ONLINE APPOINTMENT SYSTEM FOR MENTOR AND MENTEE

by

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4158

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CERTIFICATION OF APPROVAL

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A project dissertation submitted to the

Business Information System Programme

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Approved by,

_____

(Dr. Wan Fatimah bt Wan Ahmad)

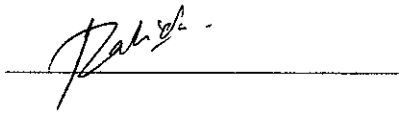
UNIVERSITI TEKNOLOGI PETRONAS

TRONOH, PERAK

July 2007

CERTIFICATION OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this project, that the original work is my own except as specified in the references and acknowledgements, and that the original work contained herein have not been undertaken or done by unspecified sources or persons.



RAHIDA ABD RAHIM

ABSTRACT

The internet has dramatically impacted the business world in the last few years and this trend will certainly continue well into the future. In current environment, the Internet has shown the potential of developing and delivering many tools. The best word to describe about the Internet technologies is that this tool has become a major or vital part of Information Technology world. It provides the online services such as the online banking, supporting the transaction via the net and also contributes to the development of online education. This project paper will serves as a literature review about the project chosen and at the same time it will discuss the objectives, the characteristic of the projects including the methodology involved and the process of creating the accomplishment of this project. The project is the Online Appointment System for Mentor and Mentee. The idea is to help the mentee easily check the availability and make an appointment with their respective mentor. The methodology for the development of the prototype is the traditional Software Development Life Cycle (SDLC) model, and the steps involved will covers from analysis until the testing phase. The relevancy of this project is supported by the information gathered from various acknowledge articles, journals, and researched done.

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CHAPTER 1
INTRODUCTION

This section describes the main information regarding the project. Include in this section are; project background of study, project problem statement, project objective and scope of study.

1.1 BACKGROUND OF STUDY

In this Online Appointment System for Mentor and Mentee project (OASMM), the main idea is to provide opportunity for the mentee easily reach or meet their mentee by making an appointment online. Recently, there is no mentor and mentee web based system that provide mentor's information and for the mentee to make an appointment with their respective mentor.

Based on this realization, this project has came up with an online system that is used by mentee to help them easily meeting with their particular mentor in checking the availability of the mentor and also made an appointment with them through online. In addition, mentees can view the mentor's information before accessing them. Moreover, the mentor also can update any upcoming news, meeting or events held to their mentee by posting an announcement.

1.1.1. What is Online Appointment System for Mentor and Mentee?

The Online Appointment System for Mentor and Mentee has similar concept of online applications available in current days. However, the heart of this online system is to

interactive and user friendly interface so that mentees can easily used the online system. The materials used in this document were solely for studies purpose which focused on how to build the online appointment system and also how the system works. The reviewed journal and website was used to study the existing online appointment system and as well as to build a new online appointment system for mentor and mentee of Universiti Teknologi PETRONAS. This information will be use by the author as a guide to develop the system. For this project, the user will be the UTP's student and the lecturers themselves.

1.3.3 Feasibility of the Project within the Scope and Time Frame

It is important to identify the opportunities and limitation of this project in deciding whether the project is possible or not possible to continue. Feasibility analysis is described within the explained scope of study and the given one year period of development. To delineate and explicate feasibility of this project, the below area is focused.

Technical Feasibility

- This area of feasibility is to assess the technical knowledge and familiarity in designing and developing web page.
- Less familiarity of the scope or technology will generate more risk and imperil the completion of this project with the allocated time frame.
- Since the web page will be developed using a familiar language such as PHP and Macromedia Dreamweaver MX 2004, therefore this project is possible to proceed and to be completed in timely manner.

create an online capability for mentees to view their mentor's information, checking the availability of their mentor and the most vital is to make an appointment with them.

1.2 PROBLEM STATEMENT

Currently, there is no online system for mentees to make an appointment with their mentor regarding their low performance in academic. Therefore, the author has identified some problems with respect to this project to shows the need to have the system.

1. Mentees are hard to reach the mentor through telephone calls and also miscommunication may occur to wrong information. Maybe mentees will not get fully informed about the last minute cancellation of their appointment.
2. Mentees are not aware of their mentor's availability. When they'll try to reach the mentor at their office, unfortunately they are not available.
3. As for some mentees, they did not recognize their respective mentor because not all of the mentees will be assigned with the lecturers from the same department/programme. This is hard for them to get the information about the mentor and also to reach them.
4. Did not know the latest announcement made by their respective mentors.

1.3 OBJECTIVES AND SCOPE OF STUDY

1.3.1 Project Objectives

The objectives of this project are as follow;

- To develop an online appointment system for mentor and mentee in UTP.
- To provide the students with the information of their respective mentor and also to give an easy way to meet their mentor.

1.3.2 Scope of Study

The scope of studies throughout this project is to develop a web page that helps mentees to view their mentor's background, checking mentor's availability and to make an appointment with them. Besides that, the author's responsibility is to design an

CHAPTER 2
LITERATURE REVIEW AND THEORY

2.1 SUPPORTING INFORMATION

2.1.1 What is Web site and Web Site Architecture?

From the websitearchitecture.com, web site is a related collection of World Wide Web (WWW) files that includes a beginning file called a home page while web site architecture defines as "the art and science of creating good websites". This requires useful and well-organized content (utility, commodity); good technical design (efficiency, firmness) and good visual design (beauty, delight).

To develop a good website there are three things should be measured:

1. *Technology*: fine and right links, good coding, full of browser compatibility, fast download times, appropriate use of tables and frames, approachability, follow the CSS and WC3 guidelines.
2. *Content*: suitable and fine written text, clear navigation, full of facilities (site map, contact information, search box etc).
3. *Design*: good-looking graphics, good layout, excellent choice of images, pleasant backgrounds, full of colour harmony.

2.1.2 What is Internet, World Wide Web (WWW) and Online?

From Wikipedia, the free encyclopedia, the Internet is the worldwide, publicly accessible network of interconnected computer networks that transmit data by packet switching using the standard Internet Protocol (IP). It is a "network of networks" that consists of

millions of smaller domestic, academic, business, and government networks, which together carry various information and services, such as electronic mail, online chat, file transfer, and the interlinked Web pages and other documents of the World Wide Web.

The World Wide Web ("WWW" or simply the "Web") is a global, read-write information space. Text documents, images, multimedia and many other items of information, referred to as resources, are identified by short, unique, global identifiers called Uniform Resource Identifiers (URIs) so that each can be found, accessed and cross-referenced in the simplest possible way.

The term is often mistakenly used as a synonym for the Internet itself, but the Web is actually something that is available via the Internet, just like e-mail and many other Internet services. While the Internet is a collection of interconnected computer networks, linked by copper wires, fiber-optic cables, wireless connections, etc.

Therefore, online refers to the meaning of turned on or connected. In this project, the application will involve the connectivity via internet or the intranet. This will make the application more feasible to be accessed by the user. With this capability, the user can access the system once their user personal computer is connected to the network environment.

2.1.3 The emergence of using online services

Currently, connected ourselves to the world through internet could be really basic. According to Dutta [2000], the largest service provider such as America Online indicates that an increase of online customer to 40% in early 1999 compare from the previous years. This means that, the online application is a popular way to do an online services and transaction. In addition, showing the growth and the popularity of using internet, the online application have been essential parts that contribute to the boost of online client.

2.1.4 Developing an online system

In each online application, the capability of providing online constituent might be advantages. Selber, Johndan, and Mehlenbacher [1996] said that delivering quality services for the students at a reasonable manner by considering cost and time could be really important. So it is significant to develop a system that provides the capability of scheduling component. However, in turn to build up an online system, the focus must be pondered in producing an effective and efficient system.

2.1.5 Benefit of using online appointment system.

Most of the students which are put under probation because of their low performance in academic do not have enough time to go to the Academic Central Services (ACS) to check their mentor's information such as name, phone number, current office and also email address. So it is better for the students to get their online information [Dameron, 1990]. With this system, students can easily view their respective mentor's information without wasting their time to go to the ACS. Most importantly, students can easily check their mentor's availability and make an appointment with them through internet. This will prevent them from wasting their time and cost.

2.1.6 The efficiency of online application

In sequence to develop an online application, the effectiveness and benefits provided by the application should be considered. There are a few benefits to develop an application on the web [Kendall and Kendall, 1999]. The benefits that can be considered are:

1. The possibility of accessing the system 24 hour.
2. Increasing awareness of online services.
3. A system that could expand globally rather remains at local.

Koji Torii and Morisawa Yoshitomi [2001] definite, in order to develop the application, everything will be based on the architectural style. The architectural style, which defines a framework as an application system is chosen by various participants to use. That means, either the system is complicated or not, the system will depends on the participants who's involved in the system.

This Online Appointment System for Mentor and Mentee will be kept simple to avoid the complexity. Developing an online system will require the developer to consider the issues that can cause the system to be more complicated [Dameron, 1990]. Sequentially, to develop this system, the author needs to ensure that the designing of the system is not too complicated by focusing on the simplicity of the system.

According to Vance, [2000] the force or strength of online information will be determined by how easy it is accessed and how frequently it is updated. The research indicates that for every online application, the capability of easily to be accessed and updates the information will be vital part of developing the application.

2.1.7 Website Considerations

Every Website development effort should produce a site that is universally usable [Shneiderman, 2002]. Universal usability refers to both a site's usability or "the extent to which a site can be used by specified users, to achieve specified goals, with effectiveness, efficiency and satisfaction, in a specified context of use" [International Organisation for Standardisation, 1998], and its accessibility or "usability of a site by people with the widest range of capabilities" [International Organisation for Standardisation, 2002]. There are three primary considerations while working toward accomplishing this goal: the users, computing devices, and implementation technology. In this online appointment system project, usability is very important so that the specified user which is students can used the system easily to achieve their specified goal (view lecturer's information and availability and also made an appointment with them) with effectiveness, efficiency and satisfied.

2.1.8 HIO (Harvard International Office) Student Online Appointment System

On-Line Appointment System (OLAS) is one of the existing systems that allow the students to make their own appointment with an advisor in the Harvard International Office (HIO) to discuss immigration issues related to their studies or work at Harvard University. Below is the main page of the system.

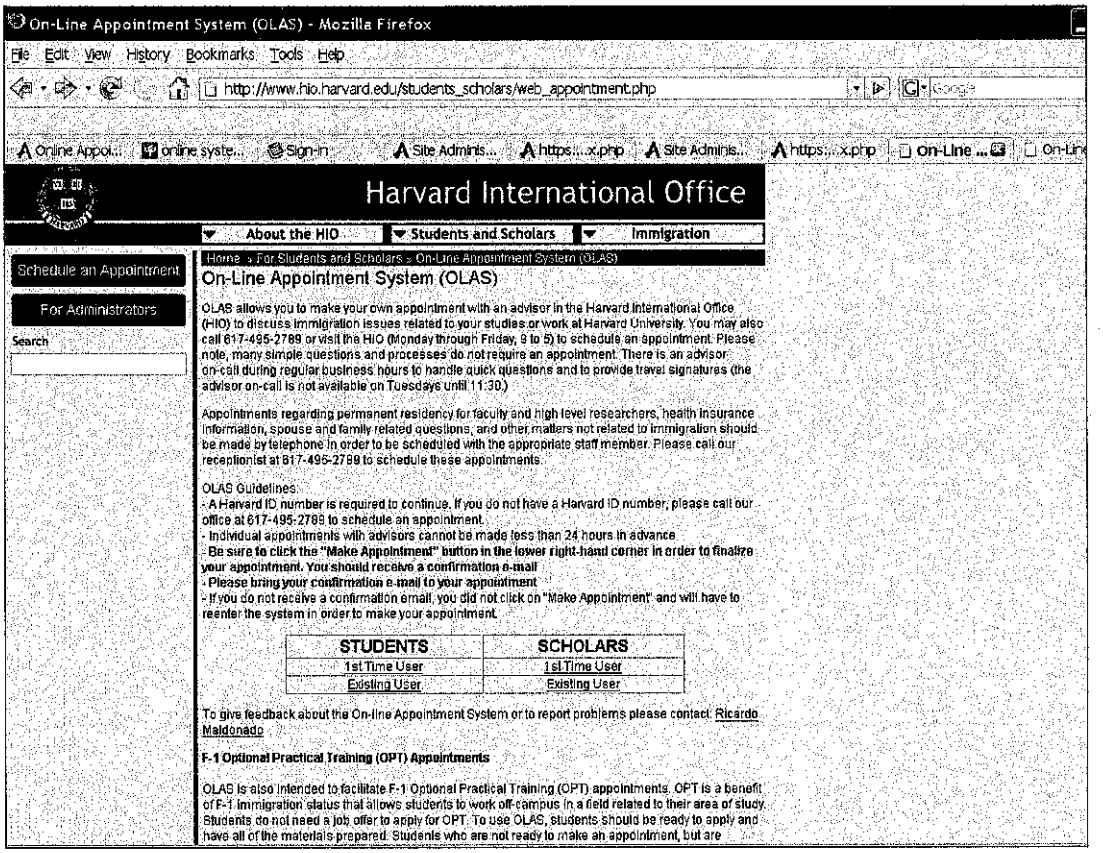


Figure 2.1 HIO Students Online Appointment System

After analyzed and reviewed the system, the author had found that the system is very suitable to be as a reference or guide to build her project on online appointment system for mentor and mentee. From the author's review of the system, she feels that the interface is simple and easy to use by the user. These systems also need their students to login with their username and password in order to access the system. For the first time user, they need to register before they can use the system. User also may cancel the appointment request if they made mistakes or would like to change for another day or time. The system used calendar format for the user to choose their date and time of appointment. After fill up the appointment form, user must finalize the appointment for

recheck and verify of their appointment's details. Then, the appointment will be confirmed and submitted into the system's database. Additionally, the system will send an email regarding the confirmation of user's appointment to their email account.

2.1.9 Harriet's Hair Salon Online Appointment Service

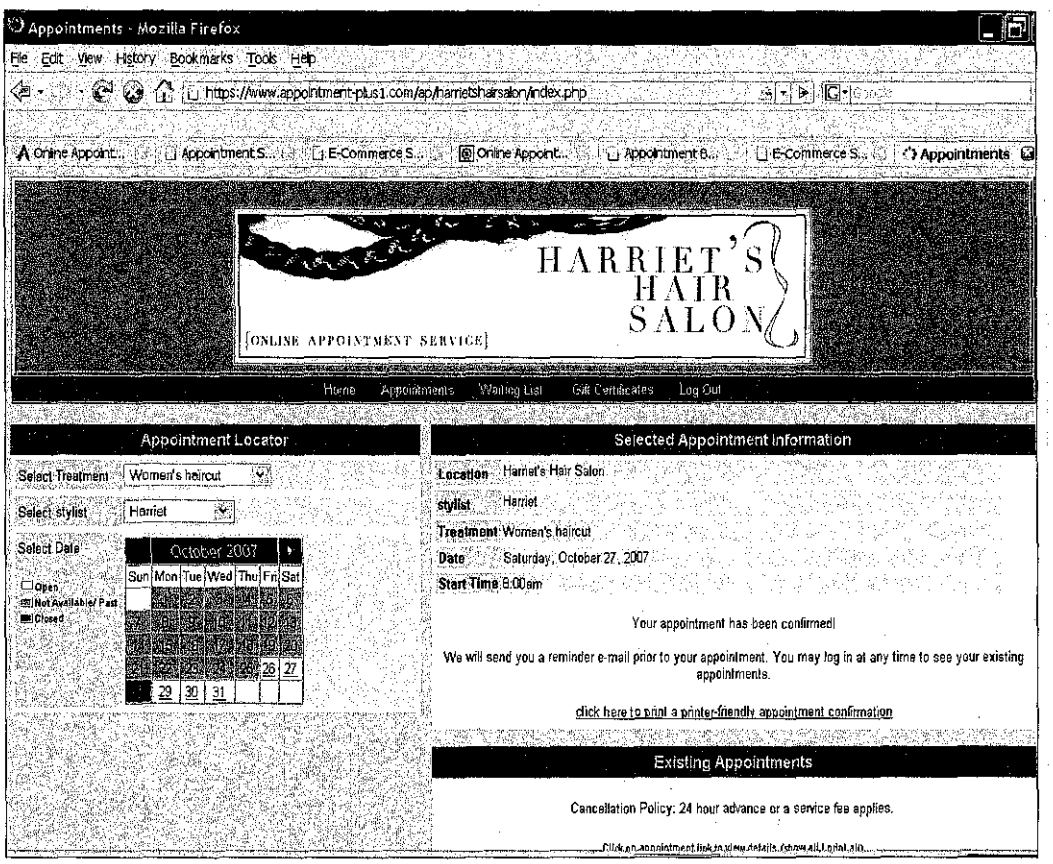


Figure 2.2 Harriet's Hair Salon Online Appointment Service

For Harriet's Hair Salon Online Appointment Service, the system is more user-friendly than HIO Student Online Appointment System. The system also used calendar format for the user to choose their date and time of appointment. Almost all the functions are alike to HIO Student Online Appointment System. However, the difference is this system has a function for their user to print out their appointment's information.

2.1.10 Online Appointment Book – zappointments.com

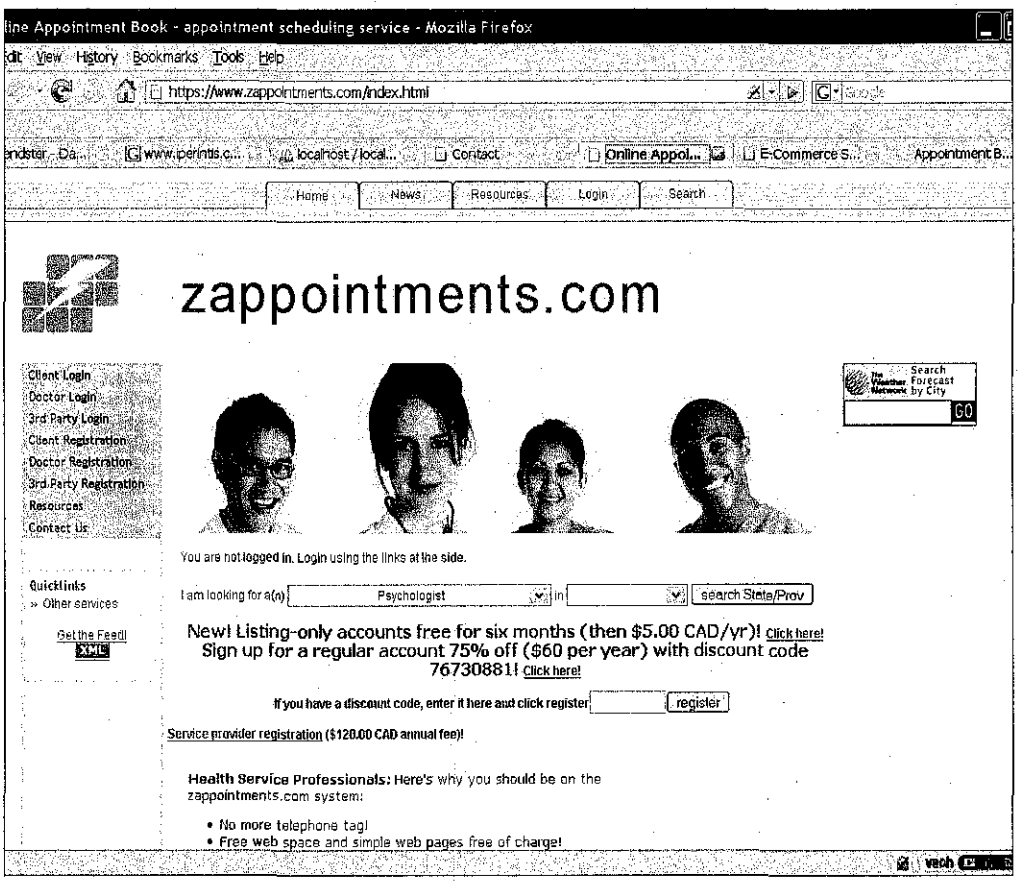


Figure 2.3 Main page of the system

These online systems allowed their patient or client to make an appointment with their respective doctor. For this Online Appointment Book, their basic functions are similar to other existing online appointment system. These systems also need their client to login with their username and password in order to access the system. For the first time user, they need to register before they can use the system.

2.1.11 iPerintis Sdn Bhd website – www.iperintis.com

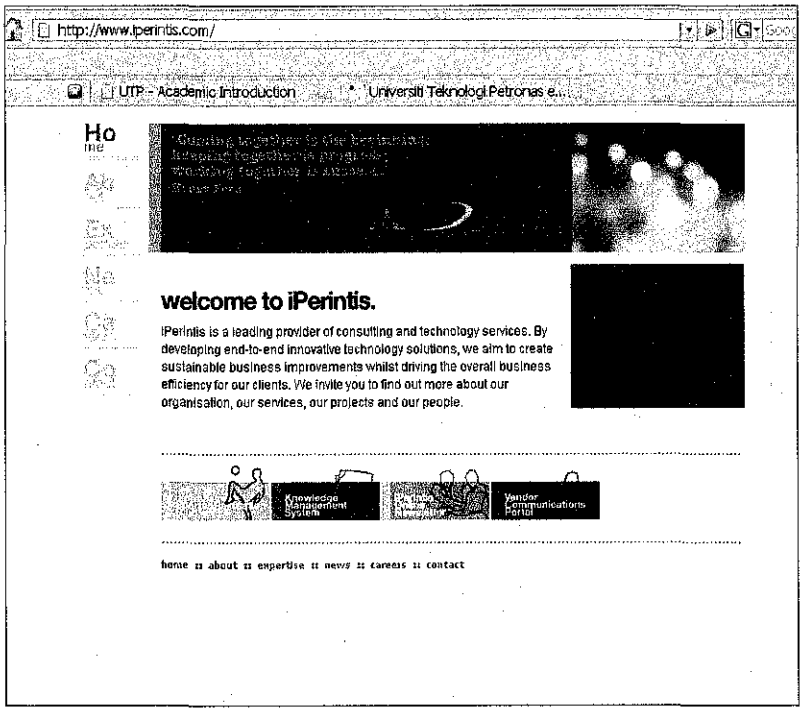


Figure 2.4 Main Page of iPerintis Sdn Bhd website

As for this website, I had reviewed it based on the multimedia elements such as font, color, image and also the contents. I also found that this website is very simple and user-friendly.

For the font, the satisfaction of user is based on how easy the users can read the information provided in the website. So for this font element, they used a very simple and easy to read the type, size and color of font. In this website there are a few images have been used. Those images are image of banner, the button functions and also the logo. The images used also very simple and interactive.

For the color, they used a few colors which are the author feels very attractive such as blue, yellow, green and red. For the last multimedia elements that have been reviewed is the content of the website. The content is about the information that are included, the navigation link and also the arrangement of the content. The author feels like the

arrangement of the information is very effective and easy for the user to view. This show that the content such as link are well placed to ease the user to used.

2.1.12 California Department of Motor Vehicles – Appointment System

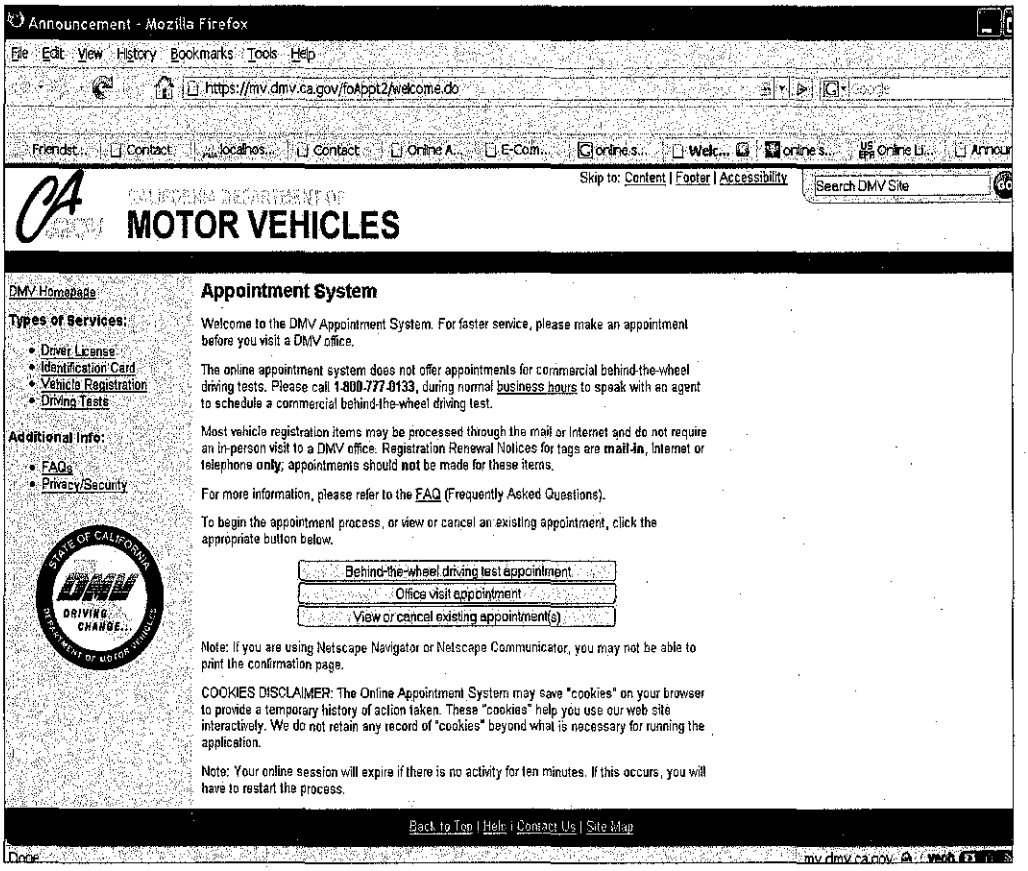


Figure 2.5 Main Page of California Department of Motor Vehicles – Appointment System

From the author's review of the system, she feels that the interface is straightforward and easy to use by the user. These systems also need their users to login with their username and password in order to access the system. For the first time user, they need to register before they can use the system. User also may view or cancel the existing appointment request if they made mistakes or would like to change for another day or time. The system used calendar format for the user to choose their date and time of appointment.

CHAPTER 3
METHODOLOGY/PROJECT WORK

The methodology that the author has adopted in developing Online Appointment System for Mentor and Mentee is the waterfall model. The waterfall model is a sequential software development model (a process for the creation of software) in which development is seen as flowing steadily downwards (like a waterfall)

It produces the benefits of reviewing the system development with the advantages of breaking it into phases. Waterfall development has distinct goals for each phase of development. Imagine a waterfall on the cliff of a steep mountain. Once the water has flowed over the edge of the cliff and has begun its journey down the side of the mountain, it cannot turn back. It is the same with waterfall development. Once phase of development is completed, the development proceeds to the next phase and there is no turning back.

The advantage of waterfall development is that it allows for departmentalization and managerial control. A schedule can be set with deadlines for each stage of development and a product can proceed through the development process like a car in a carwash, and theoretically, be delivered on time. Development moves from concept, through design, implementation, testing, installation, troubleshooting, and ends up at operation and maintenance. Each phase of development proceeds in strict order, without any overlapping or iterative steps.

For the next part, the author will explain about how the waterfall model is been implemented in the development of the system. Methodology used in the progress of this project includes information gathering through research on internet and books and also questionnaire. The project had five important stages that are the planning stage, analysis stage, design stage, development stage and finally, testing and implementation stage.

The system is developed during the design and development stage. Testing is run regularly to check whether the system run as expected. In the final part, the evaluation phase is been conducted in order to analyze the system performance and efficiency of the system. All the phases are combined to form one model of development known as Waterfall model.

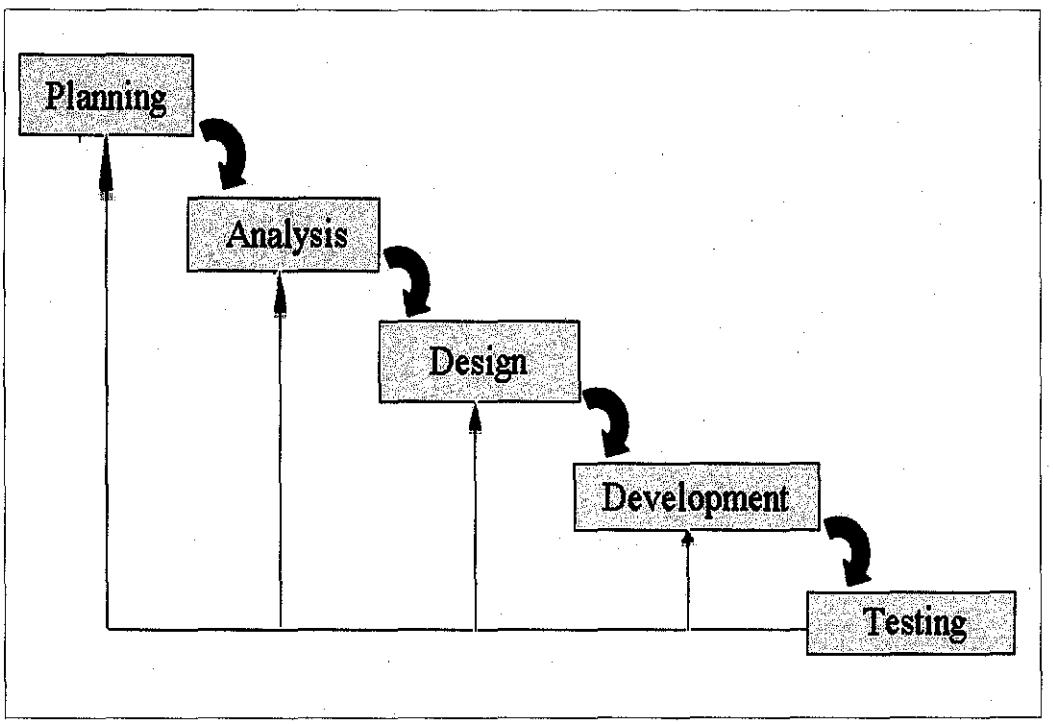


Figure 3.1 Waterfall Model

For the next part, the author will explain in details a major process of waterfall model in creating this online appointment system.

3.1 Planning Phase

Planning stage is where brainstorming of the project is being done. This is the early or preliminary phase in which the author defines the clear problem definition based on the current problem that occur in the real world. This covers the possibilities of creating a solution toward the current problems that are defined at this stage. The steps in this stage are to be able to create work plan, and to control and direct the project. Further explanations are as below,

- Work Plan is to identify ask that need to accomplished and estimate the time it will take to complete.
- Controlling and directing project means managing the project until it is complete and delivered. The steps include refining project estimation, tracking task, managing scope, mitigating risk.

3.2 Analysis Phase

Analysis phase is where all the data and information gathering is done. Further explanations of what should be done during this phase are as follow,

- Develop analysis plan. Conducting an analysis plan is a good practice in controlling and managing the steps should be taken in throughout the analysis phase.
- Information gathering. To understand this project, all necessary information and data should be gathered and collected. Browsing Internet for certified journals, articles and similar product, and also referring to books or other people research are part of information gathering.

In this phase, the author has identified the problem statement, area of study, objectives, and goals that want to be achieved while developing the Online Appointment System for Mentor and Mentee. The author has developed this system to the target user which is the students and lecturers in Universiti Teknologi PETRONAS. The purpose of developing

this online appointment system is to provide the system that will give easiness to the students to reach their mentor through online.

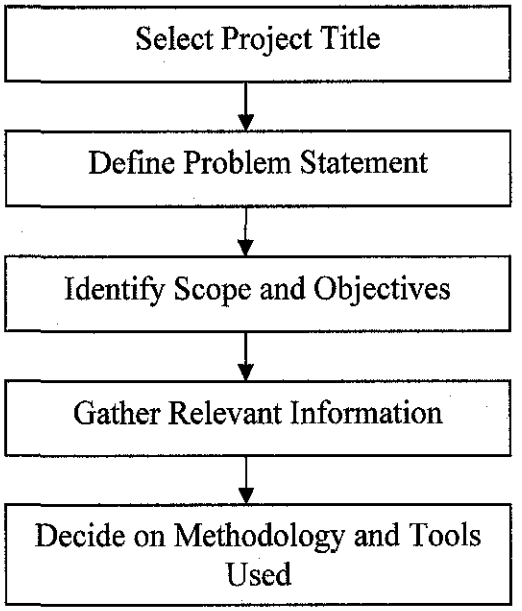


Figure 3.2 Tasks Involved in Analysis Phase

At this phase, the author also finds out the related information through out interviewing the UTP's student. During the surveys, the author uses the questionnaires as one of the method in collecting data.

- Questionnaires

The author has released the questionnaires based on interval scale in which the respondents need to rank in range of 1-5. Below are the results of the questionnaires on the relevancy of the purposed system by 20 students of UTP.

Based on the results, the majority of the students (98%) agreed that the system are relevant to be develop while there are a few numbers (2%) feel irrelevant to build the system.

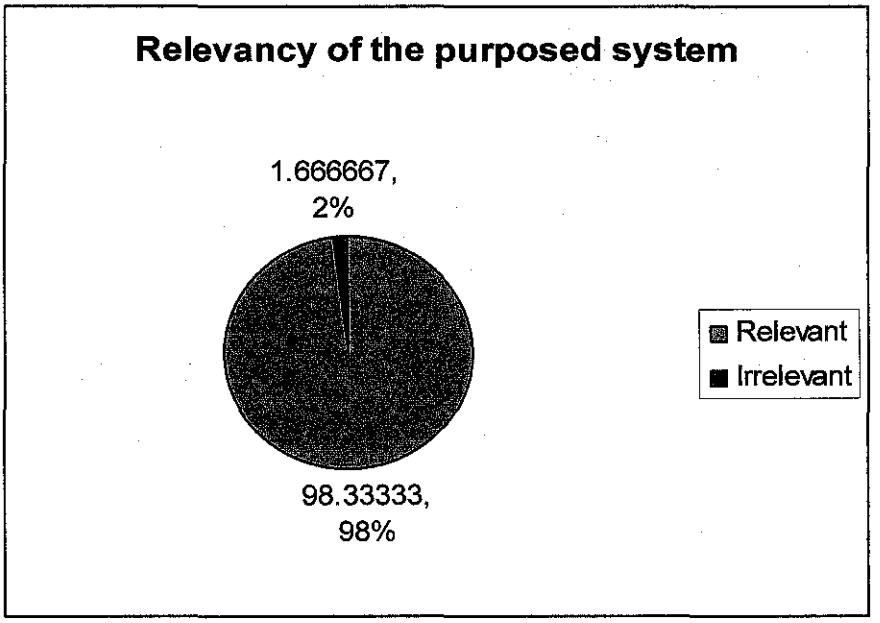


Figure 3.3 Results on relevancy of the purposed system

After the author finished analyzing on the collected data from the sample of 20 students, the author begins to enter the design phase of the system.

3.3 Design Phase

This is the phase where the draft of the interface and the system architecture is produced. At this stage require the author to design the interface at all the related feature of the system. The task mainly involves on highlighting the main characteristic of the system, the process flow of the system and architecture of the system. The process flow as shown in Figure 3.2 of the system will be design as:

1. First of all, the user (mentee) or the administrator is required to login with their username and password before accessing the system. As security purposes, the system will use student or lecturer's ID as a username and password.
2. Then after login, they will be allowed to go for the next page which is home as the main and center page that link all the pages.
3. Next, mentee can view any related issues or announcement from their mentors regarding their academic problems. Here, mentees can also view their

particular mentor's information such as name, contact number, email address, specialization and also their current office. As for administrator, other than view the announcement they also can delete, edit and update the announcement for any upcoming news or events held.

4. In the services function, user is able to ensure their respective mentor's availability by viewing their timetable.
5. After that, mentees will be able to make an appointment by fill in all the necessary information in the appointment form. Every data that the mentees entered will be transient directly to the database of the system. Mentees can also review or print out their appointment form for recheck and confirmation. For the administrator part, they can check the appointment information which the mentees had made before.
6. Finally, mentees and administrator must log out from the system as a security purposes.

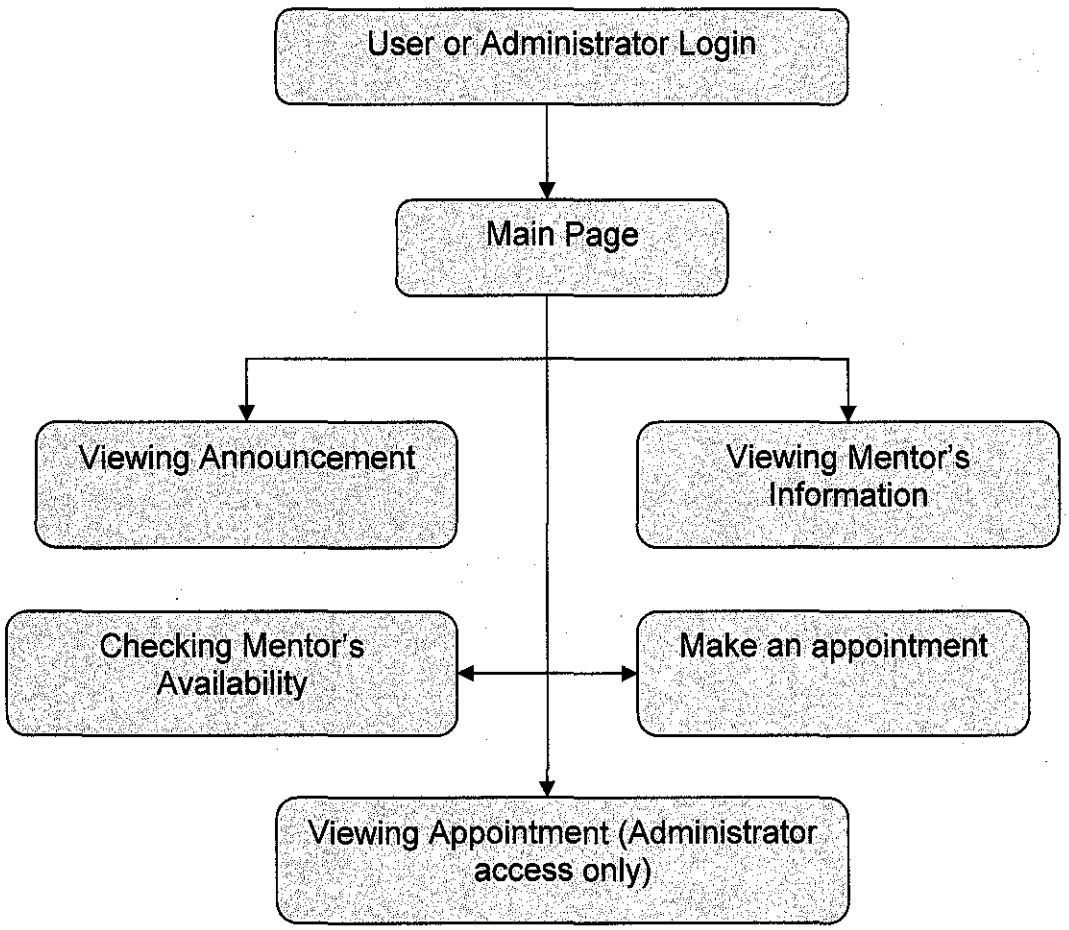


Figure 3.4 Process Flow of the System

3.4 Development Phase

At this stage, it is important for the development of product. Here also is the actual stage of producing the prototype for the Online Appointment System for Mentor and Mentee. In the development stage, the author has created the relational database which consists of tables and fields. By using the system interface that has been design in the design stage, the author has developed the system interface such as the main page, login page, appointment page and editing page.

3.5 Testing and Implementation Phase

After the module of prototype is finished, the testing phase of the system has taken over to test all the functions for the system whether it is properly functioning or not. Another purpose of having this phase is to validate application accuracy and completeness in performing the functions as designed. This testing is completed when actual and expected results are in line or acceptable. The last phase is the implementation in which it is implementing for the use of mentee and mentor with the requisite that the entire required database is created if it is tends to be implemented in the real world.

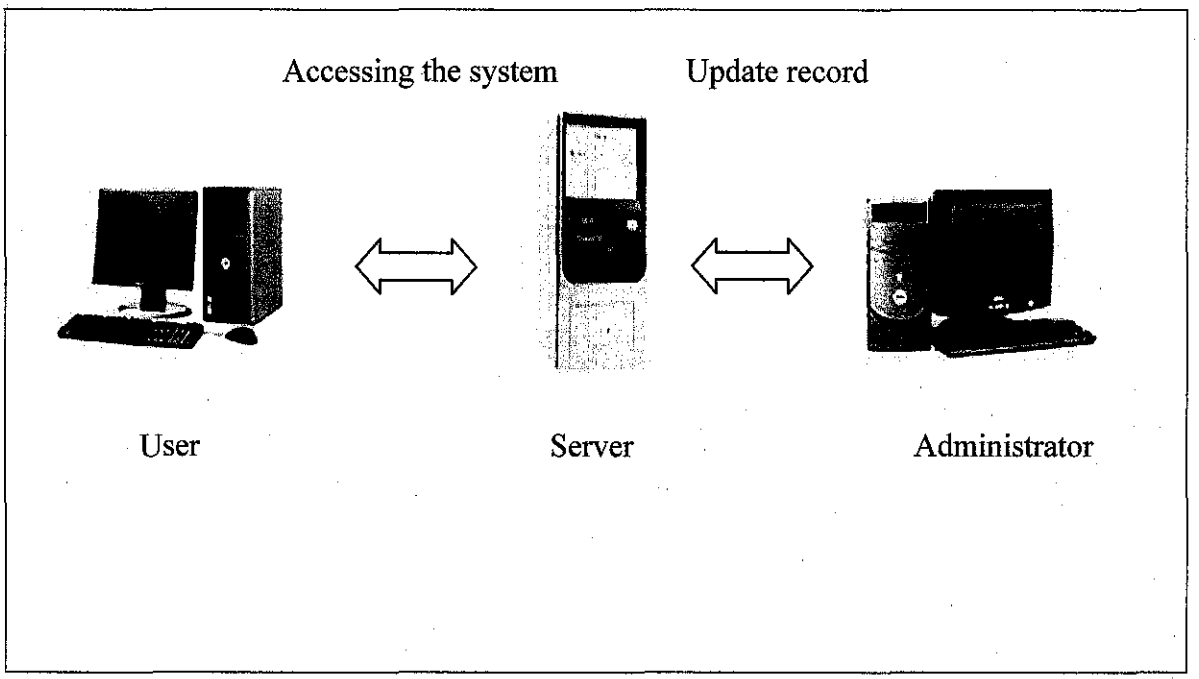


Figure 3.5 Overview of the system

Figure 3.5 figure show how the process of Online Appointment System for Mentor and Mentee being done. A server will reside at the lecturer's office that allow them to updating and review any announcement and appointments made. At the same time, the user is allowed to access the system.

Administrator are allows to make any correction by deleting, editing and updating the record. However, the user is only allows to access and viewing the information and also may request to make an appointment by filling up the form which automatically send to the system. Then, the appointment form will be stored in the database of the system.

3.6 Tools Required

3.6.1 Development tool

3.6.1.1 Programming and Coding

1. PHP (Hypertext Preprocessor)

This software is used for scripting purposes to develop the interface and the system itself. PHP stand for Personal Home Page or Hypertext Preprocessor, one of the popular tools on creating a web based application. The main reason of choosing this software is that this software provides a lot of online resources as references and it also an open source that will not require any cost of buying the right to use the software.

The PHP language's syntax is similar to the syntax of C, it is actually simpler than C because it doesn't use some of the more difficult concepts of C. PHP also doesn't include the low-level programming capabilities of C because PHP is designed to program Web sites and doesn't require those capabilities. PHP is particularly strong in its ability to interact with databases. PHP supports pretty much every database. PHP handles connecting to the database and communicating with it.

3.6.1.2 Database Management

1. MySQL

In order to create the database for the system, the author used to integrate the system with MySQL since this is the effective tools of creating the database. Below are some advantages of using MySQL:

Fast → The main goal of the folks who developed MySQL was speed. Consequently, the software was designed from the beginning with speed in mind.

Inexpensive → MySQL is free under the open source GPL license, and the fee for a commercial license is very reasonable.

Easy to use → Can build and interact with a MySQL database by using a few simple statements in the SQL language, which is the standard language for communicating with RDBMSs.

Can run on many operating systems → MySQL runs on a wide variety of operating systems — Windows, Linux, Mac OS, most varieties of Unix (including Solaris, AIX, and DEC Unix), FreeBSD, OS/2, Irix, and others.

Secure → MySQL's flexible system of authorization allows some or all database privileges (for example, the privilege to create a database or delete data) to specific users or groups of users. Passwords are encrypted.

Supports Large Databases → MySQL handles databases up to 50 million rows or more. The default file size limit for a table is 4GB, but it can increase this (if your operating system can handle it) to a theoretical limit of 8 million terabytes (TB).

3.6.1.3 Web Design

1. Macromedia Dreamweaver MX 2004
2. Adobe Photoshop 7.0

3.6.1.4 Documentation and Presentation

1. Microsoft Visio

This product is used for drawing a diagram such as drawing a chart and creating a diagram. It uses vector graphics to create diagrams. The 2007 Standard and Professional editions share the same interface, but the latter has additional templates for more advanced diagrams and layouts as well as unique functionality that make it easy for users to connect their diagrams to a number of data sources and display the information graphically.

2. Microsoft Project 2003

The author used this software to create the chart and schedule to encompass the project phase. This software provides a depth features on scheduling in which help the author to estimate and pointing the direction of this project.

3. Microsoft Word

Microsoft Word is a word processor and is considered to be the main program of Office. The author used this application to make documentation for the system.

4. Microsoft Power Point

The author used it to create slideshows of the project to be present in front of the examiners.

3.6.1.5 Web Server

- Apache Web Server

3.6.1.6 Browser

- Mozilla
- Internet Explorer

3.6.2 Hardware

Personal Computer

- Operating System : Microsoft Windows XP Professional Edition
- Processor : Intel Pentium 4, 1.70 GHz
- Memory : 384MB of RAM
- Display : ATI Mobility Radeon
- Network : Internet TCP/IP Connection

CHAPTER 4

RESULTS AND DISCUSSION

4.1 INTRODUCTION

The author would like to share the some of the results from this project as this project has been partially completed. The project is more focused on providing functions that can helps user to view their mentor's background, checking mentor's availability and to make an appointment with them. The results and discussion for this report will be discussing on two main areas which are the research and design development of the project. In order to explain the research part, the author will be depending on the data collected on the analyzing phase. A few methods such as research based on the internet articles, interviews and questionnaires can be carried out.

According to the research on internet, the author has found that there are a lot of concern in increasing and rise of internet usage. However, every application has their own specialization and characteristics on managing and delivering their tasks.

- **Efficiency of time management**

This is the main criteria needs to be considered before developing the Online Appointment System since there are no online application develops for this situation. The author had design a prototype with a simple and attractive interface which related to a certain database.

Based on the findings, the author realized that using these online system for making an appointment with the mentors are much more easy and effective by doing it through

internet. For the current system, to make an appointment with the mentor, the mentee have to make it through telephone calls. Here, occurs some problem which are, the caller cannot reach the mentor phone call or maybe mentees will not get fully informed about the last minute cancellation of their appointment. Because of this problem, the author will create the system that provides the mentees with capability to make an appointment easier.

In addition to that, any changes and progress made by the lecturer can be easily view by the students, so the lecturers no need to inform their students through telephone call. For the implementation part, after finishing the development phase, the system will be applied to the target users which are the students and the lecturers.

4.2 DISCUSSION

4.2.1 Apache HTTP Server

Apache HTTP server will be used as a stand alone server to manage the Online Appointment System for Mentor and Mentee. The Apache Server is a collaborative software development effort aimed at creating a robust, commercial-grade, feature and freely-available source code implementation of an HTTP (Web) server.

4.2.2 Application Development

There are several considerations to be taken care of before developing on the system itself. Fields such as the users, level of users, user interfaces, elements to be included and the user requirements need to be checked on, as wrong planning will make these resources unusable and wasted. Basically, there are two application tools needed to develop the Online Appointment System for Mentor and Mentee; Macromedia Dreamweaver MX and Adobe Photoshop 7.0.

4.2.2.1 Macromedia Dreamweaver MX

Macromedia Dreamweaver MX is used to design the interfaces, writing the codes, adding the functions and make it online. Before designing the system, the author needs to build a web application, setting up a web server (Apache web server), creating a root folder for the application, defining a Dreamweaver site and lastly connecting to the database. After configuring all the settings, then the designing phase can be started.

4.2.2.2 Adobe Photoshop 7.0

The author used Adobe Photoshop 7.0 to edit images and also to create a button for every function in the system.

4.3 RESULTS

For this project, the author has developed the interface of the Online Appointment System for Mentor and Mentee. The span of the system covers the process involves that will be navigated by the user, the software and hardware involves and also the parties within the system architecture. There are two types of target people using this online system, firstly, user which is mentor and secondly the mentee.

- Students View

The author has described the system into a few main processes that the user will navigate in the system. The processes are:

- The user needs to log in into the system.
- The user viewing the announcement post by the lecturer.
- The user viewing their lecturer's information
- The user checking on mentor's availability and send the appointment to the system.
- The user will log out from the system.

The user interface for this online appointment system have been kept simple and structured manner. This is to let user have an impression that the system is easy to use and can provide the information and functions that they need.

4.3.1 Accessing the system

Firstly, the users are required to enter his/her username and password that had been given by Academic Central Services to enable them to access the system. Figure 4.1 shows the main login and the login page for the user.

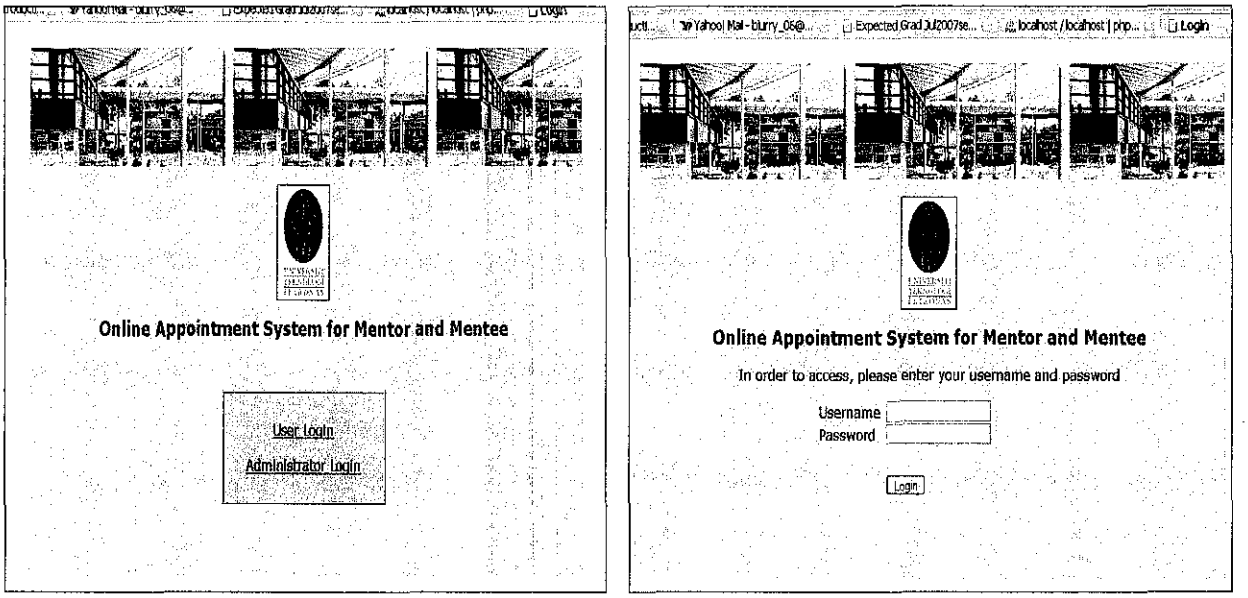


Figure 4.1 Login Page

4.3.2 Main page

After the users have entered their username, password and followed by click on the button login, they will automatically access the system. Then, the main page of the system will appear as shown in Figure 4.2.

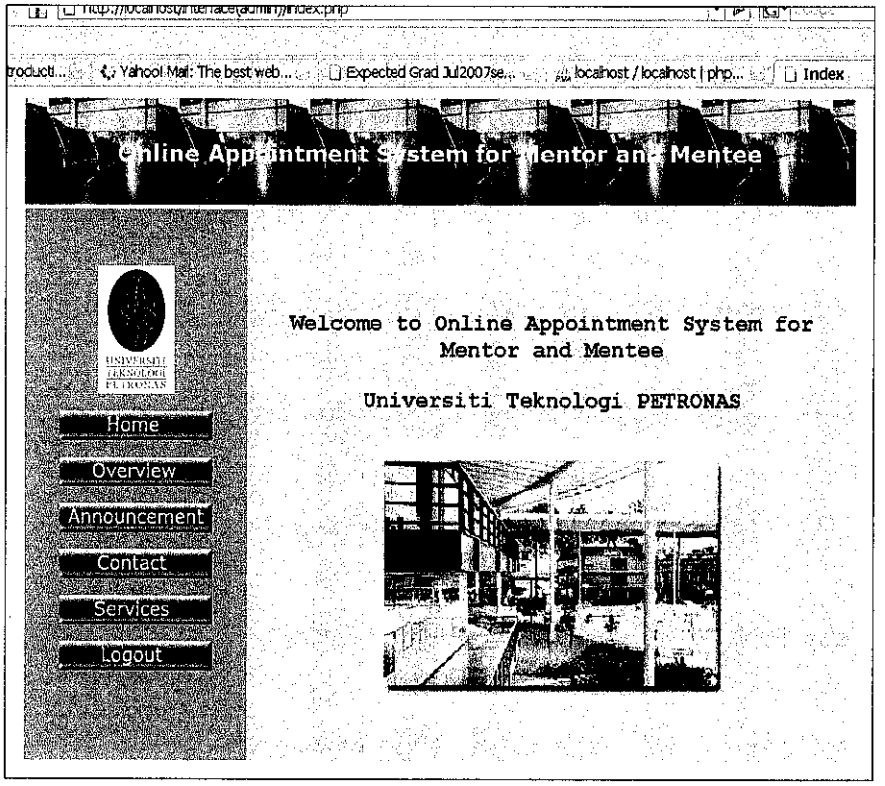


Figure 4.2 Main Page (Home)

4.3.3 Overview page

User can view the introduction and history of the system by clicking on the menu on the left side of the page that displays *Overview*. Figure 4.3 shows the introduction page of the system.

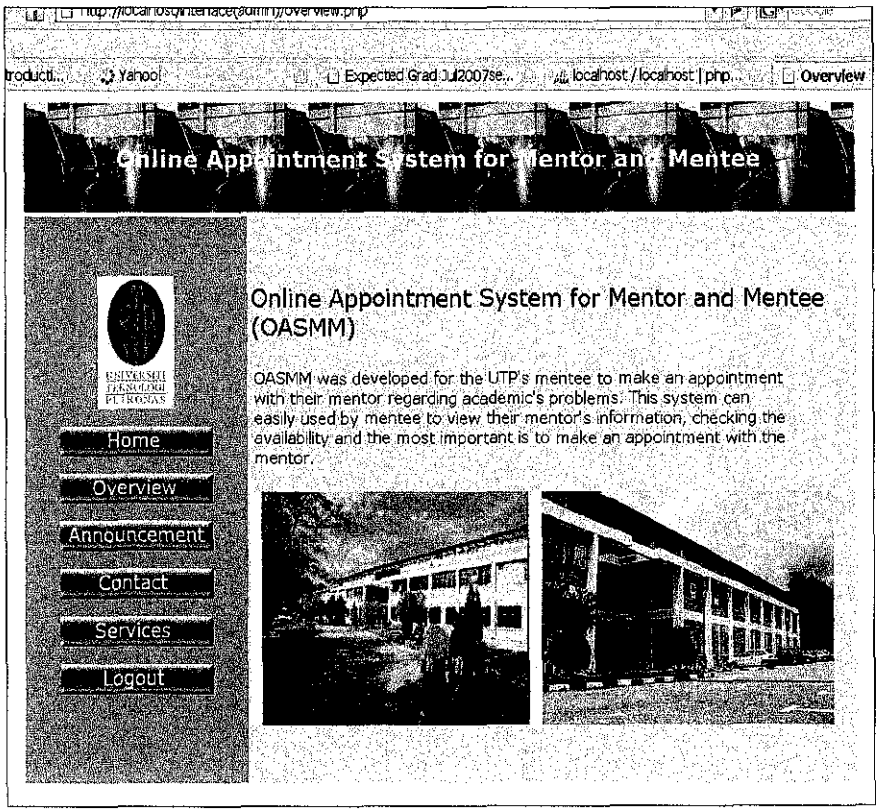


Figure 4.3 Overview Page

4.3.4 Announcement page

The system provides a function that easy for the users to view the announcement made by the lecturers. Just click on the menu on the left side of the page which displays *Announcement* and it automatically appear the page with the announcement made by the administrator. Figure 4.4 demonstrate the announcement page.

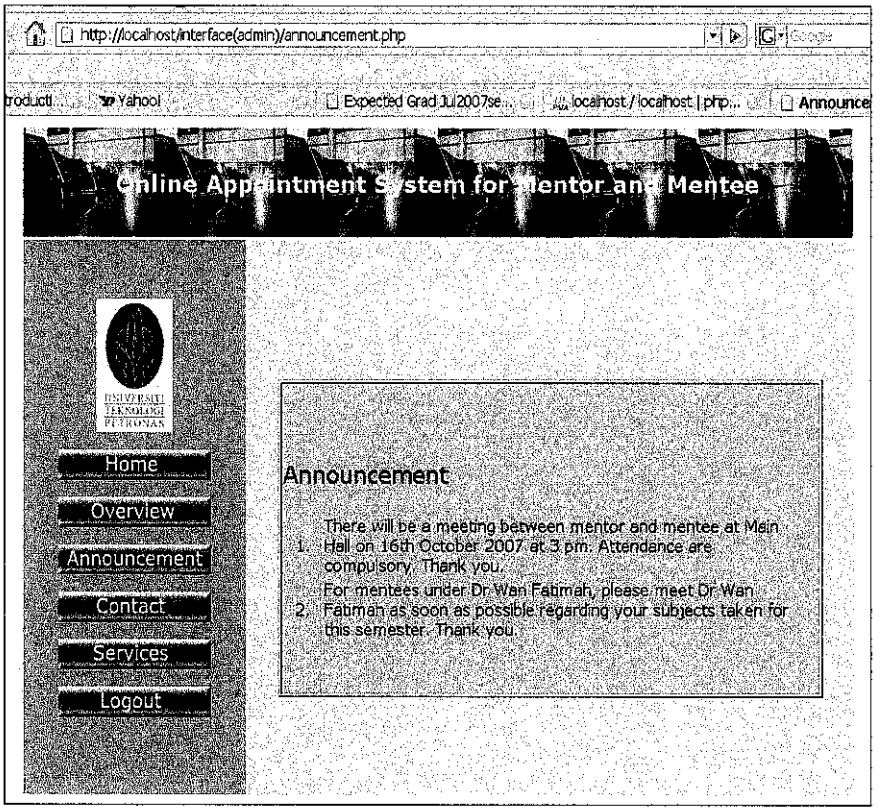


Figure 4.4 Announcement Page

4.3.5 Contact

There is a function for the user to view or check their lecturer's information such as name, contact number, email address, office and programme. Simply click *Contact* on the left side of the system. Then, it will display the entire lecturer's information. Figure 4.5 shows the lecturer's information page.

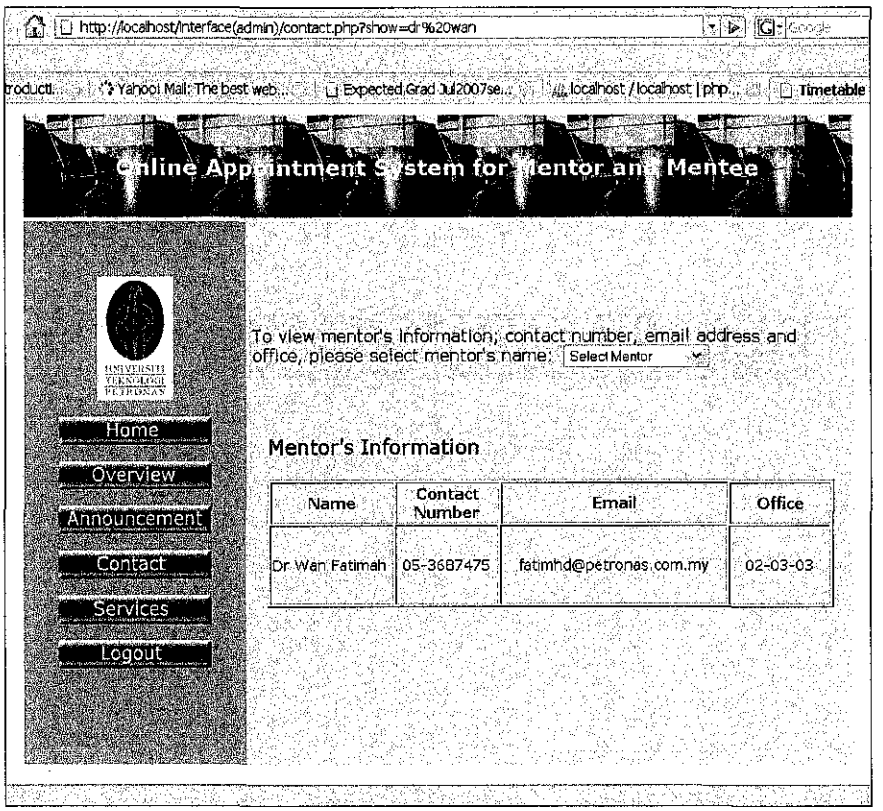


Figure 4.5 Lecturer's Contact Information

4.3.6 Services

In the *Services* page, the system provides three functions for the mentor, which is checking the mentor's availability, filling up the appointment form and also canceling an existing appointment made before. Figure 4.6 illustrate the three functions in *Services* page.

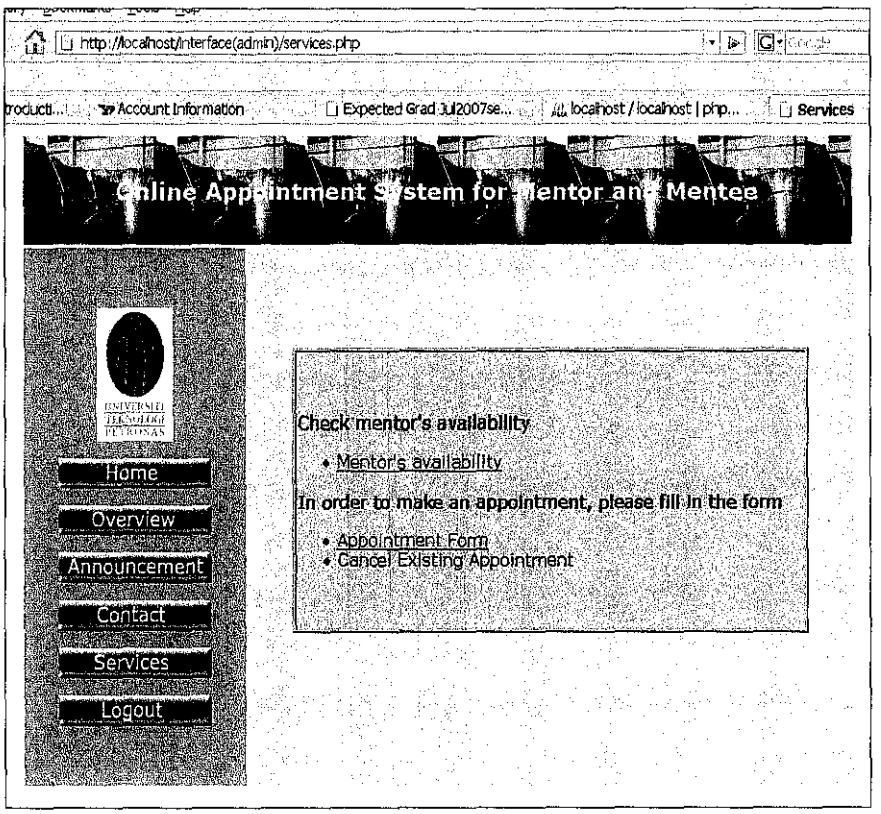


Figure 4.6 Services Page

4.3.6.1 Mentor's availability

To check the mentor's availability, the system provides the mentor by viewing mentor's academic timetable. Figure 4.7 illustrate the timetable of the selected mentor.

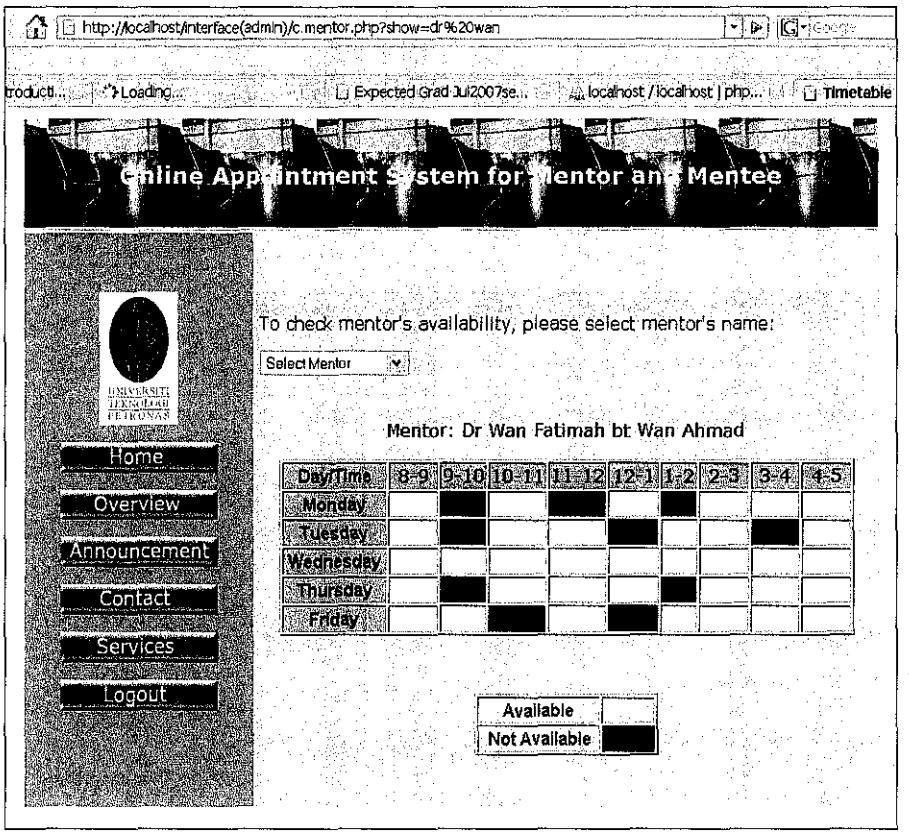


Figure 4.7 Checking Mentor's Availability

4.3.6.2 Appointment system

Figure 4.8 shows the online appointment form page. In order for the user to make an appointment, the user will need to fill in a simple form that contains all the information related to the appointment purposes.

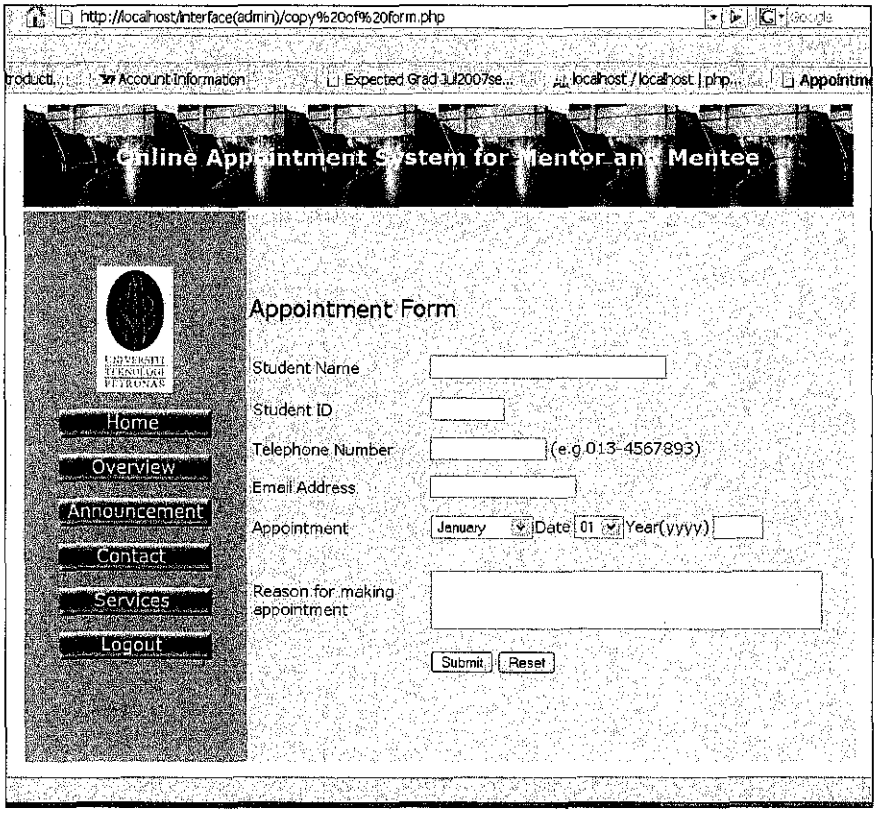


Figure 4.8 Online Appointment Form

Finally, the successful appointment page will appear once the user had submitted the form. Figure 4.9 shows the successful appointment page.

Figure 4.9 Successfully submitted form page

4.3.7 Log out from the system.

For security purposes, the user must log out from the system after they had finished using the system. The author tried to make the system easily access by the novice user, so it is done through the simple design of the interface.

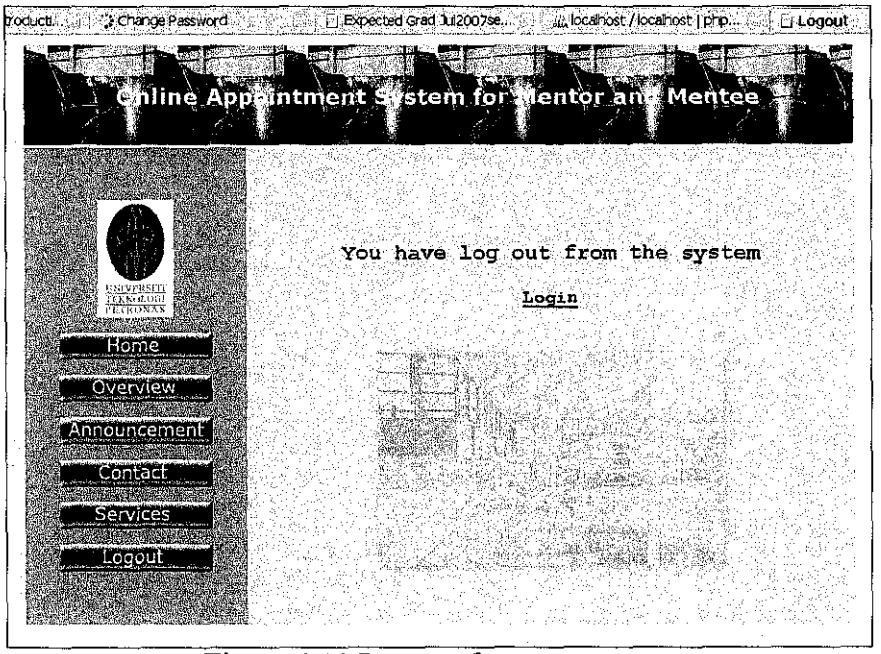


Figure 4.10 Log out from system

- **Administrator**

Overview Page

Administrator has the right to view, edit, delete and update the overview of this Online Appointment System for Mentor and Mentee.

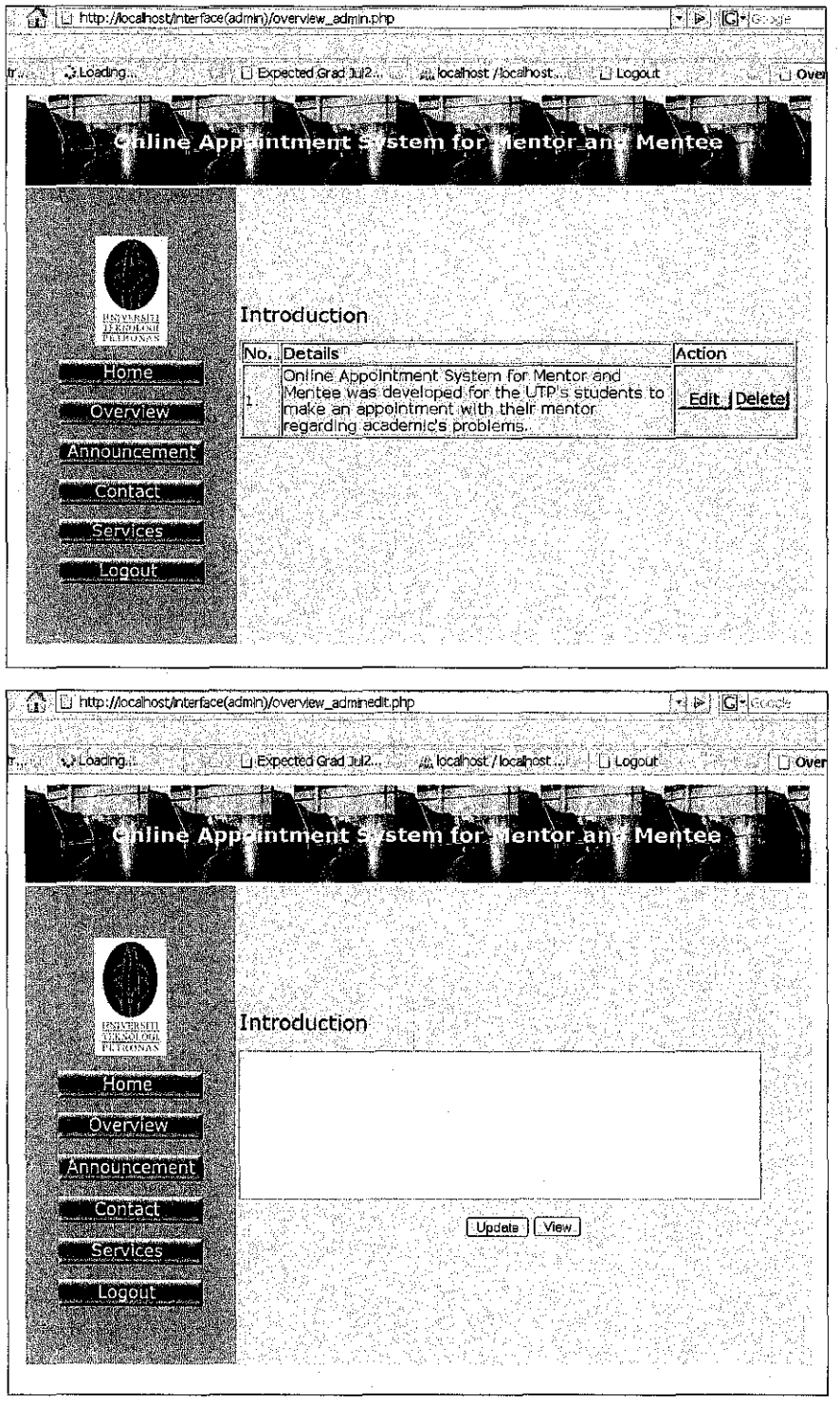


Figure 4.11 Admin Overview Page

Announcement Page

Administrator has the right to view, edit, delete and update the announcement of this Online Appointment System for Mentor and Mentee.

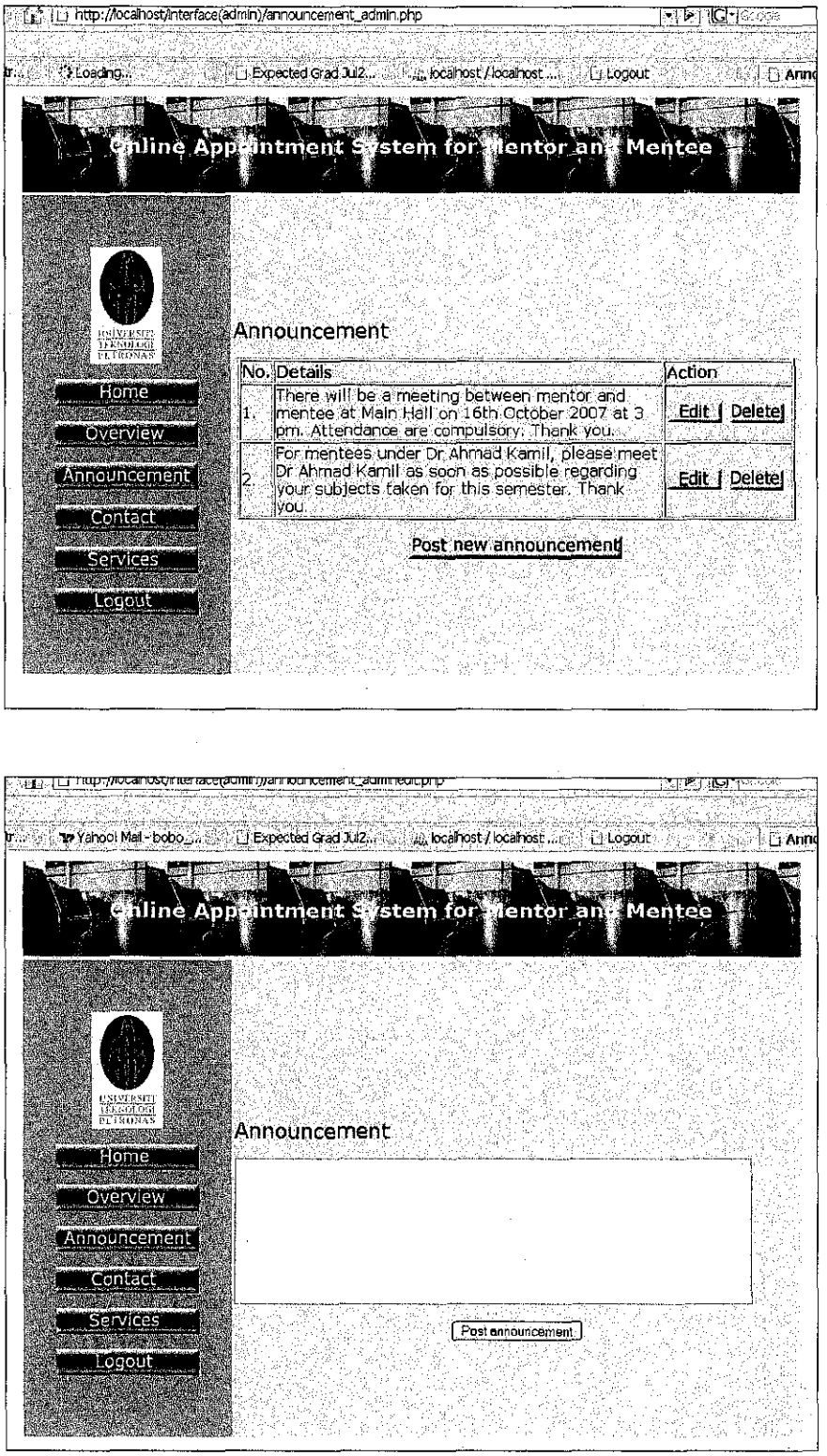
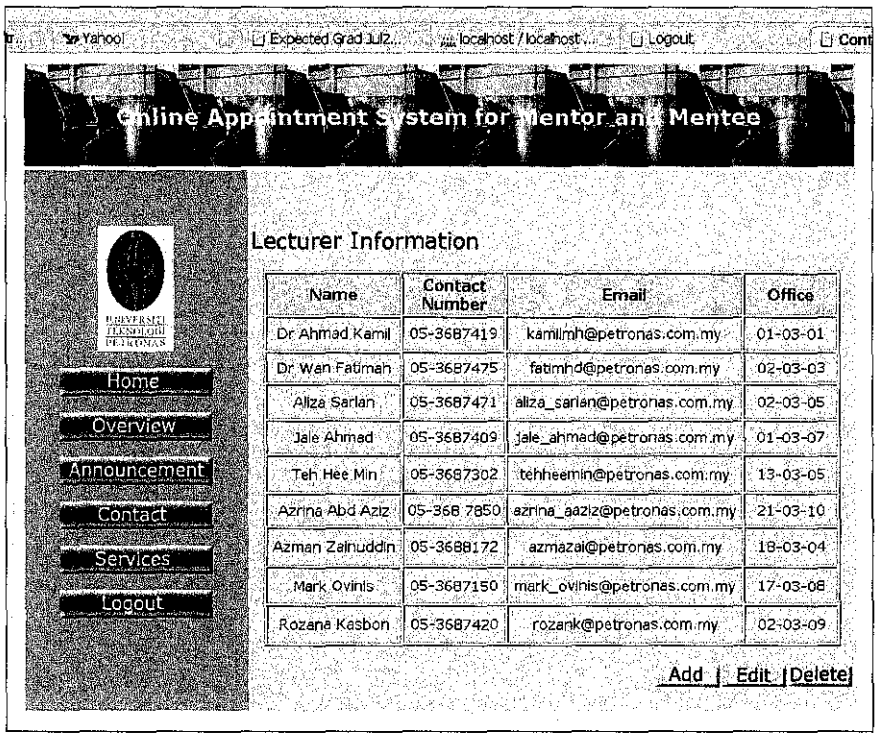


Figure 4.12 Admin Announcement Page

Contact Page

Administrator has the right to add, view, edit, delete and update the mentor's information of Online Appointment System for Mentor and Mentee.



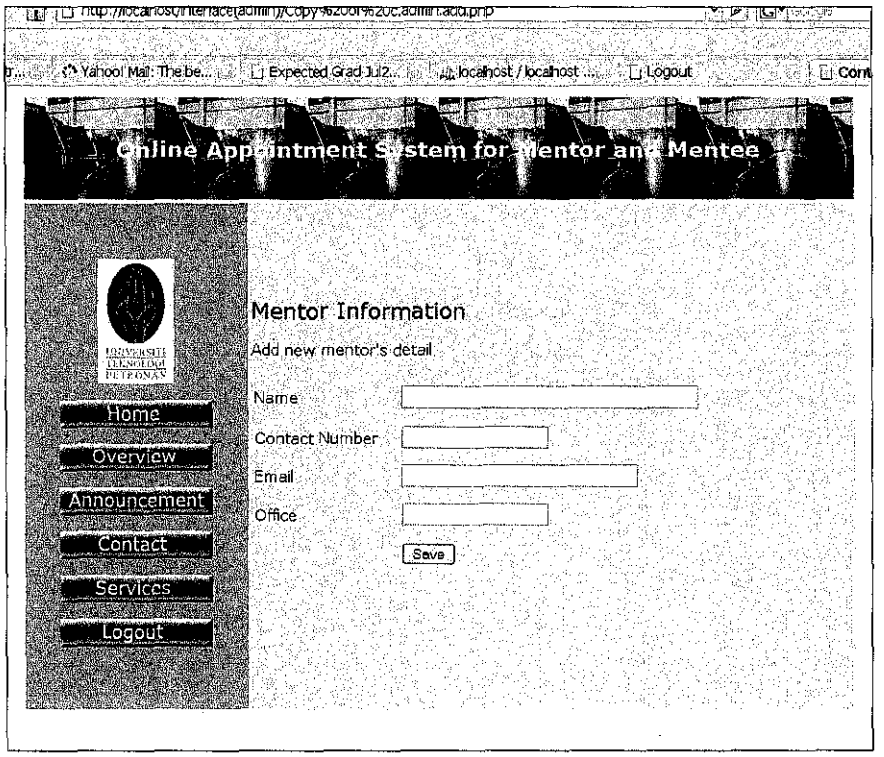
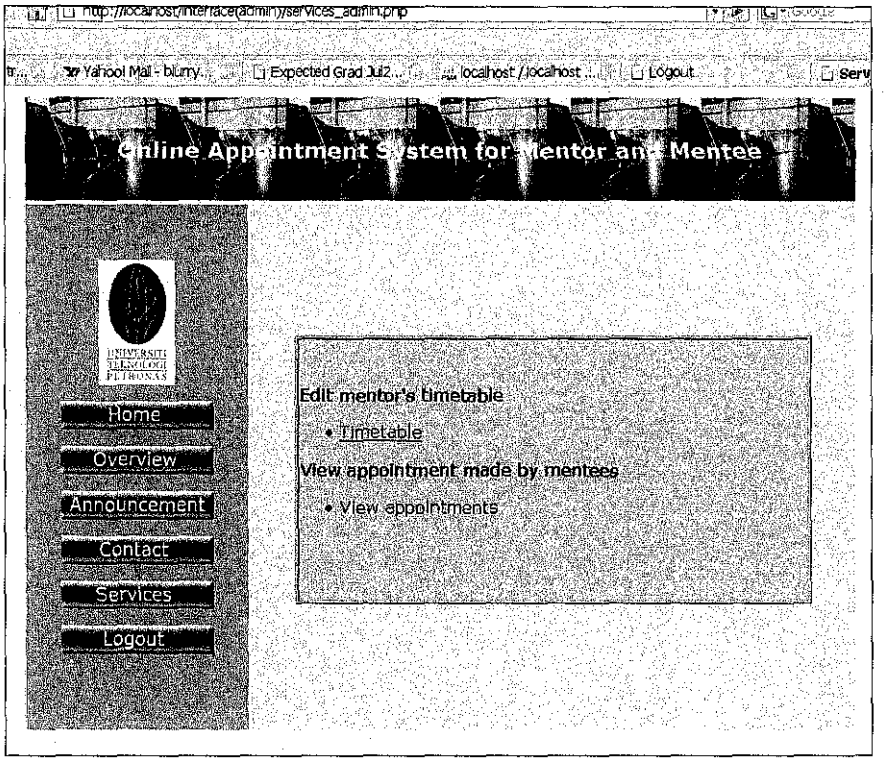


Figure 4.13 Admin Contact Page

Services Page

Administrator has the right to view, edit, delete and update the mentor's timetable of this Online Appointment System for Mentor and Mentee.



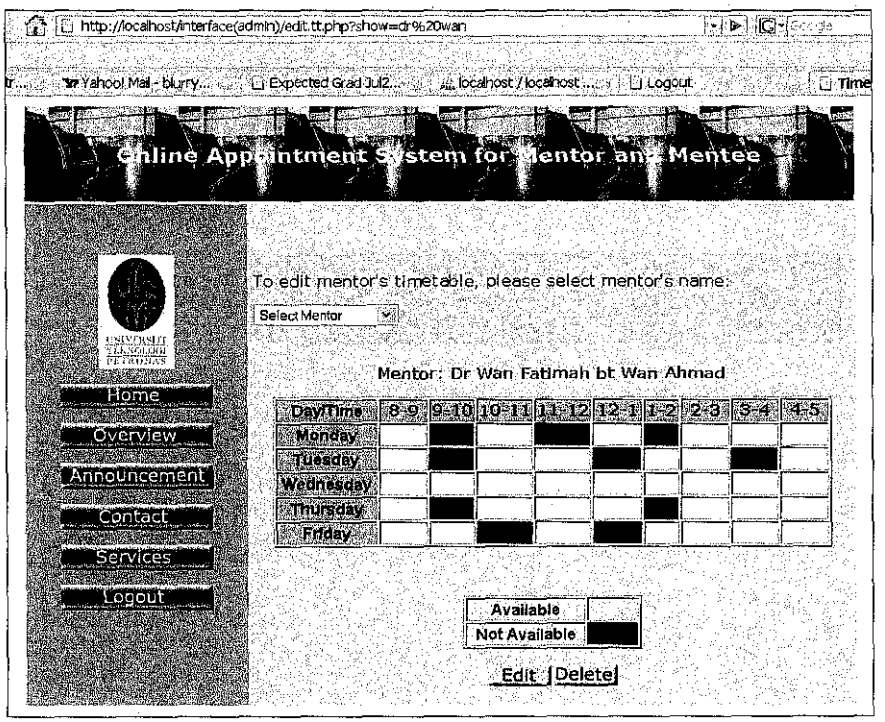


Figure 4.14 Admin Services Page

4.4 ANALYSIS

The questionnaire is done to survey the feedback and response from the user after using this online appointment system. However, this survey is just to measure the satisfaction of the user on the interface of the system merely since the system in not fully functioning yet. The next survey to evaluate the functions of the system itself will be done later. For the user to answer the questionnaire on the satisfaction of the system interface, the user needs to test and have experience with the system first. There are 20 students involved in the testing and answering the questionnaire. Those users are limited to university students and randomly selected among them. The results of this questionnaire from the users have been analyzed and the results are as follows:

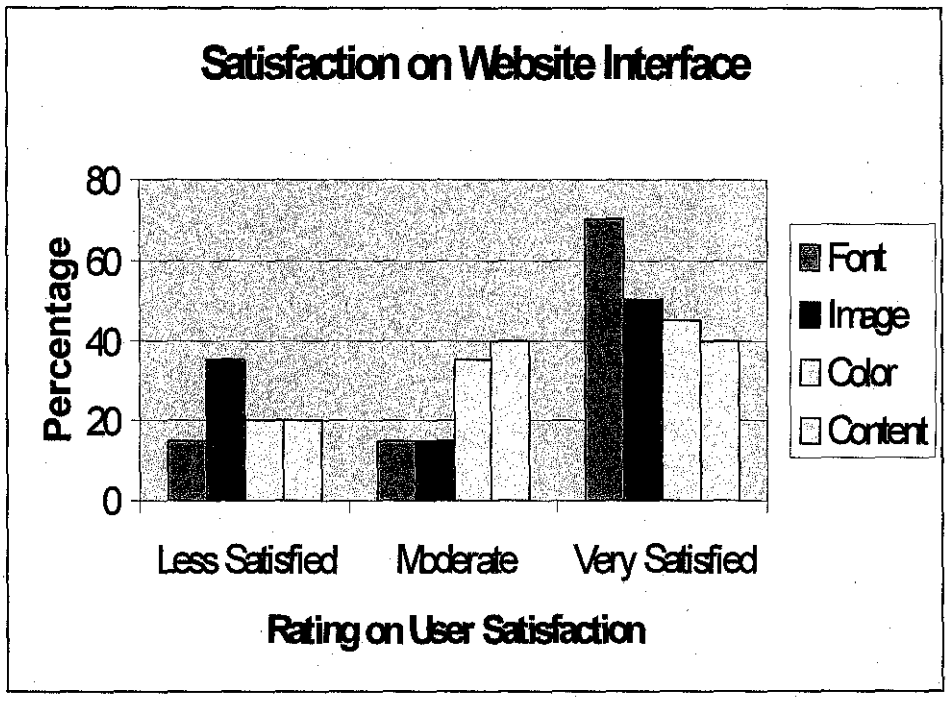


Figure 4.15 Results on Satisfaction of Website Interface

Figure 5.6 is the survey of user satisfaction on the website interface. The survey is about the multimedia elements that have been applied in the website. Those elements are font, image, color and also the content.

For font survey, the satisfaction of user is based on how easy the users can read the information provided in the website. For this font element, 15% of users are moderately satisfied, 15% are less satisfied and the other 70% of users are very satisfied with the color of the font, size of the font and the type of font.

In this website there are only few images have been used. Those images are image of banner and logo. 35% not very satisfied with the images, 15% are moderately satisfied; meanwhile another 50% are very satisfied with the images respectively. The statistic shows that the website should have been added with more images to make it more interactive.

For color, 10% users are not satisfied, 35 % are moderately satisfied, and another 45% are very satisfied with the color usage to the website. With the survey, shows the low percentage of users that are very satisfied with the color used, the website needs to add more attractive color.

For the last multimedia elements that have been survey is content of the website. The content is about the information that are included, the navigation link and also the arrangement of the content. 40% of users are moderately satisfied with the content, 20% are less satisfied, and another 40%are very satisfied. This show that the content such as link are well placed to ease the user to used.

CHAPTER 5
CONCLUSION

5. CONLUSION

Therefore in conclusion, this project "Online Appointment System for Mentor and Mentee" is to help the students to view their mentor's information, checking the availability and make an appointment with them. This project will study the elements and characteristic of a good online application, designing an interactive and user friendly interface so that students can use the online system without any difficulty. It is essentially to make easiness for the students to reach and meet their mentor instead of getting to them through telephone calls.

RECOMMENDATION

There are several recommendation and suggestions that can be done in the future for the improvement and system enhancement of Online Appointment System for Mentor and Mentee UTP.

The first recommendation is regarding the website interface and multimedia elements that have been applied in the website need be more interactive and attract the users to use the system. User need to ease in reading the information provided in the system. Suitable font should be selected to meet this requirement.

Secondly, there is also need some improvements in the interactivity with the system by providing good images, animation such as flash animation, attractive website colors and navigation, and also well structured and organized content.

For the next enhancement, the system will provide a forum for the mentee to easily communicate with their mentor. This forum also can be used to share knowledge and discussing on any matters not only between mentor-mentee but also for mentee-mentee and mentor-mentor.

Other than that, the system can also add profile for mentor and mentee such as insert a personal detail and also upload photos. Final recommendation is to used calendar format for the mentee to choose date and time of appointment. With the calendar format it is easier for the mentee to choose their date and time of appointment instead of insert by their own.

6. REFERENCES

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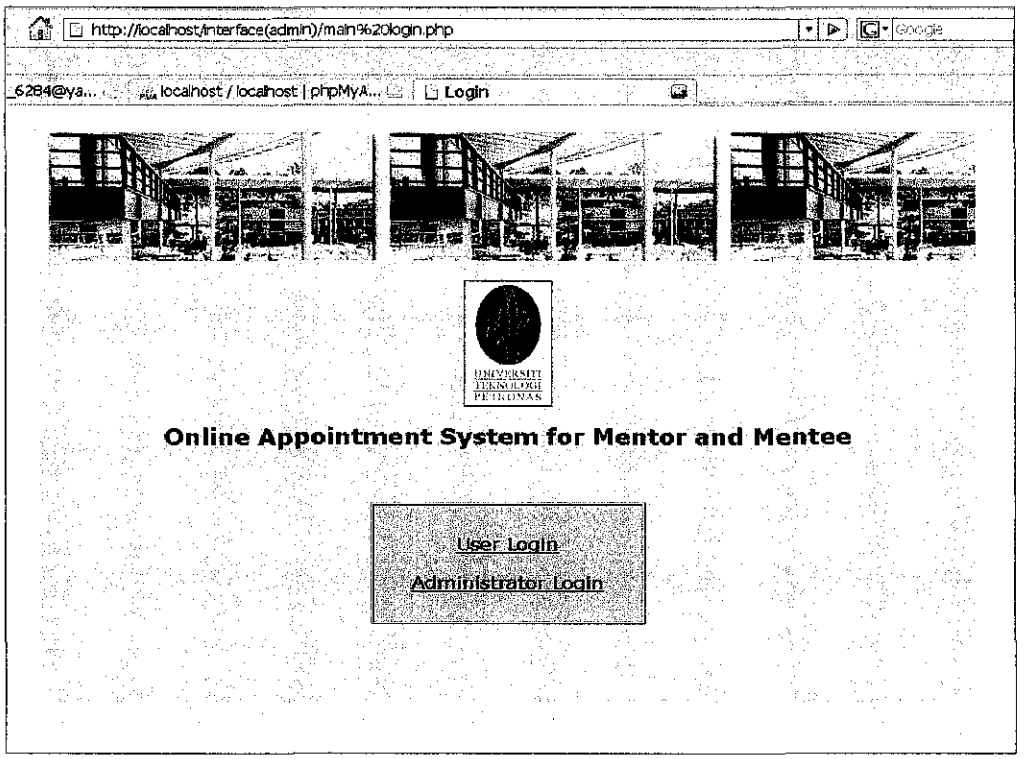
http://en.wikipedia.org/wiki/Internet

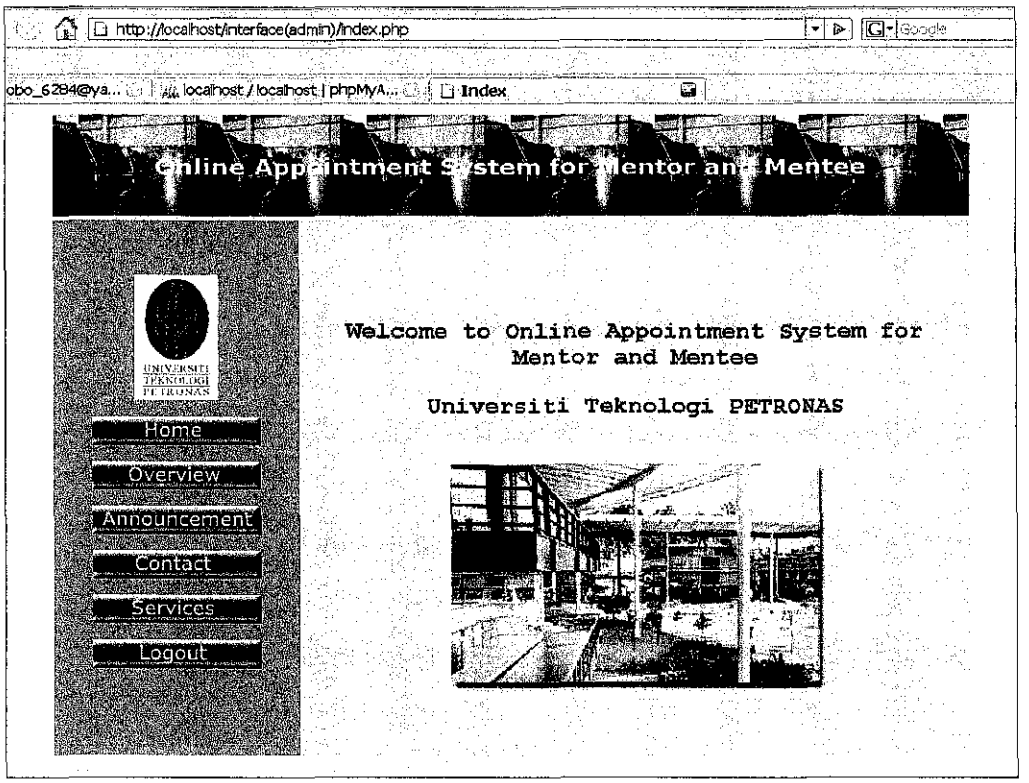
Wikipedia, the free encyclopedia – World Wide Web
http://en.wikipedia.org/wiki/World_Wide_Web

7. APPENDICES

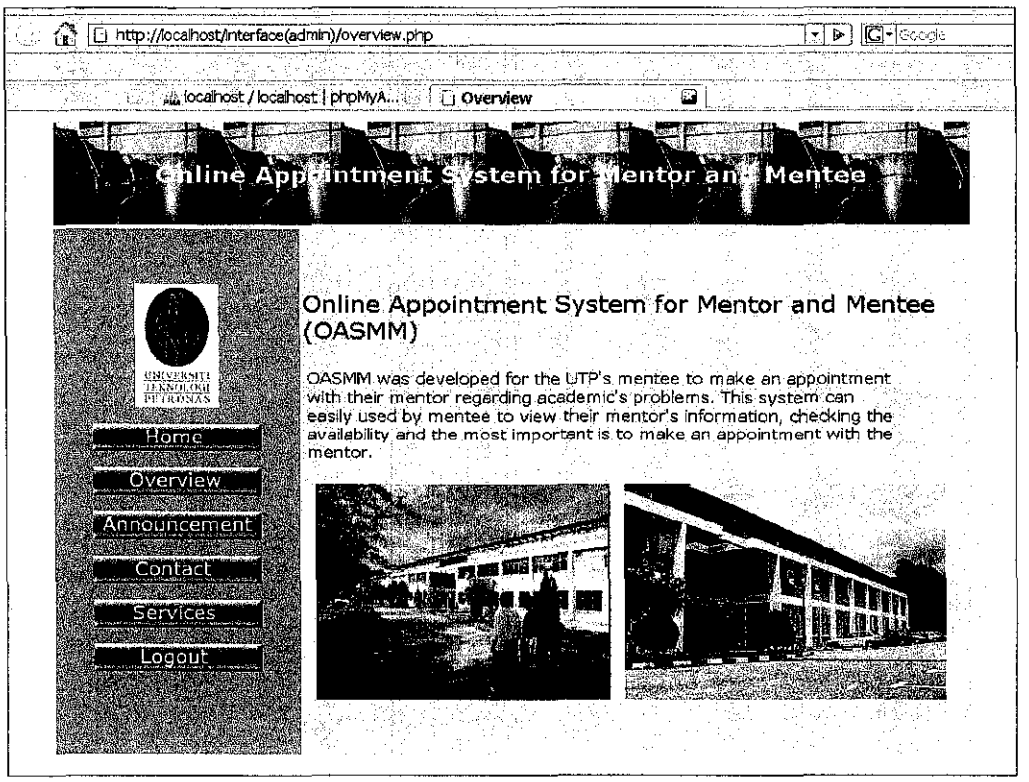
1. User Login Page



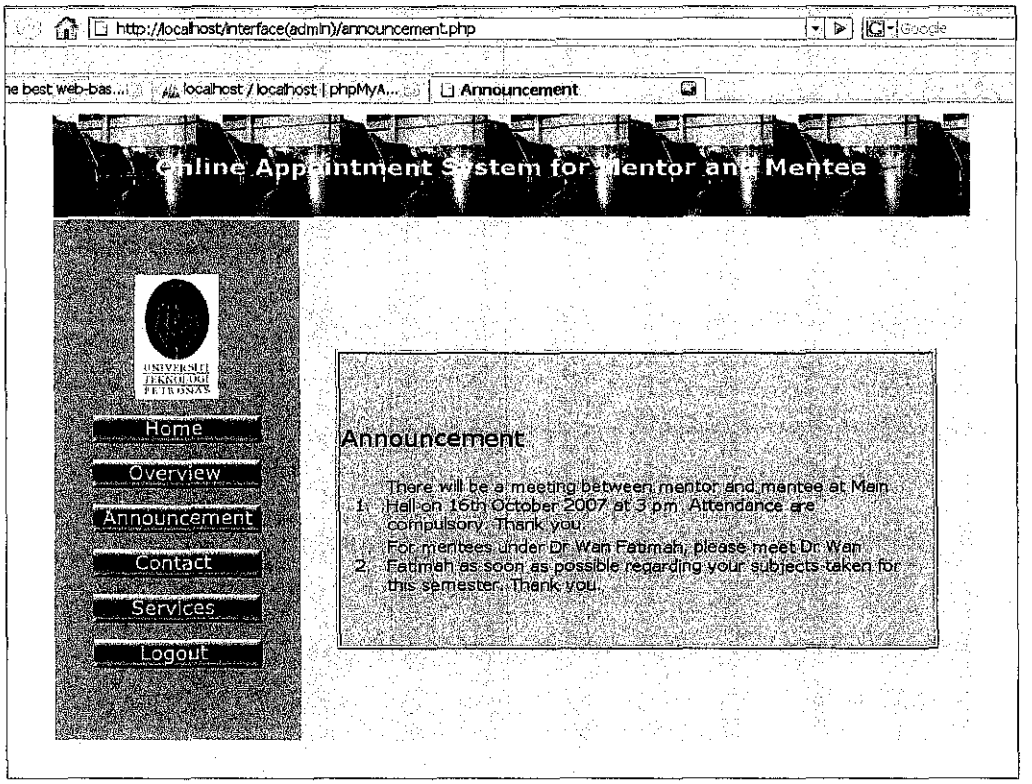
2. Main Page



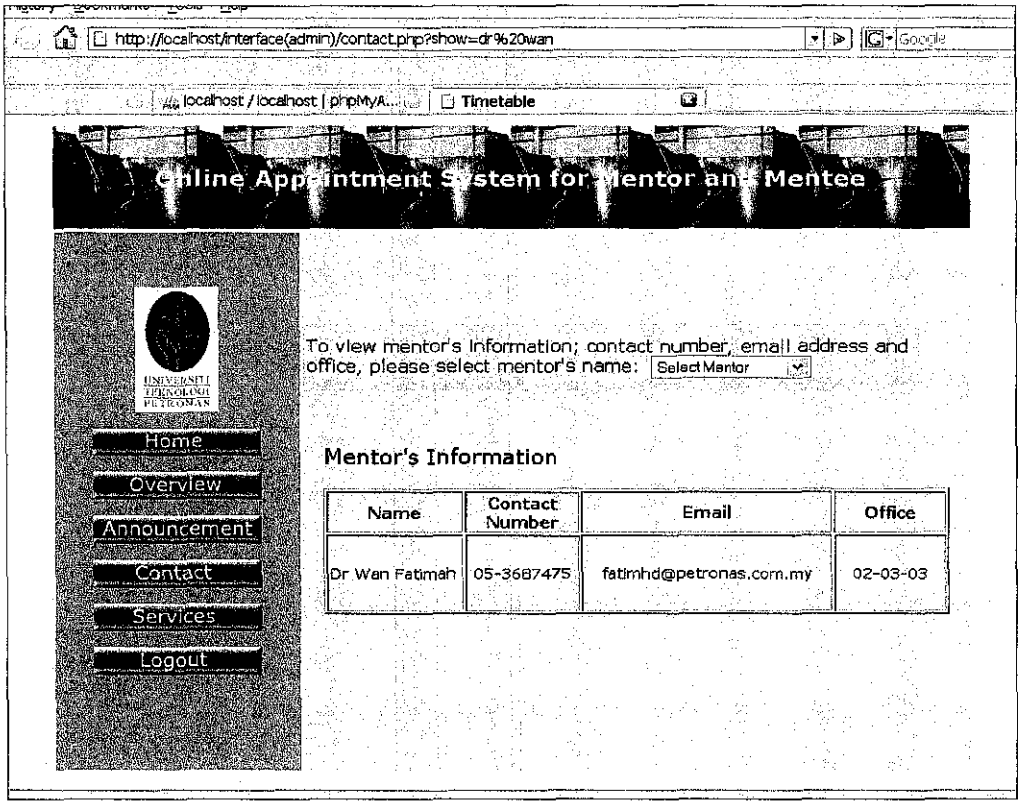
3. Overview Page



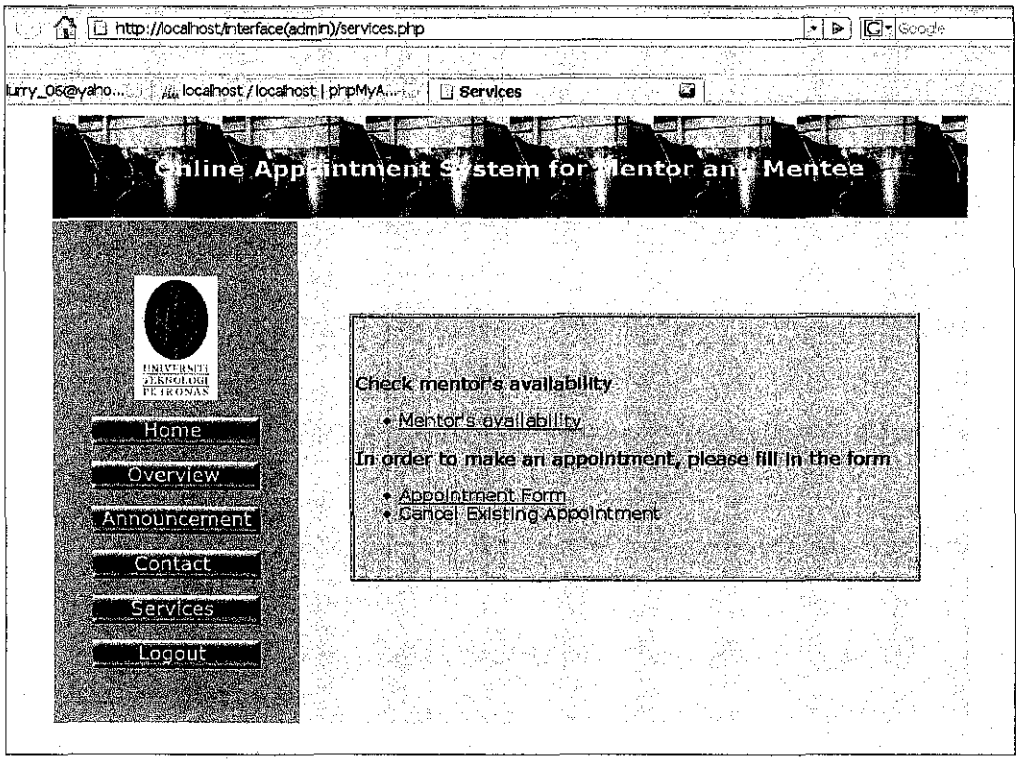
4. Announcement Page

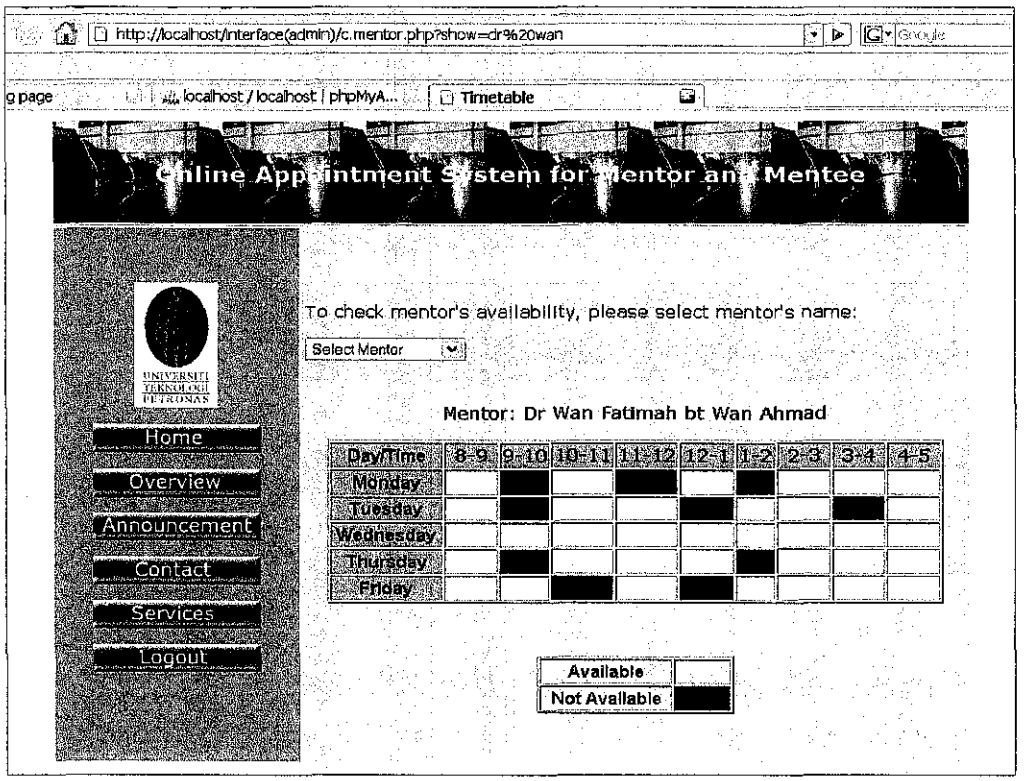


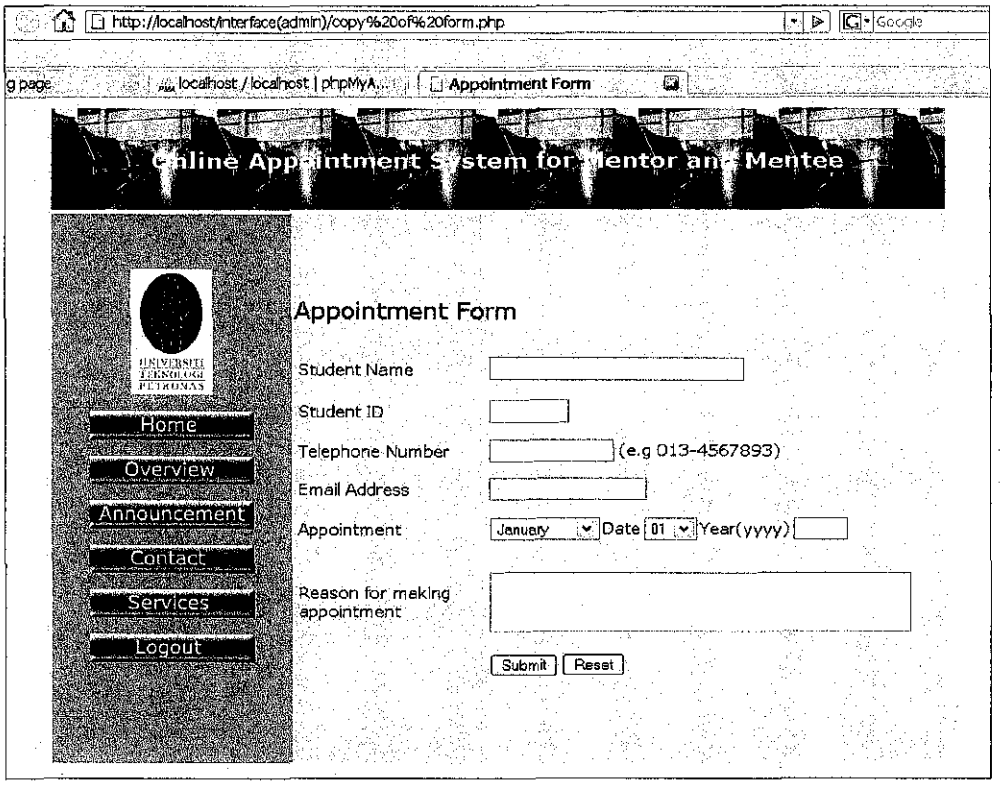
5. Mentor's Information Page



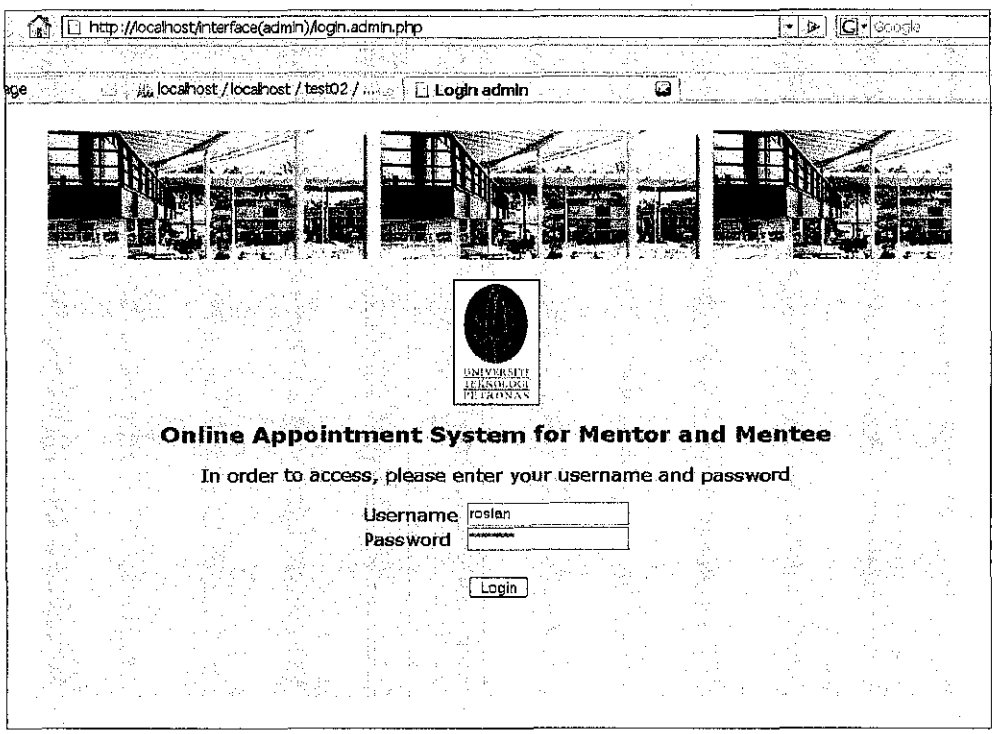
6. Services Page



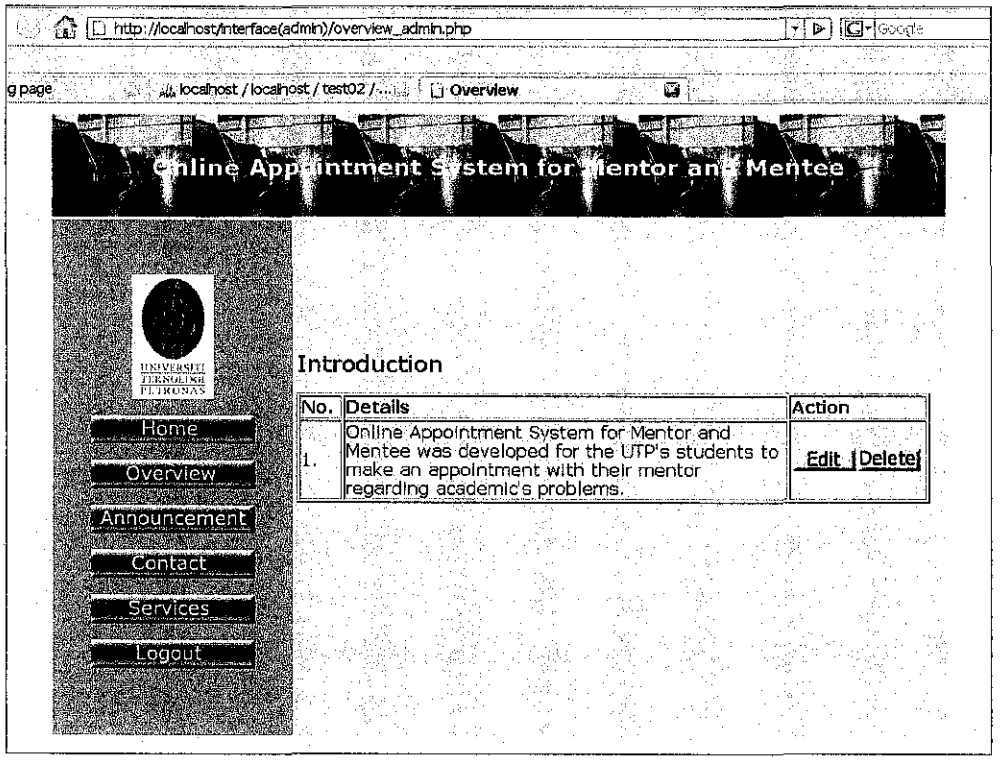


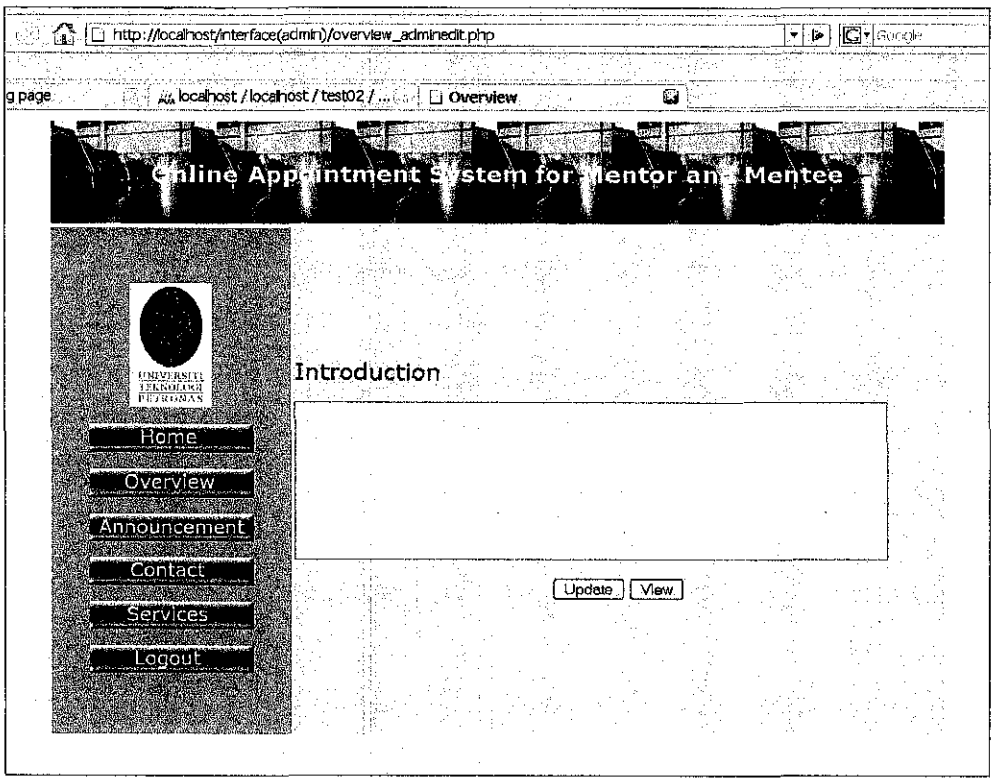


7. Administrator Login Page

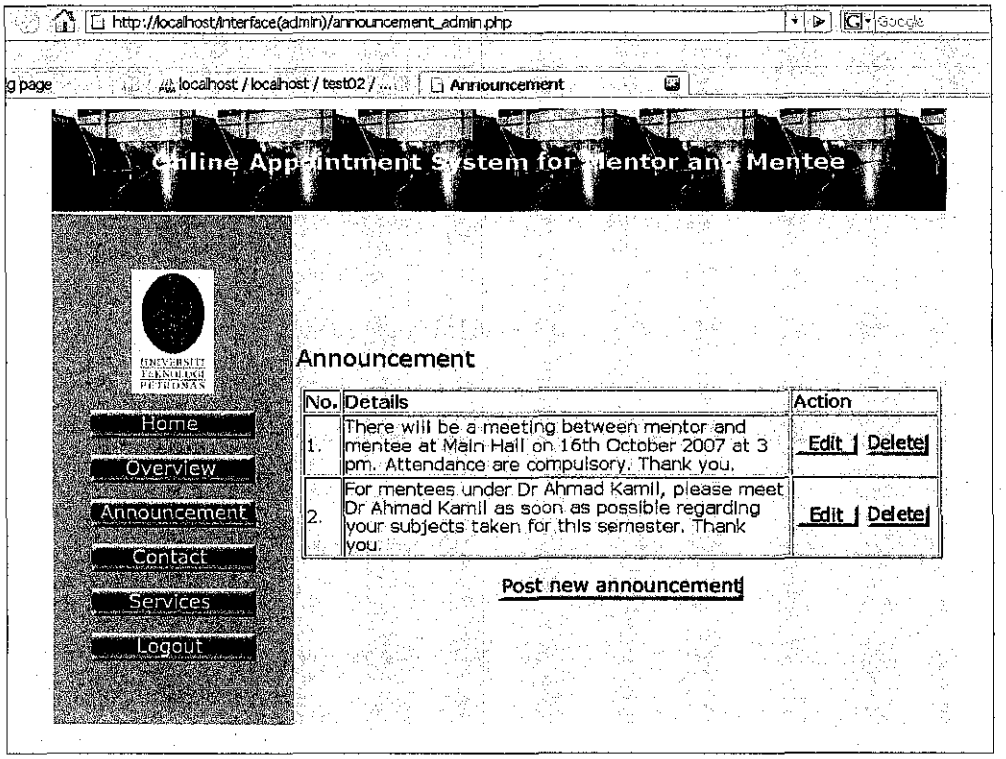


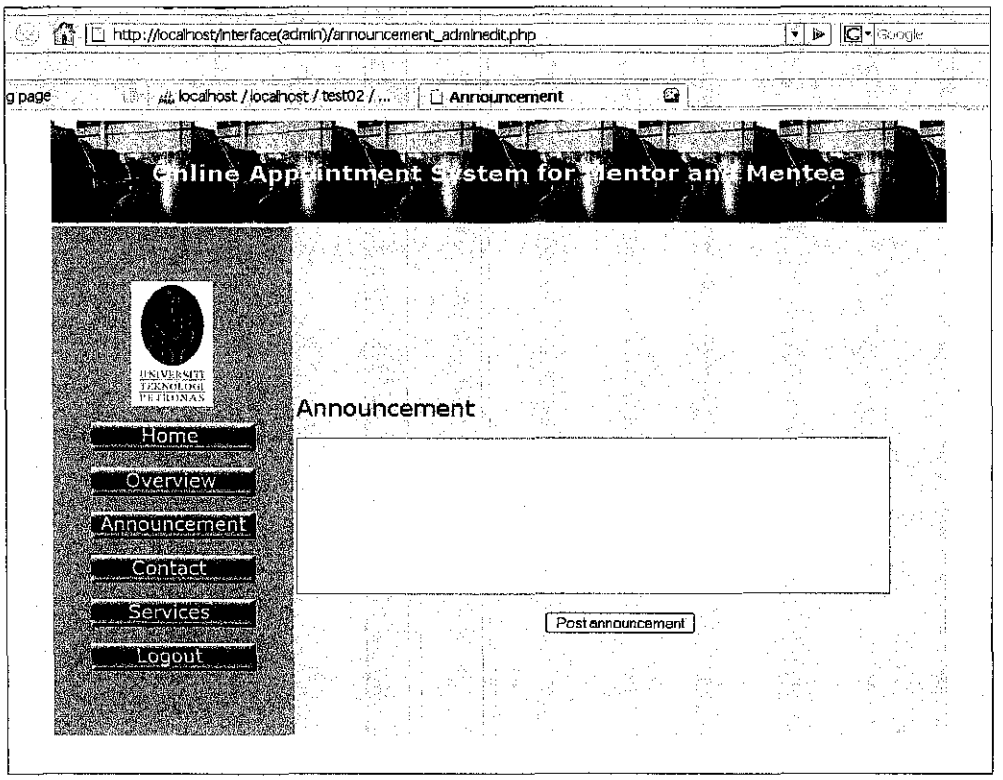
8. Overview Page



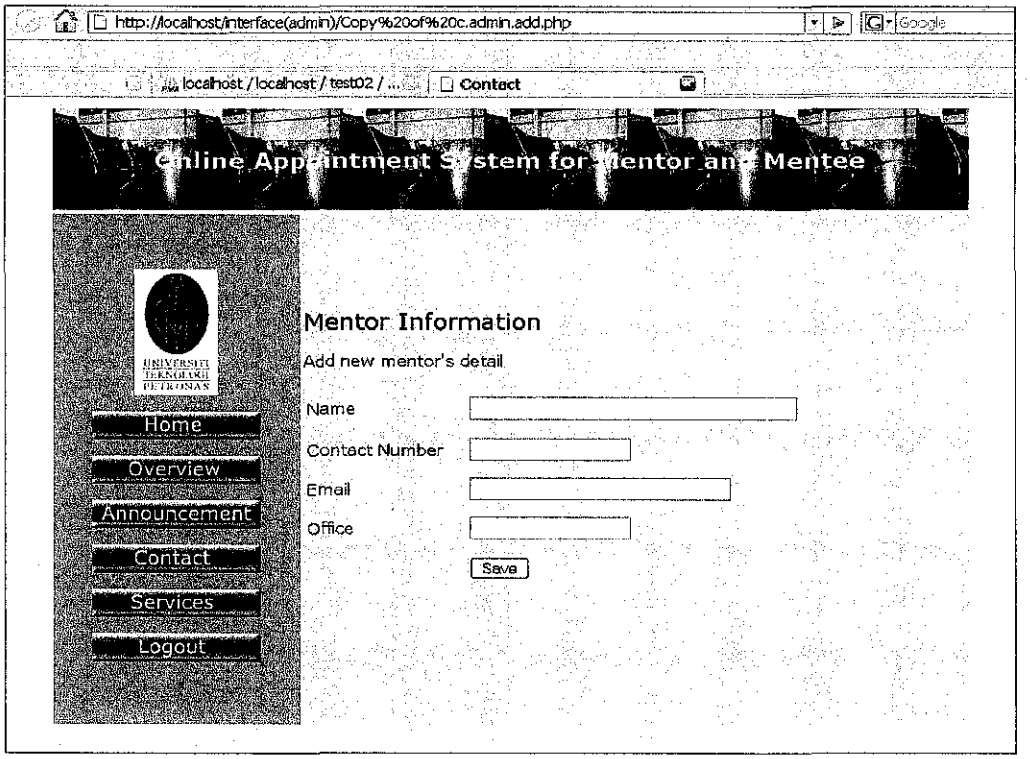


9. Announcement Page

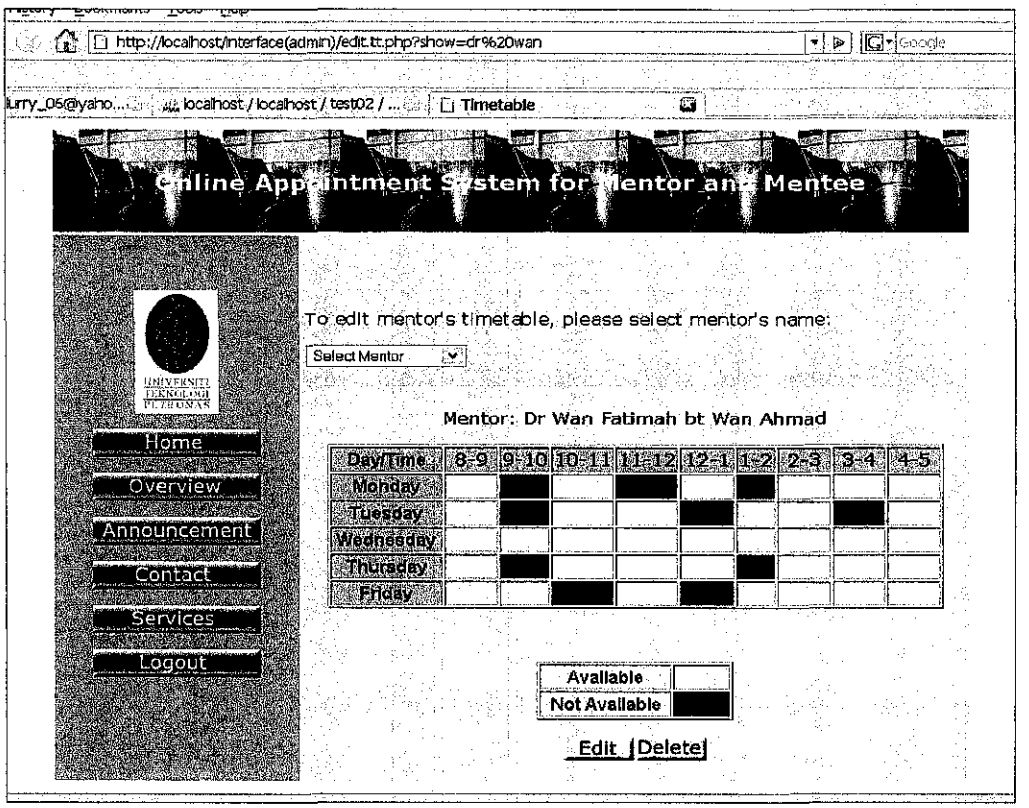




10. Add Mentor's Information Page



11. Services Page



Questionnaires

ONLINE APPOINTMENT SYSTEM FOR MENTOR AND MENTEE

This questionnaire is to analyze the relevancy of the purposed system to the students who has an experience being a mentee before.

Background Study

Tick where applicable

1. Have you been in mentor and mentees program before this?

   Yes [ ] No [ ]

2. If yes, do you go to ACS to get your mentor's information?

   Yes [ ] No [ ]

3. Did you go to see your mentor to discuss about your academic's problem?

   Yes [ ] No [ ]

4. If yes, do you make an appointment first before meeting with them?

   Yes [ ] No [ ]

For the following questions, please rate your answer between the given ranges

5. Do you agree if the mentees can easily access their mentor through online application?

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

6. Besides providing easily access for mentee, do you agree that through this online application it can reduce mentees time, cost and energy?

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

7. Do you agree if the Online Appointment System for Mentor and Mentee provides the mentee to view mentor's information such as name, contact number, email address and so on?

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

8. In addition of viewing mentor's information, do you agree if the Online Appointment System for Mentor and Mentee provides viewing announcement made by the mentor?

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

9. Do you agree if the online appointment system provides the mentee to check mentor's availability before made an appointment?

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

10. Shall an Online Appointment System for Mentor and Mentee be implemented in the nearer future for the easiness of the mentees?

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

11. If you have any suggestion, please state here:

_____

_____

Thank you for your co-operation in completing this questionnaire.

Questionnaires On User Acceptance Testing

This questionnaire is to evaluate the satisfaction of the website interface of Online Appointment System for Mentor and Mentee.

Instruction: Please circle your answer between the given ranges.

1. Are you satisfied with the interface of Online Appointment System for Mentor and Mentee UTP?

1	2	3	4	5
Less		Moderate		Very

2. Do you satisfied with the user interface of the website based on those characteristics:

   a. Type of font:

1	2	3	4	5
Less		Moderate		Very

   b. Image:

1	2	3	4	5
Less		Moderate		Very

   c. Color:

1	2	3	4	5
Less		Moderate		Very

   d. Content arrangement (E.g.: navigation, links, banner)

1	2	3	4	5
Less		Moderate		Very

If you have any suggestion, please state here:

_____

_____

Thank you for your co-operation in completing this questionnaire.