology*.

Al-Shaikh, A. M. (2010). Online Registration System. *International Journal of Computer Science and Security (IJCS), Volume (4), Issue: (3).*

Ciebiera, K., Mincer-Daszkiewicz, J., & Walen, T. (2004). *New Course Registration Module for the University Study-Oriented System.*

Darian, A. K. (2007). *e-Registration of Vital Events in Iran.*

Dr. Adeyegbe, S. O. (2004). *2 YEARS OF E-REGISTRATION: KEEPING PACE WITH I T REVOLUTION IN TESTING: THE WAEC EXPERIENCE*.

Fedorov, D., Fonseca, L. M. G., Kenney, C., & Manjunath, B. S. (2003). *Automatic Registration and Mosaicking System for Remotely Sensed Imagery*.

Gunawardana, J. M. N. C., Ishara, G. P., Rajel, R. G., & Radhakrishnan, S. (2008). An Online Course Registration System for the Faculty of Engineering in University of Peradeniya. *Proceedings of the Peradeniya University Research Sessions, Sri Lanka, Vol.13, Part II.*

Hadjerrouit, S. (2010). Developing Web-Based Learning Resources in School Education: A User-Centered Approach. *Interdisciplinary Journal of E-Learning and Learning Objects, Volume 6.*

Hui, S. X. (2004). *Online Registration System User's Manual*.

Isler, C. T. (2004). *Web-Based Decision Support Systems in Conference Registration*.

Jackrabbit Technologies, (2010). *Online Registration: Integrating Jackrabbit with Your Website.*

Little, M. C., Wheater, S. M., Ingham, D. B., Snow, C. R., Whitfield, H., & Shrivastava, S. K. (1995). *The University Student Registration System: a Case Study in Building a High-Availability Distributed Application Using General Purpose Components*.

Lui, J., & Tang, X. (2007). *Offline Signature Verification Using Online Handwriting Registration.*

Mei, T. H., Lee, C. K., Abd Wahab, M. H., & Mohd Fauadi, M. H. F. (2003). *Web-based Content Management System for Academic Purposes.*

Newtonraja, T., & Nafde, A. (2004). *Online Course Registration System.*

Rav-Acha, A., Pritch, Y., & Peleg, S. (2006). *Online Registration of Dynamic Scenes using Video Extrapolation.*

Wokocha, A. M., & Nwokeocha, S. (2009). E-Governance: Lessons from the Capacity Building Project and Online Registration of Teachers in Nigeria. *ACM 978-1-60558-663, Bogota, Colombia.*

APPENDIX

Time table

No.	Month / Activities	Sep 2010	Oct 2010	Nov 2010	Dec 2010	Jan 2011	Feb 2011
1	Project Planning						
2	Project Analysis						
3	Prepare documentation						
4	Project Design						
5	Project Implementation						
6	Project Testing						
7	Project maintains						
8	Final Complete Report						