

STUDENT'S DECLARATION

I declare that this thesis entitled called 'School Academic Management System (SAMS)' is the result of my own research except as cited in the references. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree"

Signature :

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Date : **11 JUNE 2012**

ABSTRACT

This online application system is part of reforms to the existing system of data storage manually. This system involves the users, teachers, students and staff and parents. The main purpose of this system is to facilitate the school management to store student information and disseminating information on any changes that happen in schools to parents and teachers. Messaging system is the fastest way to send and distribute information directly and accurately.

With this system, the possibility of error or offense, or storage of data registration is low. For develop this system, an analysis was conducted to identify problems and identify effective ways to overcome existing problems. Overall, the system is achieving the objectives but still need some reforms to make the system better.

ABSTRAK

Sistem aplikasi secara online ini adalah sebahagian daripada pembaharuan terhadap sistem yang telah ada iaitu penyimpanan data secara manual. Sistem ini melibatkan pengguna iaitu guru, pelajar dan staff serta ibubapa. Tujuan utama sistem ini adalah untuk memudahkan pihak pengurusan sekolah untuk menyimpan maklumat pelajar dan menyebarkan maklumat mengenai sebarang perubahan yang berlaku di sekolah kepada ibubapa dan guru. Sistem pesanan ringkas adalah jalan terpantas untuk menghantar dan menyebarkan maklumat secara terus dan tepat.

Dengan adanya sistem ini, kemungkinan untuk berlaku kesilapan atau kesalahan pendaftaran atau penyimpanan data adalah rendah. Untuk membangunkan sistem ini, satu analisis telah dilakukan bagi mengenalpasti masalah dan mengenalpasti cara yang berkesan untuk mengatasi masalah yang sedia ada. Keseluruhan, sistem ini mencapai objektif tetapi masih memerlukan sedikit pembaharuan untuk membuatkan sistem ini lebih sempurna.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

In most school today, most of the work done manually filling out the form and save the regular place of storage provided. In management of school, they have to store all data manually by writing it on paper and store it in the regular place of storage provided. This scenario gives an idea to develop the Student Academic Management System (SAMS). This system focus on student academic management.

This chapter will describe about Student Academic Management System (SAMS) overview at Project Overview, problem statement which reported about the issue caused by the manual system. Beside, the project scope and objective will detailed about Student Academic Management System (SAMS) scopes and the reason of development. This system recommended by Dr. Jamaludin bin Sallim as my supervisor.

2.1 Project overview

Student Academic Management System (SAMS) is a system that developed for school to ensure all academic process or management is in order and organize. This system is developed to facilitate the administrative management and arrange of laying out all the administration and management students. The system is creating to solve the problem and give a standard academic process for the student of that school. Many problems are occurring because there have no system to manage the student process such as attendance, student profile record, result and so on. The computerized system can solve this problem because this system is systematic and effective to prevent any data lost and some kind of problem. As a conclusion this system is develop for a school and it's can manage the student management of academic.

2.2 Problem statement

The current problem in the standard school in Malaysia is did not have systematic data arrangement in the student management. When the staff of administrator wants to record the data of the student, they need to fill out by use the manual system, In this case data might be lost when several problem is occur. Other problem that can be happen is hard to search and update the student information and class arrangement. Teachers also have some problem to as same as administrator that using manual system including to develop the student performance example student discipline, result, attendance and so on that have no any systematic record. The systematic requirement is required so that all data is stored into the database for future reference and enhancement. Below is the specific problem statement that occurs in standard school via using manual system.

- i) Lack of data arrangement that is record by using manual system and using a lot of paper to record the student information, student result and performance.
- ii) The manual system is hard to search and update about the student information, result and performance
- iii) The manual system is not providing the security of the academic information that might be lost.
- iv) Some information released by the school is not known by the parents or teachers.

2.3 Objective

The objectives of this system are:

- i. To record all of the student academic information for future reference and enhancement and to update and search student information include personal information, result and performance
- ii. To record student attendance and notify to parent when their children not coming to the school.
- iii. Provide SMS notification to parent and teacher when have a meeting or activity.

2.4 Scope

The scope of this project is for primary school that has been search before the system is build. It is important because to make sure the system meet their requirement and to perform better phase of system under making.

The scopes are;

- i. This system will focus on student academic that consist student academic profile, student result and student performance (discipline).
- ii. Student Academic Management System (SAMS) is a prototype system for record and update the student academic process only for one class.

Administrator

- i. To manage and record all the student academic information
- ii. To update and search student information and analysis the student data
- iii. To view the student result and performance that manage by the teachers

Staff/Teacher

- i. To manage the result and performance (discipline) for each of the student
- ii. To manage and record all the student academic information
- iii. To manage student attendance

Student

- i. Check their exam result online
- ii. Check their attendance online

Parent

- i. Check their children mark and attendance online.
- ii. Receive notification from school about their children information such as examination results have been release or attendance their children.

2.5 Thesis Organization

This thesis will consists of 6 chapters.

- i. Chapter 1 will discuss on introduction to system and project.
- ii. Chapter 2 will explain about the review for the chosen project.
- iii. Chapter 3 will discuss the approach and framework for the project
- iv. Chapter 4 will document all processes that involve in the development.
- v. Chapter 5 will explain about the results and data analysis that had been acquired.
- vi. Chapter 6 will briefly summarize about the developed project.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter will explain about the research of the project that has been chosen. School Academic Management System is a web based system. This system running in the server and provide service to user or management. The system is to facilitate teachers and administrators to make data storage and review of data quickly and easily ^[1]. Currently, teacher and administrative management using manual system, that is writes data in the book and keep it separately. Possibility of data loss or damage occurred is high and the possibility of data accurate is low when using this system.

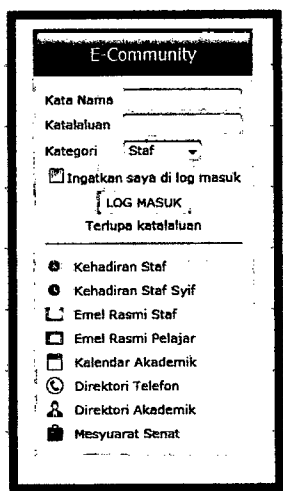
2.2 Overview of the manual system

In order to develop the new system, important parts that must be considered are study and analysis the current system. For that, the current system had been study and analysis by make the interview to administrative management. From the interview, flow management can be describing as another paragraph.

Almost all record in that school use manual system that is writing down in the record book and keep in one room in the office. This manual system is not very consistence and systematic. Teacher must write down the data from the result of student's paper exam to record result book one by one and this manual system is not efficient and take much time to done all of it. After write down to record result book, teacher must calculate mark all subject one by one and total result for all students to put ranking of student in the class this is not systematic. After that, teacher must make a copy to administrative management to keep that as a record.

2.3 Exiting System

In this chapter stated one example of the existed system that similar with School Academic Management System (SAMS), that is E-com student in Universiti Malaysia Pahang (UMP). This system is quite similar with SAMS which is focus to academic management. In UMP system, we need to login the system whether staff or student.



E-Community

Kata Nama

Katalaluan

Kategori: Staf

Ingatkan saya di log masuk

LOG MASUK

Terlupa katalaluan

- Kehadiran Staf
- Kehadiran Staf Syif
- Emel Rasmi Staf
- Emel Rasmi Pelajar
- Kalendar Akademik
- Direktori Telefon
- Direktori Akademik
- Mesyuarat Senat

Figure 2.1: Login for student or staff

Figure 2.1 show the login for student and staff. This is the first security for UMP website before enter the website. For student and staff, they need to key in the id and the password that given to login the website. If wrong password or id, the error messages will pop-up to tell that the id or password is wrong and cannot login the website. If the student or staff forgot their password or id, they can retrieve the password or id with email the administrator or contact the ICT management.

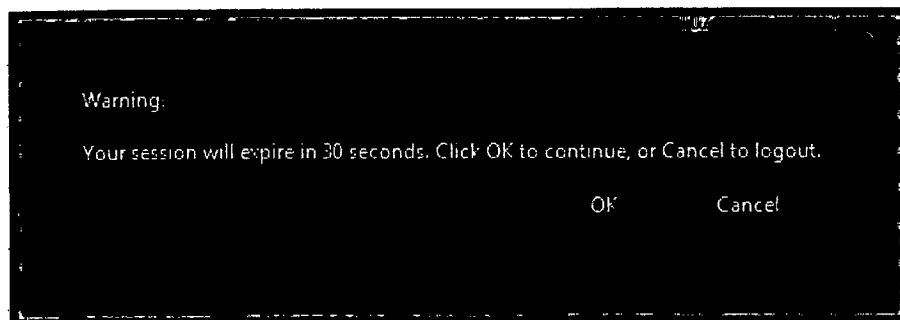


Figure 2.2: time out session

Figure 2.2 show the time out session. This is second security for UMP website that provides to protect form outsider to change or do something with the website. There is time limit of one session in UMP website. If the student forgot to log out from the system, system will automatically log out if the session to long.

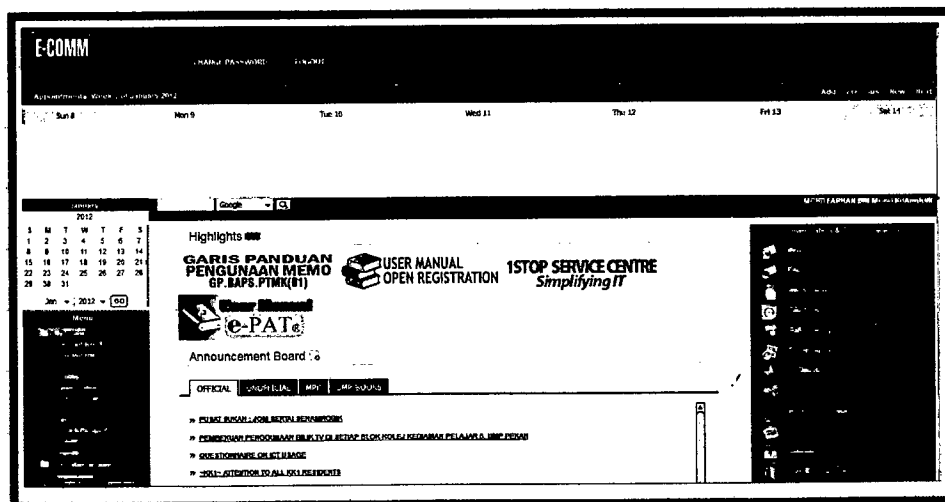


Figure 2.3: Main Page UMP website

In the main UMP website show the menu to choose. It also shows the latest information or news and the important announcement in UMP. This is very efficient way to spread information to student and staff about what happens in UMP and latest information in UMP.

The screenshot displays the 'Course Results' page for a student. At the top, there are navigation tabs: 'Registered Subjects', 'Courseworks', 'Final Results', 'Setback', and 'Course Structure'. Below these, the student's details are listed:

- Semester: [Dropdown]
- Subject: [Dropdown]
- ID: CA09133
- Name: MOHD FARHAN BIN MOHD KHARUDIN
- Course: BCH - SARJANA MUDA SAINS KOMPUTER (SISTEM KOMPUTER & RANGKAIAN) DENGAN KERUJIAN
- Program: D1 - Ijazah Sarjana Muda
- Faculty: FSK1000 - FAKULTI SISTEM KOMPUTER & KEJURUTERAAN PERISIAN

The main section is titled 'Registered Subjects for Semester: SEMESTER 1 SESSION 2011/2012'. It contains a table with the following columns: Subject, Desc, Group/Section, Tutorial Group, and Credit Hours.

Subject	Desc	Group/Section	Tutorial Group	Credit Hours
1	BCH133 COMPUTER ETHICS & POLICES	01		3
2	BCH203 IMAGE PROCESSING	01		3
3	UNF1111 MANDARIN FOR BEGINNERS	07		1
4	BCH203 NETWORK ANALYSIS & DESIGN	01		3
5	BCC303 RESEARCH METHODOLOGY	01		1
6	UG202 TECHNORESEARCH	04		2
7	BCC303 UNDERGRADUATE PROJECT 1	01		3
8	BCH203 WAN TECHNOLOGY	01		3
				19

Figure 2.4: Course result in UMP website

Figure 2.4 show the course result in UMP website. Students will be able to see their examination results online. In this way, it will be easier for students to review the results & evaluate the results of the examination. This way is more systematic than providing examination results to the student paper and the risk of lost paper the results are high.

The screenshot displays the 'Time table for Semester: SEMESTER 1 SESSION 2011/2012'. The table is organized into columns representing different days of the week (Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday) and rows representing different time slots (08:00-09:00, 09:00-10:00, 10:00-11:00, 11:00-12:00, 12:00-13:00, 13:00-14:00, 14:00-15:00, 15:00-16:00, 16:00-17:00, 17:00-18:00, 18:00-19:00, 19:00-20:00, 20:00-21:00, 21:00-22:00, 22:00-23:00, 23:00-24:00). The table lists the subjects and sections for each time slot on each day.

Day	08:00-09:00	09:00-10:00	10:00-11:00	11:00-12:00	12:00-13:00	13:00-14:00	14:00-15:00	15:00-16:00	16:00-17:00	17:00-18:00	18:00-19:00	19:00-20:00	20:00-21:00	21:00-22:00	22:00-23:00	23:00-24:00
Monday	BCH133 (COMPUTER ETHICS & POLICES) / (L)P-DE-03	BCH133 (COMPUTER ETHICS & POLICES) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03
Tuesday	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03
Wednesday	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03
Thursday	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03
Friday	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03
Saturday	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03
Sunday	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03	BCH203 (IMAGE PROCESSING) / (L)P-DE-03

Figure 2.5: Time table in UMP website

Figure 2.5 show the time table of student. Student will able to know the class and the time of class with time table. It's easy to student to print out the time table or check the time table if they don't remember the class.

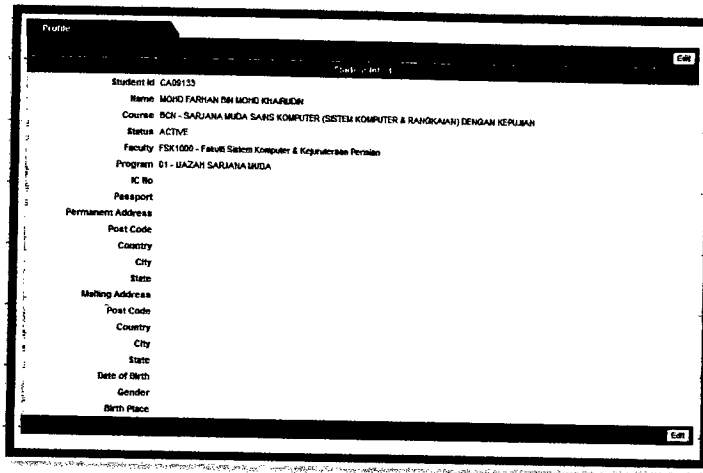


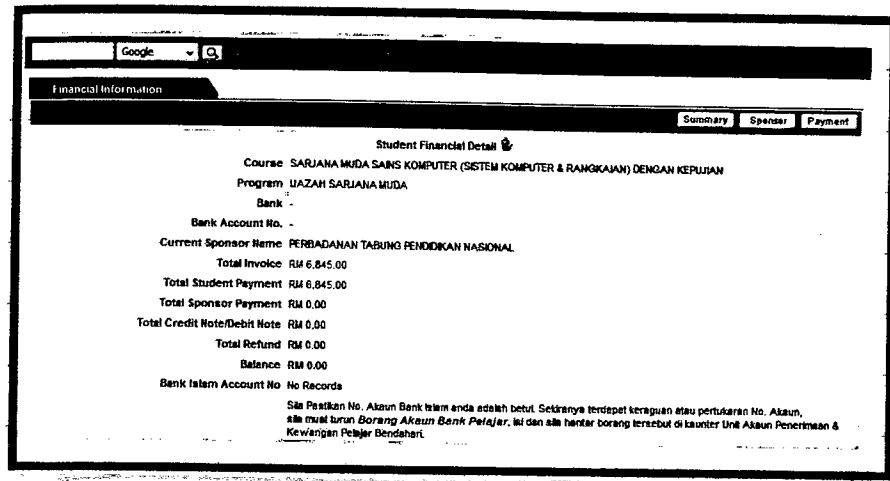
Figure 2.6: Student's Profile in UMP website

Figure 2.6 show the student's profile. Every student and staff in UMP have own profile and all detail about it will record on the database. Student and staff can view the detail about them self. If any update, they must see administrator or ICT department to update the detail such as address or email.

Subject	Desc	Group/Section	Credit Hours
1. BOC111	COMPUTER ETHICS & POLICES	01	3
	Exam Schedule		
	Date : 11/01/2012		
	From : 02:30 PM		
	Until : 05:30 PM		
	Venue : ZDK25		
2. BOC201	MADE PROCESSING	01	3
	Exam Schedule		
	Date : 12/01/2012		
	From : 09:00 AM		
	Until : 12:00 PM		
	Venue : ASTAKA		
3. UMP 1111	STANDARIN FOR BEGINNERS	02	1
4. BOC205	NETWORK ANALYSIS & DESIGN	01	3
	Exam Schedule		
	Date : 04/01/2012		
	From : 09:00 AM		
	Until : 11:00 AM		
	Venue : YDK2		
5. BOC301	RESEARCH METHODOLOGY	01	1
6. UIC202	TECHNORENEURSHIP	04	2
7. BOC313	UNDERGRADUATE PROJECT 1	01	3
8. BOC303	WAN TECHNOLOGY	01	3
	Exam Schedule		
	Date : 05/01/2012		
	From : 09:00 AM		
	Until : 11:00 AM		
	Venue : YDK2		

Figure 2.7: Exam schedule in UMP website

Figure 2.7 show the exam schedule. In this schedule state the date of exam, time of exam and place of taking exam. So if student forgot about their schedule, they can open it easily and can view without go to office to see the exam schedule. It will save the students from go to office to see schedule.



Student Financial Detail	
Course	SARJANA MUDA SAINS KOMPUTER (SISTEM KOMPUTER & RANGKAIAN) DENGAN KEPUJIAN
Program	IJAZAH SARJANA MUDA
Bank	-
Bank Account No.	-
Current Sponsor Name	PERBADANAN TABUNG PENDIDIKAN NASIONAL
Total Invoice	RM 6,845.00
Total Student Payment	RM 6,845.00
Total Sponsor Payment	RM 0.00
Total Credit Note/Debit Note	RM 0.00
Total Refund	RM 0.00
Balance	RM 0.00
Bank Islam Account No	No Records

Sila Pastikan No. Akaun Bank Islam anda adalah betul. Sekiranya terdapat teraguan atau pertidaran No. Akaun, sila mual turun Borang Akaun Bank Pelajar, isi dan hantar borang tersebut di kaunter Unit Akaun Penemuan & Kewangan Pelajar Bendahari.

Figure 2.8: Financial of student in UMP website

Figure 2.8 show the financial of student. Student can see their financial detail in UMP website without go to office to check it. Student can know whether they pay or not yet the fees before they begin the new semester. If any problem with their financial, they can go to Jabatan Hal Ehwal Pelajar (JHEPA) or email first to someone in JHEPA to ask about their problem. This will save time of student and will facilitate students deal with those responsible.

2.4 Macromedia Dreamweaver 8

Macromedia Dreamweaver 8 is one of web development tool. Macromedia Dreamweaver 8 able to create an interactive interface. There are many benefits using Macromedia Dreamweaver 8 in developing the interface. Macromedia Dreamweaver 8 support many web technologies such as CSS, JavaScript, and various server-side scripting frameworks. It also allows many script of language PHP, ColdFusion, JSP, ASP, and ASP.NET are type of language that can be use in Macromedia Dreamweaver 8. There is some example of the type of coding that Dreamweaver support.

2.5 PHP (Hypertext Preprocessor)

Many languages can be use in developing a web site such as ASP, JSP, and PERL. PHP is one of popular language. PHP become more popular because it has an advantage more that other languages. PHP can access many database systems, either commercial or non-commercial. The database that people always use will using PHP language are Informix, Microsoft SQL Server, mSQL, MySQL, ODBC, Oracle and Sybase. PHP is easy to use compare to PERL and ASP. This is because in PHP, the code is easy to maintain and update. PHP scripts work on any of the existing Internet servers, including Apache, Microsoft and Netscape service solutions [PHP @ FrOSCon]. PHP is free and readily available. PHP is very efficient. It is faster to code and faster to execute. Using a single inexpensive server, millions of hits per day can be served. Because PHP was designed for use on the Web, it has many built-in functions for performing many useful Web-related tasks. These include generation of GIF images on-the-fly, connecting to other network services, sending email, working with cookies, generating PDF documents.

2.6 MySQL

MySQL is a multithreaded, multi-user, SQL (Structured Query Language) Database Management System (DBMS). MySQL is easy to learn rather than other database. MySQL is available as free software. A privilege and password systems that is very flexible and secure, because all password traffic is encrypted when connect to server and it allows host-based verification. MySQL is an extremely fast and efficient relational database management system to handle large databases. MySQL is available at no cost, under an Open Source license, or at a low cost under a commercial license if required. Anyone can download MySQL at interface without paying anything. MySQL data load and search are very important business requirements in any Windows or Internet web application development. In general, any application needs to show a result set of data and/or a single record to the end-users.

CHAPTER 3

METHODOLOGY

3.1 Introduction

Methodology is defined as the systematic study of methods that are can be, or have been applied within a discipline or a particular procedure or set of procedures. It also can define as a standard process followed in an organization to conduct all the steps necessary analyze, design, implement, and maintain information system.

This chapter will briefly explain about the procedure or the step in develop this system. This chapter will show how the system running and how it being develop. Beside it this chapter will also describe about the software and hardware that have being used in developing this system.

3.2 Software Process

Systems Development Life Cycle (SDLC) or sometimes just (SLC) is a software development process, although it is also a distinct process independent of software or other information technology considerations. It provides a consistent framework as the task and deliverables needed to develop a system. An SDLC should result in a high quality system that meets or exceeds customer expectations, within time and cost estimates, works effectively and efficiently in the current and planned information technology infrastructure, and is cheap to maintain and cost-effective to enhance. SDLC is the most suitable methodology for this system and the model that has been used is waterfall model.

In School Academic Management System, the system development life cycle (SDLC) method has been selected to make sure the project will do properly. In this project 5 stages of process have been used. They are identification, planning, analysis, Design, implementation and testing.

3.3 Identification

This stage is very important in developing this system because this system is based on the management of the school. This stage begins with studying the process of how administrative management manages the data of the school information. Currently, teacher and administrative management use a manual system, that is, they write data in the book and keep it separately. Possibility of data loss or damage occurring is high and the possibility of data accuracy is low when using this system.

3.4 Planning

Planning is one of the important stages in developing a system. The process had been done in this stage is firstly find all the information about the current system. In finding the data some research has been done. All the process must be done in a time that been plan from the beginning. In time management a schedule for the planning in this system have been made. The schedules start from defining the scope, searching data until the end of developing and maintenance. All the planning had being made in the Gantt chart.

3.5 Analysis

An analysis about the software and hardware requirement will be done in this phase. The first things that have been made for analysis is about the current system that school have been used. There are three users that can use this system. It is the administrative management, the teacher and the parent of the student. Administrative management can manipulate data (add, delete and update data) and generate the report for viewing or reference. It will easier to administrative management for updating the data and makes it as reference. Teacher can record all data and update the data of the student easily and update the student attendance. Parents will receive short message about latest information about their children or progress of the school via Short Message Service (SMS).

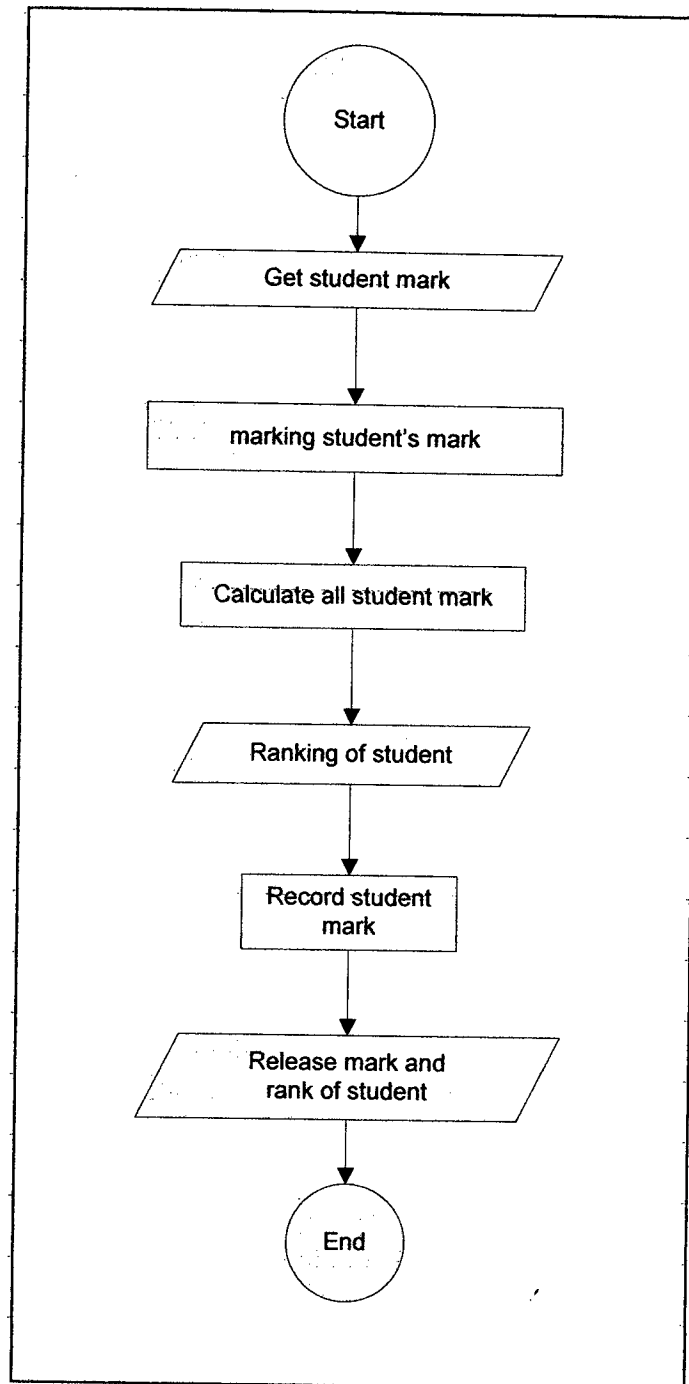


Figure 3.5.1 System flow current system for teacher

Figure 3.4.1 show the current system flow for staff or teacher. Teacher must get all mark from all students and record one by one before calculate the mark and release the mark and the rank of student.

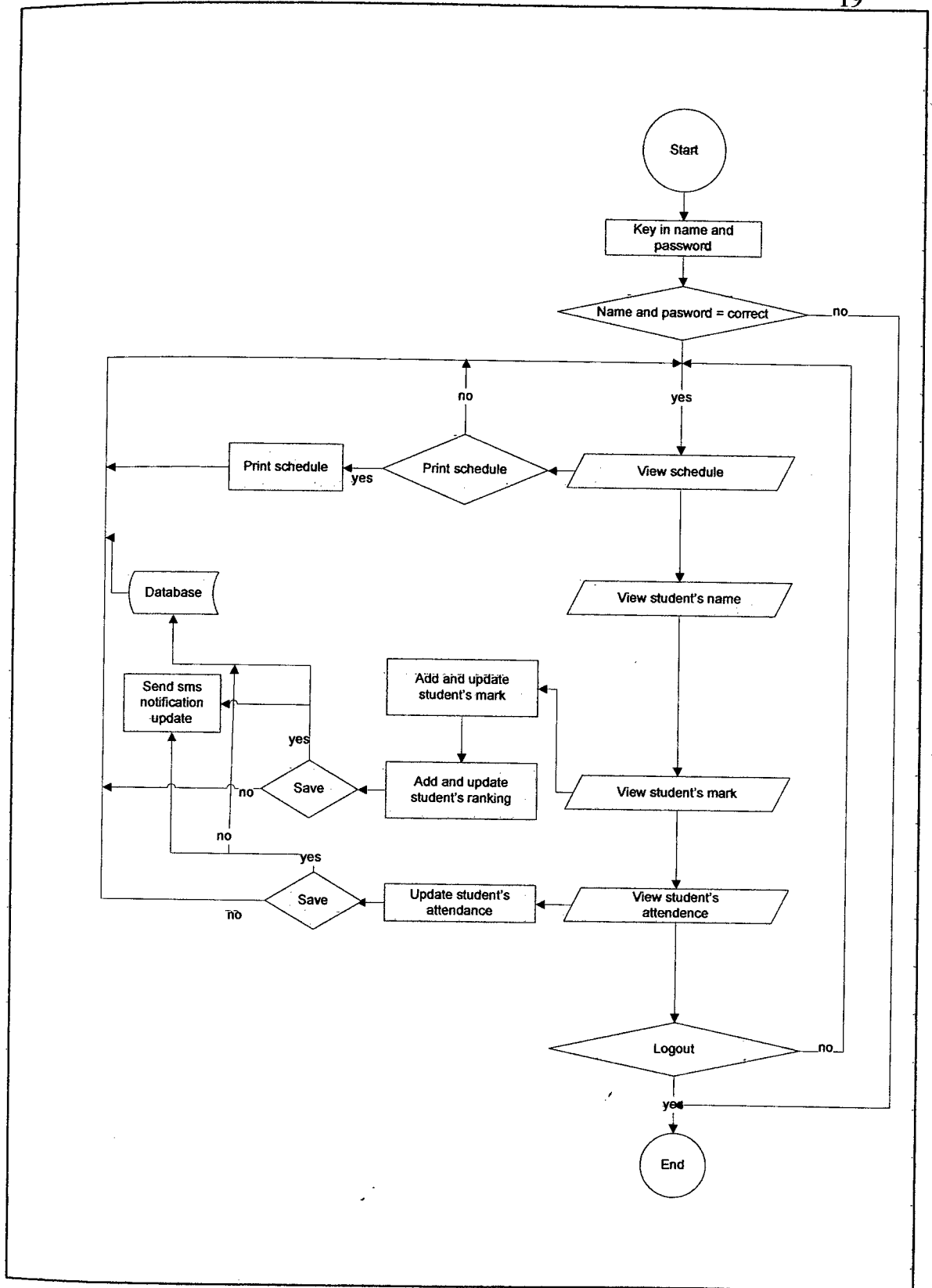


Figure 3.5.2 System flow for teacher