

KOLEJ KEDIAMAN TUN AHMAD ZAIDI HOMEPAGE LEONG WING KIN

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THESIS II – WXES 3182 PROJECT REPORT

Project Title
Project Description

Kolej Kediaman Tun Ahmad Zaidi's Homepage
Design and develop a web page for Kolej
Kediaman Tun Ahmad Zaidi which can be updated
from time to time. Apart from the general
information about this college, this homepage
should include a student database which the
information inside it can be updated from time to
time, a bulletin board that is used to spread
college's news, activities etc.

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ABSTRACT

By the middle of 1990s, World Wide Web had transformed the online world tremendously. Users from all over the world were able to access and select varies types of information from the online world through the system at hypertext called homepage. Through homepage, there are hyperlinks that can link to all the other homepages thus enrich the interaction and developments of humans-to-humans communication on the Web by enabling users to distribute executable content electronically. Because of these reasons, the first Kolej Kediaman Tun Ahmad Zaidi (KKTAZ)'s homepage was created.

The Kolej Kediaman Tun Ahmad Zaidi (KKTAZ)'s homepage was an attractive and interactive homepage that provide users with a high degree of selectivity over the information they want to view. The features of this homepage are structured mainly into sections namely; background, facilities, administrator, links, projects, student and alumni.

The integration of advanced features such as the online chatting, discussion box, complaint and announcement box further enhanced the existing KKTAZ's homepage by allowing more sophisticated and interactive online tasks to be executed among students and the administrator.

The development tools for this homepage are mainly Microsoft Interdev 6.0, and using ASP technologies on Microsoft Window 98 Personal Web Server platform, utilizing Microsoft Access 97 database.



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INTRODUCTION



CHAPTER ONE: INTRODUCTION

The Internet is a vast network of computers all over the world. They are so connected and have so many routes to choose from, that if one machine is not functioning, the data would still get through by choosing another way. The craze in the world now is the World Wide Web. It has become so popular over the last several years because it is extremely flexible with all types of viewable content; sounds, pictures, text, files you can download, and a relentless amount of information on most any imaginable topic. Like a spider web, Web sites are intricately connected to all sorts of other places and information through a remarkable feature called links. Today both Internet and World Wide Web are experiencing explosive growth and unparalleled interest and web pages are being created at an astonishing rate.

The Kolej Kediaman Tun Ahmad Zaidi's homepage was developed to allow visitors from around the world that come to this homepage to go wherever they want, and access files, services, and information that they choose precisely for the homepage.



1.1 What Is the Internet?

The Internet is a worldwide computer network which links up thousands of computer networks as well as millions of machines belonging to private individuals. This network of networks is linked together using a common communication protocol called Transmission Control Protocol/Internet Protocol (TCP/IP). It began as ARPANET, a US military network, which gradually linked in to educational and research organization around the United States. In other parts of the world, similar networks, such as JANET in the UK, developed. Over time, all these separate networks have come together to create the present Internet that continues to grow rapidly.

The Internet is a huge network of computers making a worldwide community, with millions of members, providing a vast store of information with great possibilities for education. Half of all primary schools and virtually all secondary schools already have an Internet connection and the Government's target is for all schools, colleges and libraries to be connected by 2002. The home user market is also expanding swiftly.

The Internet offers a range of facilities, allowing users to obtain information and resources, to communicate and to publish information. Via a range of facilities the Internet can be used for:

Communicating

- Electronic mail
- Discussion groups
- Videoconferencing

Publishing resources

Electronic publishing



Obtaining resources

- Data files, including many on-line databases
- Catalogues and illustrated guides from museums, art galleries, libraries and exhibitions
- Shareware and free software, e.g. to play sound, show large graphics and play video clips
- World maps, weather maps, images of outer space and other graphics
- Newspapers, magazines and books in full text, e.g. the Bible,
 Shakespeare
- Sound files, video clips and animations.

1.2 What Is World Wide Web (WWW)

The World Wide Web (often abbreviated to the Web or WWW) is the fastest growing component of the Internet. The Web comprises, as its name suggests, a virtual web of connecting documents, graphics, videos and sound hosted on thousands of Web server's worldwide. The World Wide Web (WWW) provides easy access to the vast quantity of information and resources available on the Internet and is the facility which people use to 'surf' for information. It is made up of millions of screens, or 'pages', of information. The collection of pages created by one individual or organization is known as a website.

To access the Web you will need a Web browser such as Netscape Navigator or Internet Explorer, which fetches and composes the pages on your screen and allows you to pick keywords and hotspots to jump seamlessly to other Web pages containing linked materials.



1.3 What is Homepage?

A homepage is the first page presented at a site or presence on the World Wide Web. Homepage generally refers to someone's main "page" or Web file that is initially retrieved when someone visits it. Some people refer to their whole set of pages as their home page. Most often, a large collection of Web files and resources is known as a Web Site. From the homepage, there are hyperlinks that can get to all the other homepages on other sites. The Web Site for KKTAZ has the homepage address at http://www.kktaz.um.edu.my

1.4 Project Objectives

The objectives of developing this KKTAZHP are as follows:

- To design and develop an interactive homepage that provides adequate, useful and up to date information about KKTAZ to the users.
- To improve and integrate new online features in the homepage such as online chatting, discussion box, announcement and complaint box etc.
- To provide users with a high degree of selectivity over information in the homepage.
- To increase the level of interactivity between users and the administrator over the information.
- 5. To introduce the use of some graphic programming.



1.5 Project Scope

This KKTAZHP project is divided into two major modules that are the user module and the administrator module. The user module is accessible for users and the administrator module is only accessible for the authorized administrator or user.

1.5.1 User Module

The user module consists of series of pages that can be access by any users on the Internet especially those who want to get information about Kolej Kediaman Tun Ahmad Zaidi Residential College and also for those who wish to edit their profiles by logging into the system. Besides that, users are allowed to make discussion and announcement through the Discussion Box that is available in this KKTAZHP. There is also a Complain Box which is available for users to make complains, suggestions and getting feedback from the Administrator. In this module, users are given choices to browse and select the pages they wish to access through the features and functions that link one page to another.

All the users who have password to access the database, discussion box and complain box can access only within the college. This means that the users can access all these features only if they're the authorized users who are currently living in Kolej Kediaman Tun Ahmad Zaidi.

All the information are arranged according to priority, type and importancy. The main categories are as follows: -



1. General

This category will display information about the history of the college, the college administrator, the college's master together with the personal details, the college's map, the song of the college and a database for the students who are currently living in Kolej Kediaman Tun Ahmad Zaidi.

2. Academic

- This page will display the organizational structure and name lists of Jawatankuasa Tindakan Kolej (JTK), Jawatankuasa Induk Kolej (JIK), Jawatankuasa Perkembangan Kolej, Wakil Tingkat, JKP Seni, JKP Sukan, JKP Hati, JKP Addin and JKP Kemas.
- The objectives and visions for each of the JKP are also displayed in this page.

3. Facilities

This category contains all the information about the facilities provided by the college.

4. Services

This category displays information about the services available in this college.

5. Complain Box

This category is only accessible by the authorized users to make complains and suggestions.

6. Discussion Box

 Users are able to do discussions and make announcements through this category.



7. Chat Module

Users are able to chat with their friends through this module.

8. Links

This page provides users access to the useful and informative links such as linkage to the newspaper's homepages and the higher education's homepages in Malaysia.

9. Bulletin and Announcement

- This page provides information about the latest news and bulletin of Kolej Kediaman Tun Ahmad Zaidi.
- One Announcement Box will be available here which can be accessed only by the authorized administrator to make announcement.

10. Projects and Clubs

All the current and past projects or clubs that have been held and will be held in Kolej Kediaman Tun Ahmad Zaidi will be display in this section.

1.5.2 Administrator Module

This module is only accessible by the administrator. Only the authorized administrator is allowed to access and maintain the database. The functions provided in the module are as below:

- To enable the administrator to maintain the login information in the database.
- To enable the administrator to add, delete and edit pages in the homepage.
- To enable the administrator to update announcements and bulletins when it is necessary.



- To enable the administrator to receive complains, feedback and suggestions and reply to the users.
- To enable the administrator to change the username and password when necessary.

1.6 Project Significance

The main focus of this KKTAZHP project is to provide adequate and up to date information about Kolej Kediaman Tun Ahmad Zaidi to users. Besides that, with the integration of online features such as the online chatting enable users to chat with their friends. This homepage also provides users a discussion and complaint box that enable them to make discussion and announcement effectively and conveniently. With the complaint box, users are able to give their comments and complaints. Besides, this homepage enables the authorized users to update their own profiles and password.

In other word, this homepage is developed to increase the level of interactivity with information and to shorten the logical distance of global communications, interaction and information exchange through the online features in this homepage.

Apart from that, the development of this KKTAZHP project has significance for me. Throughout this project, I have learn how to develop a web page using web development tools such as Active Server Pages (ASP), HTML and Microsoft Visual Interdev 6.0 and thus has benefited me by gaining experience and knowledge in software engineering method.



1.7 Limitations

This KKTAZHP project has limitation to it. All users who have password to access the database, discussion box and complain box are limited for the residents who are currently living in Kolej Kediaman Tun Ahmad Zaidi.

Besides, this homepage doesn't provide online booking facilities to users.



CHAPTER TWO: LITERATURE REVIEW

2.1 Purpose

Literature Review is a background study about the knowledge and information gained in developing this KKTAZHP project. The purpose of having this literature review is to have a better understanding about the development tools used to develop this project. Besides that, having this literature review can help to obtain a better knowledge and skills on the development methodologies used while developing a project.

Moreover, the developers are able to make comparison and study on the past-developed projects about the strength, advantages and disadvantages of their projects. This indirectly can help the developers to study the weakness of their projects, get to know on how to improve the weakness and fulfill the requirements needed.

2.2 Approach

A system is a collection of related parts treated as a unit where its system interacts. It is also a regularly interacting or independent group of elements forming a unified whole. Thus different systems can be developed in different methods and ways. A lot of information need to be gathered about the system that to be developed, the procedures and methodologies used and involved in developing the system.

There are a various of sources that can be used in order to gather the relevant information and basically different sources will yield different kind of information and facts. For example information obtain from books or journals are different from the information obtain from the Internet. If Internet is used to find an information, the keywords or phrases that are being used to search information will yield various sites and some of the sites are totally different from each other and



some are not related to the information that are being search at all. Besides that, it is also depends on how the research has been carried out. The sources that can be used to obtain information are from the computer programs, system users, procedure manuals and report, documents and forms.

Information gather from the system users can be divided into a number of ways. One of the most popular ways is through the usage of questionnaires. Interview is another way to obtain useful information while the third way is through observation of users activities and behaviors. Computer programmes are use to obtain information about the details and flows of data structures or processes.

Procedure manuals are used to specify user activities in a business process while forms and documents are very useful sources to gather information such as system data flows and transactions. Reports are used to indicate the kind of output needed by users.

As for KKTAZHP project, a lot of researches have been made through the Internet on some of the homepages to study the design, features and content of their homepages. The comments for these homepages will be discussed later in the Electronic Resources section.

Besides that, the Internet has been used to gather information from various sites on software development tools to be used to develop this project. Moreover, some researches have been done on web designing at some of the relevant sites via the Internet.

Apart from that, information has been gathered using interview with the supervisor of the college regarding the information needed in the homepage.



2.3 Findings

All the information gathered for this KKTAZHP is divided into two categories namely; printed resources and electronic resources. Printed resources are books that are used to find information about development process models, web development software and relational databases while electronic resources comprise of sites on homepages, web designing and web development tools.

2.3.1 Print Resources

Some books have been used to study and find information about development process models, web development software and relational database. The development process models that have been studied from the books are the prototype model and waterfall model. These two models will be discussed in the following sections.

2.3.1.1 Development Models

(i) Waterfall Model

The waterfall model is a systematic sequential approach to software development modeled after a conventional engineering cycle. One phase is completed before the next is entered.

There are six phases to the waterfall model, which are:

i. System Engineering

System Engineering is the establishment of requirements for all aspects of the system (i.e. requirements gathering at the system level).



ii. Software Requirements Analysis

Software requirements analysis defines functional capabilities, performance, design constraints and system interfaces. It provides the software designer with representation of information and function that can be translated to data, architectural and procedural design. (Pressman p. 25) "The requirements analysis task is a process of discovery, refinement, modeling, and specification. The software scope, initially established by the system engineer and refined during software project panning, is refined in detail. Models of the required information and control flow, operational behavior, and data content are created. Alternative solutions are analyzed and allocated to various software elements."(Pressman p. 173) Five areas of effort:

- 1. Problem recognition
- 2. Evaluation and synthesis
- 3. Modeling
- 4. Specification
- 5. Review

iii. Software Design

Software design is translating the requirements into a representation of software that can be assessed for quality before coding begins. There are two phases of software design:

- Preliminary Design (transforms requirements into architecture)
- Detailed Design (refines the product of preliminary design into detailed data structures and algorithmetic representations)



iv. Code

Coding is translating the design into machine code form.

v. Test

Testing is exercising the software to uncover errors and ensure the system meets defined requirements.

vi. Maintenance

Maintenance is making adaptation of the software for external changes (requirements changes or enhancements) and internal changes (fixing bugs). When changes are made during the maintenance phase all preceding steps of the model must be revisited. There are three types of maintenance:

- 1. Corrective (Fixing bugs/errors)
- 2. Adaptive (Updates due to environment changes)
- 3. Perfective (Enhancements, requirements changes)

The problems with the waterfall method are:

- Real projects rarely flow in a sequential process.
- It is difficult to define all requirements at the beginning of a project.
- This model has problems adapting to change.
- A working version of the system is not seen until late in the project's life.



(ii) Prototype Model

Prototyping consists of developing an initial 'model', providing the prototype to the intended users, gathering feedback from the users, and including any revisions or refinements. This process continues until the required system is developed.

Specification, development, and validation activities occur at the same time, since rapid development is important for prototype systems. To deliver a prototype quickly, you may have to leave out some system functionality or relax non-functional factors such as response speed and reliability.

There are two types of prototyping, which represent two different objectives and two different types of implementation:

- Evolutionary
- Throw-Away

Evolutionary:

The objective of evolutionary prototyping is to deliver a working system to end-users. Evolutionary prototyping starts with the parts of the system, which are clearly understood by the customer/end-user. The system is continually developed by adding new features/requirements as they are discovered or proposed by the customer, until a final system is delivered. The evolutionary approach helps anticipate how end-users will use new software systems. The user is given a system, which is unfinished, and then the system is modified and fine-tuned as the user requirements become clear.



Evolutionary prototyping is the only practical way to develop systems where a detailed system specification is difficult or impossible to create. You must be able to make quick system revisions, make the suggested changes, and demonstrate the system again.

Throw-Away:

The objective of throw-away prototyping is to validate or determine the system requirements. By understanding the customer's requirements, a better requirements definition for the system can be developed. (A requirements definition is a top-down process, which takes the 'general' system requirements and broadens it out into specifics, which describe the system/environment interactions.) Throw-away prototyping focuses on undefined or unclear portions of the requirements. During implementation, the parts of the system which are not understood are developed first. Throw-away prototyping is intended to determine the system specification so that the end-product of the prototype development phase is that specification.

A fixed decision is made to build a throw-away prototype to help requirements analysis and validation. After evaluation, the prototype is 'thrown-away' and a production-quality system is built. Throw-away prototyping extends the requirements analysis process with the intention of reducing overall life cycle costs. (The requirements analysis process begins with understanding the domain and ends with the requirements validation.) The principal function of the prototype is to clarify requirements and provide additional information for managers to assess process risks. Components from the prototype may be reused in the production-quality system. However, customers and end-users should not take the throw-away and make it into a final delivered system due to the following reasons:



- Important system characteristics may have been relaxed during rapid prototype development (security, robustness or reliability).
- Changes made during prototype development are usually made in an uncontrolled environment. The prototype code may be the only design specification.
- The changes made during prototype development can degrade the system structure, making the system difficult and expensive to maintain.

Strengths

- Users can discover requirements errors or oversights early in the software process. Requirements validation is performed since users are able to experiment with requirements and the system. The requirements validation process consists of seven factors: correctness, consistency, completeness, realistic, needed, verifiable, and traceable.
- Misunderstanding between software developers and users may be identified while the system functions are demonstrated.
- User services which are difficult-to-use or unclear may be found and corrected.
- Incomplete and/or inconsistent requirements may be found.
- In a short time, a working system is available to demonstrate the capabilities and usefulness of the application to management; however, this working system is limited.
- The specification for a production-quality system can be derived from the prototype.
- Prototyping can be viewed as a risk reduction technique. Experiments
 have shown that prototyping reduces the number of problems
 connected to requirements specifications and the overall development
 costs may be lower if a prototype is developed.



Weaknesses

- Progress is difficult to measure since it is not visible. Also, if the systems are developed rapidly, documentation is usually not created to reflect each version of the system.
- The systems may be poorly structured. The constant change is harmful to the software structure.
- Special skills are often required. Small teams of talented and motivated individuals are needed to succeed with prototyping.
- Major technical problems revolve around the need for rapid software development.
- The prototype may not correspond with the way in which the final system is used, especially with throw-away prototyping.
- Many software project managers are inexperienced in the areas of planning, cost, and estimating a prototyping project. Change procedures may not be suitable for controlling rapid changes/development.
- Prototype users/evaluators may be pressured by managers to draw quick conclusions concerning the prototype.
- The cost of prototyping represents a large portion of the total development costs. However, effective prototyping can increase the software quality.



2.3.1.2 Software Development Tools

Below are the software development tools that used in developing this KKTAZHP.

(i) Microsoft Visual Interdev 6.0

Microsoft Visual Interdev 6.0 is a powerful, comprehensive integrated database tools. It includes a complete set of database programming and design tools, allowing developers to build enterprise-class, data driven Web applications within a single integrated IDE. It has the following characteristics.

Rapid end-to-end application development

- Use the integrated WYSIWYG page editor to visually construct sophisticated HTML and ASP pages. Easily switch between multiple page views--including WYSIWYG, Source, and Preview--while preserving source code formatting.
- Make the Web application development more efficient. Debug the code with step-through debugging of client- and server-side scripts for Microsoft Visual Basic® Scripting Edition (VBScript) and Jscript® at any point in the development cycle.
- Build cross-platform applications that target any HTML 3.2 browser, on any platform. Or, optimize for Dynamic HTML, cascading style sheets, and other powerful Microsoft Internet Explorer features.
- Build enterprise-ready, scalable Web applications using Microsoft Transaction Server (included) and reusable COM-based components built with tools such as Microsoft Visual Basic.
- Increase coding speed with IntelliSense®-enabled script development--Statement Completion and Quick Tips support both VBScript and JScript.



 Design the structure and flow of the Web site visually while Visual InterDev automatically creates the actual file structure and navigation bars.

Powerful, integrated database tools

- Connect to data from any ODBC-compliant database with open support for enterprise data sources. Visual InterDev works with Oracle, Microsoft SQL ServerTM, Sybase, Informix, DB/2, Microsoft Access, Microsoft Visual FoxPro®, dBase, Paradox, and most other major database systems.
- Visually design and modify database schemas and create stored procedures and other database objects for Microsoft SQL Server 6.5+ and Oracle 7.3.3+ databases using Visual Database Tools. Attach to and browse the data in tables and views, and visually create SQL queries for any ODBC- or OLE DB-compliant database.
- Drag and drop from the Data Environment to quickly create sophisticated, database-driven HTML forms, and reports.
- Build desktop and shared solutions that are fully compatible with Microsoft SQL Server and can migrate directly to SQL Server without changing a single line of code.
- Access host and mainframe data using tight integration with Microsoft SNA Server (available separately).

Full-featured, standards-based team development

- New Local Mode allows a developer to work and test parts of a project against a local Web server without interrupting team development, then synchronize and deploy the changes to the shared master Web server.
- Build with integrated support for the latest W3C approved standards, including HTML 4.0, HTML Document Object Model, and more.
- Create dynamic Web pages using Microsoft FrontPage® 98 client included in Visual InterDev 6.0.



(ii) ASP (ACTIVE SERVER PAGES)

ASP stands for Active Server Pages. ASP is a server side scripting language which is used to display dynamic content on the web pages. ASP is becoming popular day by day as the favorite server side scripting language. ASP in itself isn't a language actually, instead it uses vbscript or jscript to display dynamic content. ASP is more of a technology used by vbscript / jscript on the server side.

When you request an Active Server Page from a Web server, the server performs all the scripting tasks itself before delivering the resulting Web page to the client and this is called server side scripting.

This cannot take over from JavaScript tasks like image rollovers, but it can produce dynamic Web pages that depend on variables. This could all be done with client-side JavaScript, but with ASP only the relevant HTML is delivered to the browser and it will be compatible with any browser.

An ASP can include another file, such as a menu bar, so we only need to amend one file to make site-wide changes. An ASP can run verification functions on the data before either calling up routines to mail it from the server, or returning to the form if insufficient data has been submitted.



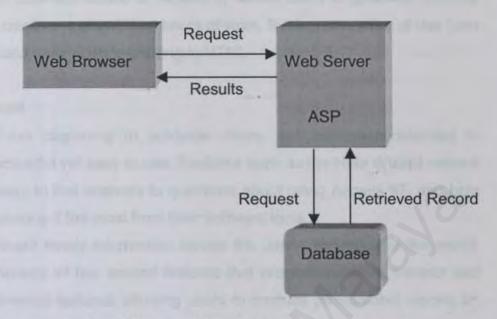


Figure 2.1 How ASP fits in Web Application Development

Benefits of ASP

- Complements server side scripting
- Easy to learn
- Leverage Existing investments
- Compile free development
- Protects proprietary business algorithms and information

2.3.1.3 Relational Database

For the relational database, Microsoft Access 97 was studied and below is the information about Microsoft Access 97.

(i) Microsoft Access 97

Microsoft® Access 97 provides relational database power to give users the information they need to make better decisions. It integrates data from spreadsheets and other databases, and is the easy way to find answers, share information over Intranets and the Internet, and build



faster business solutions. Access 97 allows users to generate, analyze and create reports without hours of work. It integrates ease of use from the data entry point to printing in HTML

Benefit

- From beginning to advance users, this relational database is powerful yet easy to use. Features such as the Help Wizard make it easy to find answers to questions about using Access 97, and help users get the most from their software tools.
- Share timely information across the users workplace or the world. Access 97 has several features that integrate network, intranet and Internet features, allowing users to produce professional reports on paper, online or in HTML.
- Access 97 is scalable. From home businesses to corporations, it's the only database that will grow with users as their business grows.
- Features such as the Help Wizard make it easy to find answers to questions about using Microsoft Access 97, and help users to get the most from their software tools.

Standard Features

Database Wizard

Automatically builds tables, queries, forms, and reports from more than 20 types of full-featured templates, giving users the option to further customize them to suit their needs.



ii. Simple Query Wizard

Sorts through database information, including data from multiple tables, and then determines how to bring it all together to answer user's questions.

iii. Filter By Selection

Filters data according to the data that have been highlighted, presenting only the information that corresponds to the selections.

iv. Filter By Form

Lets users enter search criteria into forms they're already familiar with, and then presents only the data that match the parameters.

v. Hyperlink Datatype

It's one of the first desktop databases to support the storage of hyperlinks as a native datatype. For example, an applicant's name stored in a job candidate database can become a permanent hyperlink to the candidate's resume

vi. Output to IDC/HTX

Leveraging the Internet Database Connector functionality native to Microsoft Internet Information Server and Personal Web Server, Access 97 provides an easy way for users to share their structured data in a workgroup or over the Internet.

vii. Publish To The Web Wizard

Publish to the Web Wizard allows users to publish any object in their database either statically or dynamically. Allows for custom HTML formatting using templates, and allows users to save settings used to output the objects.



viii. HTML Importing and Linking

Users can point to an HTML document containing a table of data, and the Import/Export Wizard reads the information and either imports it directly into anew table or appends the records to an existing table.

2.3.2 Electronic Resources

The electronic resources comprise of sites on web designing, other sites on homepage and sites on learning development tools.

2.3.2.1 Sites on Web Designing

URL: http://webdesign.about.com/compute/webdesign/library/weekly/

This site is obtained by keying the key words "Web design" in the Yahoo search engine. Through this site, I come to know that there are a few elements that are essential when designing a web site. The elements are as follow:

User-Friendly Navigation

Navigation is one of the most important elements of web design. It takes time to lay out a logical and effective method of navigation.

Consistency

This means that we use only one design throughout the site.

Identity

Keeping with the concept that a Web site is a physical place, consider the purpose of the site and reflect that purpose in the design.



Simplicity

Simplicity in design should also be reflected in background choice. Busy, loud backgrounds detract from content and make text illegible. Too many colors or fonts can also be distracting and give the site a cluttered feel.

Compatibility

Make the Web site platform, resolution, and browser compatible.

Content

Make sure that as much information as possible is made available on the Web site.

Visual Appeal

Certainly part of visual appeal involves personal preference but another part is reflected in adherence to the qualities of simplicity and consistency.

2.3.2.2 Other Sites on Homepage

1. Multimedia University Homepage

URL: http://www.mmu.edu.my/

This is a very attractive and interactive website. This website provides information about the Multimedia University and contains all the basic features for a homepage. This homepage used multimedia tools to make the homepage more dynamic and attractive.

Moreover this homepage contains integrated advance online features such as online application for courses, online timetable, Web Diary, Bulletin Board and etc. This site has given me a general view and idea of developing the KKTAZHP.



2. Beloit College Homepage

URL: http://www.beloit.edu/

This site was obtained from the Alta vista search engine with the keyword "College" + "homepage". This homepage also provides all the relevant and useful information about Beloit College.

The most interesting feature in this homepage is the online chatting feature, which enable students to do online chatting with their tenth president.

Besides, this college has their own search engine that enables users to search information within the Beloit College web.

3. College of Engineering

URL: http://www.eng.vt.edu/

This site was also obtained from the Alta vista search engine with the keyword "College" + "homepage". This site is also an attractive and informative website that provides useful information to users. This site contains student activity database to search and add records about students.

4. E-Circles

URL:http://www.ecircles.com/

This is also a very attractive and interactive site that has special features such as Discussion Box, Announcement Box and enables users to upload their files and photos in the File Sharing and Photo sections.

Besides that, this site also enables users to do online chatting and even provides the voice chat service for users.

This web site has given me a lot of ideas in developing the KKTAZHP.



2.3.2.3 Sites on Learning Software Development Tools

1. URL:

http://www.support.nedcomp.nl/iishelp/iis/htm/asp/iiatovr.htm

The site was found from Web Ferret search engine by using the keyword "ASP Tutorial". This site provides useful information about ASP such as overview of ASP, creating ASP pages, using COM components and writing my own components.

This tutorial provides a step-by-step introduction to a handful of useful Active Server Pages features. I can learn how to implement these features with either VBScript or JScript.

2. URL: http://www.geb.net/asp/samples/

The site was also found from Web Ferret search engine by using the keyword "ASP Tutorial". This site contains tutorials and file for downloads about database, plus all the .htm and .asp demo pages.

Furthermore, this site provides guideline in making an ODBC connection and a simple introduction about ODBC.

3. URL: http://www.aspdeveloper.net/VInterDev/page1.asp

The site was also found from Web Ferret search engine by using the keyword "Visual Interdev Tutorial". This site contains tutorials in learning how to create a web site with Visual Interdev and then add a database to the ASP-enabled site using Visual InterDev's amazingly easy wizards. This tutorial uses the Access97 database made in the Access97 tutorial.



5. URL:

http://www.public.iastate.edu/~kzhang/useful links/tutorial.htm

The site was also found from Web Ferret search engine by using the keyword "Visual Interdev Tutorial". This website comprises of different kind of software development tools tutorial such as ASP, Oracle, SQL, Java, Java Script, VB Script, Microsoft Frontpage 98 and Visual Basic.

2.4 Summary

Generally all the research that has been done was to gain knowledge and information in developing the KKTAZHP project. The knowledge and information covers development methodologies, web development software, and other sites on homepage.

For the development methodologies, approaches have been done on two-development models, which are the waterfall model and the prototype model. Each of the models has their own strength and weakness thus different from each other. The development model that was chosen in developing this KKTAZHP project is the prototype model that will be mentioned in the next chapter.

For the software development tools, all the information was obtained from the Internet. Two software development tools were studied and the software that will be chosen to develop this KKTAZHP will be discussed in the next chapter.

For the relational database, information was obtained from relevant books and also through Internet. The relational database that was chosen for this project was Microsoft Access 97 and the reasons for choosing this database will be discussed in the following chapter.



Research that has been done on several homepages has given me an idea of how to develop this KKTAZHP project.

Lastly, all the information and knowledge gained from the literature review will be used to develop KKTAZHP project effectively.

WETHARALOGY WILLIAM STATES



CHAPTER THREE: METHODOLOGY

3.1 Project Description

This KKTAZ Homepage is developed in order to give students or any users information about Kolej Kediaman Tun Ahmad Zaidi. This homepage consists of a series of pages that provide students the upto-date information, online booking facilities and links to some relevant and useful sites.

3.1.1 Modules in KKTAZHP

As mention earlier in Chapter One, this KKTAZHP project is divided into two modules that are the user module and the administrator module. These two modules are categorized according to their functionality and each module consists of different sections and features as describe below.

(i) User Module

In this module, users are given chances to browse and select the pages they wish to access. This user module has the following features as follow:

Main Page

- This is an introduction page. This page will give a brief introduction about Kolej Kediaman Tun Ahmad Zaidi.
- Besides, this main page consists of features such as:



- 1. Kolej Kediaman
- 2. Akademik
- 3. Kemudahan
- 4. Berita Terkini
- 5. Perkhidmatan
- 6. Projek
- 7. Links
- 8. Guest Book

The details for each feature are as follow:

A. Kolej Kediaman will consist of

1. Sejarah

A brief introduction about the history of Kolej Kediaman
 Tun Ahmad Zaidi. Some photos will be included here.

2. Pentadbiran Kolej

 Describe the administrator structure (Struktur Pentadbiran)
 of the college such as Pentadbir Akademik Kolej and Pekerja Am Kolej.

3. Sekitar Kolej

 Some photos about the beautiful scenery around Kolej Kediaman Tun Ahmad Zaidi.

4. Pengetua

 A brief introduction about the personal details of the college's master, Prof. Dr. Mohd. Razali Agus.



5. Peta Kolej

The college's map.

6. Senarai Pelajar

Database for the students who are currently live in Kolej Kediaman Tun Ahmad Zaidi. These include their room number, address, faculty, year of academic, hometown and contact number. Each student will be given a password to access this database to update their details except their name, Matric Number and IC Number.

7. Lagu Kolej

Consists of the lyrics of the college's song.

B. Akademik will consist of

- The organizational structure and name lists of JawatanKuasa Tindakan Kolej (JTK), Jawatankuasa Induk Kolej (JIK), JawatanKuasa Perkembangan Kolej, Wakil Tingkat, JKP Seni, JKP Sukan, JKP Hati, JKP Addin and JKP Kemas.
- The objectives and visions for each of the JKP.

C. Kemudahan

 Consists of information about the facilities available in this college such as cafeteria, computer lab, room, basketball court etc.



D. Berita Terkini will consist of

1. Bulletin College

 To display important activities that are being held in the college.

2. Announcement Box

 Can be accessed only by the authorized administrator to make announcement.

E. Perkhidmatan

 Consists of information about the college's cybercafe and services provided by the counseling/motivation club of Kolej Kediaman Tun Ahmad Zaidi.

F. Guest Book

Enables users from the World Wide Web to give comments and opinion about this homepage.

G. Projek

All the current and past projects that have been held and will be held in Kolej Kediaman Tun Ahmad Zaidi will be displayed in this section.

H. Links

This page provides users access to the useful and informative links such as linkage to the newspaper's homepages and other higher education's homepages in Malaysia.



(ii) Administrator Module

The administrator module has the following sections:

1. Authentication Section

Only the administrator will be allowed to access this section.

2. Database Maintenance Section

This section will allow the administrator to maintain the login information in the database.

3. User Module Maintenance Section

This section allows the administrator to update announcements and links when it is necessary.

4. Feedback Maintenance Section

This section allows the administrator to receive complains, feedback and suggestions and reply back to the users.

3.1.2 Characteristics of KKTAZHP

This KKTAZ homepage has some characteristics that may benefit the users. The characteristics are as follow:

- i. User Friendly
- ii. Informative
- iii. Interactive
- iv. Well Organized
- v. Simple and easy understanding



3.2 System Analysis

Analyses have been done in order to develop this KKTAZHP project. In the previous Literature Review section, two development models have been studied. After analyzing both models, finally the prototyping model was chosen in developing this KKTAZHP project.

3.2.1 Prototyping Development Method

Prototyping is an approach for establishing a system requirement definition that is characterized by a high degree of iteration, by a very high degree of user participation in the development process and by an extensive use of approach. Through prototyping, the designers can revise forms, input screens, databases, and processing methods, submit them to a limited number of system end users for testing, and revise them for necessary for the final design.

Prototyping is an approach based on an evolutionary view of software development and having an impact on the development process as a whole. It involves producing an early working version (prototypes) of the future application system and experimenting with them.

System prototyping is actually an interactive process that is it may begin with only a few functions and may stat with what that both analysts and users believe a complete set of fractions and user requirements that may expand or contact through use and experience.

Once the decision to prototype has been made, there are four main guidelines that must be used when integrating prototyping into the requirements determination phase of the system. The guidelines are as follow:



1. Work in a manageable modules

A manageable module is one that allows users to interact with its key features yet can be built separately from other system modules.

2. Build the prototype rapidly.

- Speed is essential to the successful prototyping of an information system.
- Putting together an operational prototype both rapidly and early in the system development allows the analyst to gain valuable insight into how the remainder of the project should go.

Modify the prototype in successful iterations.

- Construction of the prototype must support modifications. Making the prototype modifiable means creating it in modules that are not highly independent.
- Entering the prototype phase with the idea that the prototype will require modification is a helpful attitude that demonstrates to users how necessary their feedback is if the system is to improve.

4. Stressing the user interface

- The user interface with the prototype is very important. For many users, the interface is the system.
- Many of the intricacies of interfaces must be streamlined or ignored altogether in the prototyping phase.



This prototyping model consists of the following 6 steps as shown in the below figure 3.1.

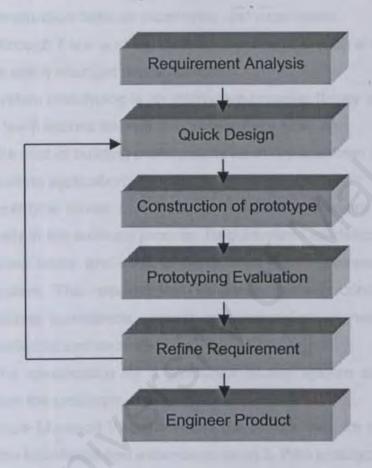


Figure 3.1: Prototyping Model Requirement Analysis

3.2.2 Reasons I Used Prototyping Model

The prototyping model was chosen because of the following reasons:

Prototyping changes the system early in its development because it depends on early and frequent user feedback, which can be used to help modify the system and make it more responsive to actual needs.



- Prototyping provides a communication basis for discussions among all the groups involved in the development process, especially between users and developers.
- Prototyping enables us to adopt an approach to software construction base on experience and experiment.
- Although it is a working system, it is design in such a way that could be easily changed and enhanced.
- System prototyping is an interactive process. It may begin with only a few functions later as the development goes on.
- The cost of building prototypes is relatively less than building a fully working application.
- Prototype model can discover requirements errors or oversights early in the software process. Requirements validation is performed since users are able to experiment with requirements and the system. The requirements validation process consists of seven factors: correctness, consistency, completeness, realistic, needed, verifiable, and traceable.
- ☐ The specification for a production-quality system can be derived from the prototype.
- Since Microsoft Visual Interdev 6.0 is quite new for me and I have little knowledge and experience using it, then prototyping is the best method to be used because it can help to reduce errors in the end of the product.
- Prototyping can be viewed as a risk reduction technique. Experiments have shown that prototyping reduces the number of problems connected to requirements specifications and the overall development costs may be lower if a prototype is developed.



3.3 System Requirements

Basically, the system requirements for this KKTAZHP project are divided into functional requirements, non-functional requirements, hardware requirements and software requirements. Each system requirement is describe below:

3.3.1 Functional Requirements

Functional requirements describe an interaction between the system and its environment. The functional requirements in this KKTAZHP project are:

- User module
- Administrator module

The description for these two modules has been discussed at the beginning of this chapter.

3.3.2 Non-Functional Requirements

Non-functional requirements describe the restriction on the system that limits one choice for constructing a solution to the problem. The non-functional requirements for this KKTAZHP project are as follow:

- i. Accuracy
 - Refers to the precision of information in the homepage. Most of the information obtained is up-to-date and accurate.
- ii. Attractive interface
 - Enable users to enjoy surfing the KKTAZHP
- iii. Security
- Only the authorized administrators are able to access the administrator module to maintain the database and announcement box. Only the authorized users that are given password are able to access the database to update their details.



iv. User friendly

- Enable users to browse and navigate the site without any problem.
- v. Interactive
 - Allow better communication between users and administrator.
- vi. Efficiency
- Enable users to retrieve information within a reasonable time.

3.3.3 Hardware Requirements

Two of the most important issues that should consider when discussing about the hardware requirements are the development environment and runtime environment. The following hardware specifications have been used to develop this KKTAZHP.

i. The Development Environment

The following specifications have been used in the development environment.

- AMD K6-2D 266MHz computer.
- 64 Mb RAM
- A SVGA Graphic Adapter
- A Web Server
- Mouse

ii. The Runtime Environment

The following specifications are required for the runtime environment.

- A 486 processor or above
- · NIC/Modem to connect to the Web Server
- 16 Mb RAM
- A SVGA Graphic Adapter
- Mouse



3.3.4 Software Requirements

The following sections describe the software requirements for this KKTAZHP project. Basically, software requirements also are divided into development environment and runtime environment.

i. The Development Environment

- The major software and programming language used in developing this system are as follow.
 - Microsoft Visual Interdev 6.0
 - · Personal Web Server to develop web based application.
 - ASP (Active Server Pages)
 - Microsoft Access 97
 - Microsoft Word for documentation
 - Windows 98
 - Notepad
 - Internet Explorer 4.0
 - ACD See

ii. The Runtime Environment

The runtime environments are as follow:

- Window 95, Window NT, Window 98
- Internet Explorer 3.0 or above, Netscape Communicator 3.0 or above



3.4 Project Schedule

All the steps described in the development strategy have been completed within a time constraint. Please refer the below Gantt chart for the project schedule of KKTAZHP project.

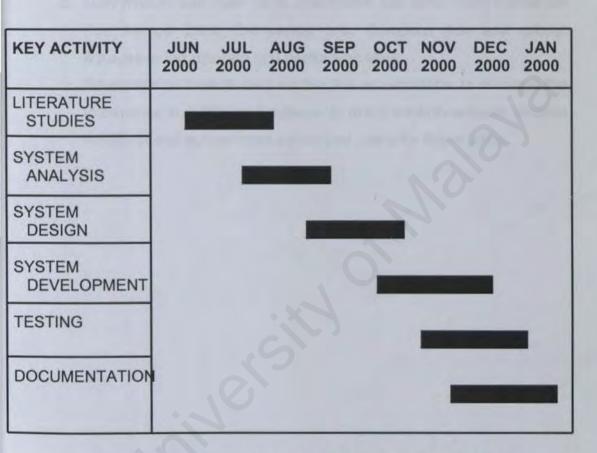


Figure 3.2 Gantt Chart Showing the Period of Each Activities



3.5 Statement of Expected Outcome

This KKTAZHP project is expected to be an informational site on the web with the following features:

- User module with main page, information site about Kolej Kediaman Tun Ahmad Zaidi, Discussion box, Complain box and proper linkages to the relevant and useful web sites.
- Administrator module that enable the administrator to manage the information in relational database, to make announcements, receive feedback and authenticate authorized users for this module.

SYSTEM IMPLEMENTATION



CHAPTER FOUR: SYSTEM IMPLEMENTATION

4.1 System Design

System design is a very important step in the system development because it determines the success of a system. Design is the process of transforming the problem into a solution and the description of the solution. Requirements that are found in analysis stage are the one actually translated into design specification.

4.2 System Architecture Design for KKTAZHP

The architecture design for KKTAZHP is divided into two parts that are the user module and administrator module as shown below.

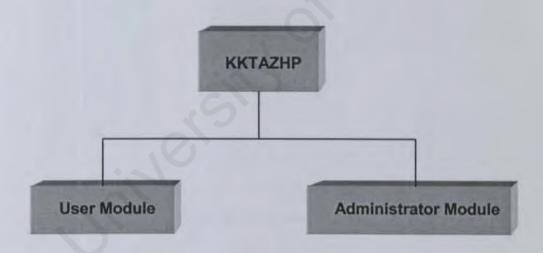


Figure 4.1 Architecture Design for KKTAZHP



4.1.2 System Design for KKTAZHP

As define earlier, one of the objectives of this KKTAZHP is to provide users with a high degree of selectivity over information in the homepage hence the user and the administrator module are design in such a way that enable users to link all modules easily. Please refer figure 4.2 and figure 4.3 to view the structure chart for the user module and the administrator module.



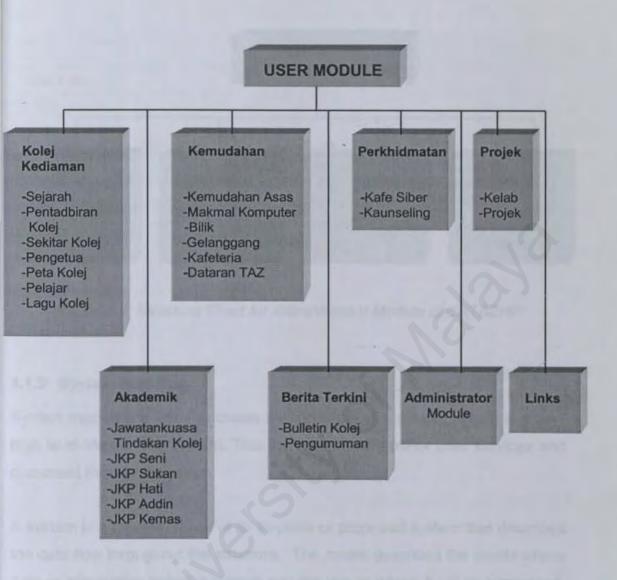


Figure 4.2 Structure Chart for User Module Of KKTAZHP



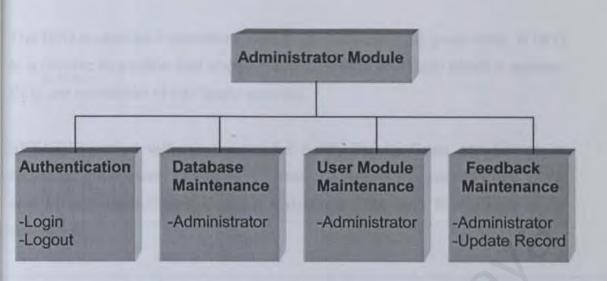


Figure 4.3 Structure Chart for Administrator Module of KKTAZHP

4.1.3 System Modeling

System modeling is used to create a conceptual of a system, which is a very high level view of the system. This includes identify major user services and document their relationship.

A system is a representation of an in-place or proposed system that describes the data flow throughout the structure. The model describes the points where data or information enters a system and the places where it will be processed, as well as action taken and the points where data will be output.

A system model is documented through a variety of design diagrams. A design diagram is a graphic or visual representation of a structure. Design diagrams include data flow diagrams (DFD), structure charts, decision trees and other items. For the KKTAZHP project, DFD was chosen to represent the system.



The DFD is used as a system-modeling tool because of its great utility. A DFD is a graphic illustration that shows the flow of data and logic within a system. DFD are composed of four basic symbols.

KKTAZHP project will use the symbol developed by Gane and Sarson to represent the system. The table 4.1 below describes the symbol using Gane and Sarson method and Figure 4.4 describes the data flow diagrams for KKTAZHP.

Symbol	Name	Description
	Source or destination of data	External sources or destinations of data, interact with the system but are outside its boundary.
	Processes	It represents the transformation or processing of information within a system.
	Data store	It is used for showing the data storage or referenced by a process.
	Data flow	It is used to show movement of data from an origin to a destination with the head of arrow pointing towards the destination.

Table 4.1 Symbols using Gane and Sarson Method



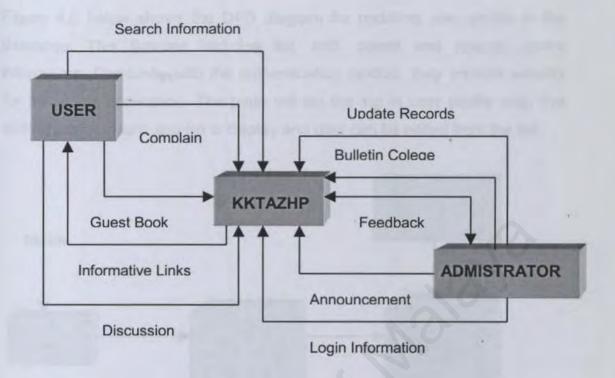


Figure 4.4 The Data Flow Diagram for KKTAZHP

Figure 4.5 shows the DFD diagram for the authentication module. This module is responsible for the security of the application. It enables the log in and logout of the user.

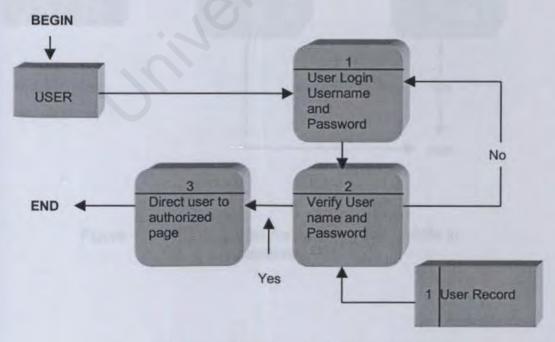


Figure 4.5 Authentication Module DFD



Figure 4.6 below shows the DFD diagram for updating user profile in the database. This function includes list, add, delete and change user's information. Combined with the authentication module, they provide security for the whole application. The page will list the log in user profile only. For editing user, current user list is display and user can be edited from the list.

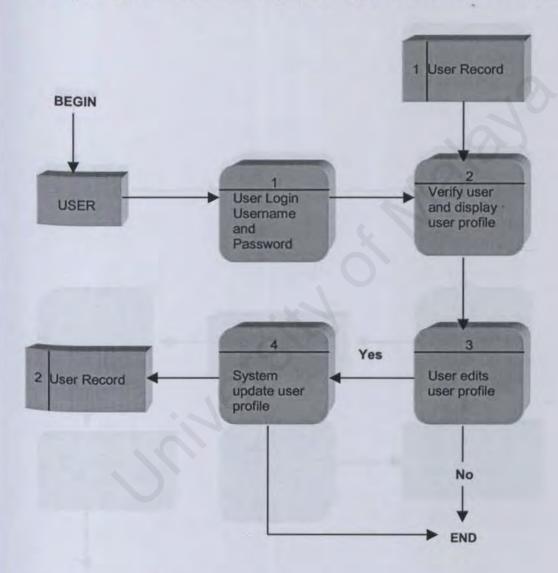


Figure 4.6 DFD diagrams for updating user profile in database



Figure 4.7 below describe the DFD diagram for the Complain box and the Discussion box. Users have to login in order to enable them to access the Complain and Discussion box. The administrator will retrieve the complains and discussions made by users and send feedback to them.

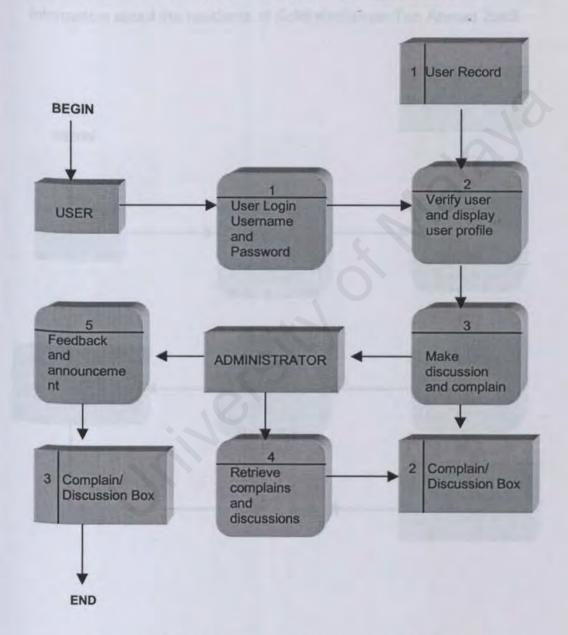


Figure 4.7 DFD diagrams for the complain and discussion box



Figure 4.8 below describe the DFD diagram for searching students record and the chat module. Authorized users who successfully login are able to access these 2 modules. Users have to key in keywords in order to search information about students. This search module is restricted only for the information about the residents of Kolej Kediaman Tun Ahmad Zaidi.

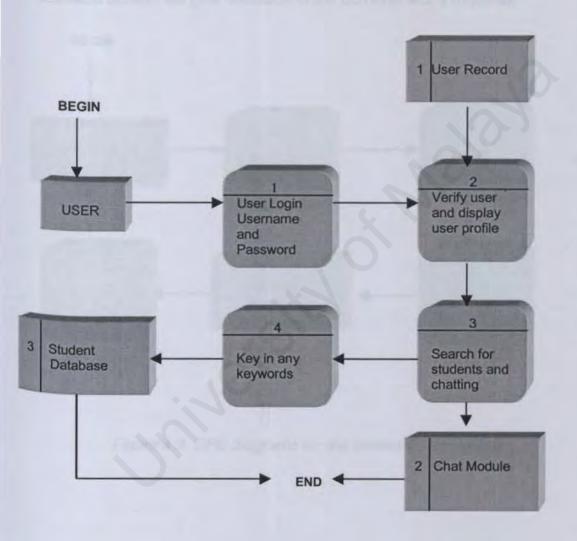


Figure 4.8 DFD diagrams for the search record module and chat module



Figure 4.9 below describe the DFD diagram for the Administrator module. As usual, users have to login in order to enable them to access this module. Successful login users will able to update any information, view the guest book, complain box and make new announcements or bulletins. Besides, the administrators are able to change their own username and password. The database system will give feedback to the administrator's requests.

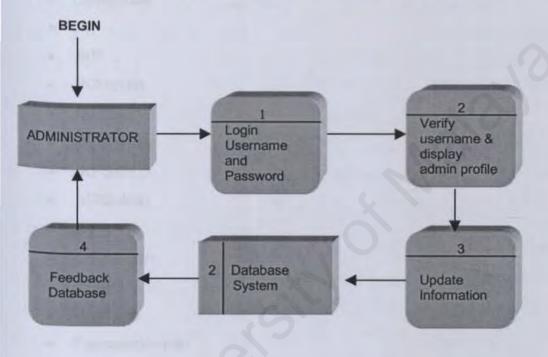


Figure 4.9 DFD diagrams for the administrator module



4.1.4 KKTAZHP Database Design

The KKTAZHP database contains about 22 tables as follow:

- Announcement
- Bulletin
- Complain
- Guestbook
- JIK
- JKP
- JKPAddin
- JKPHati
- JKPKemas
- JKPSeni
- JKPSukan
- JTK
- Kakitangan
- Kelab
- Message
- PasswordAdmin
- Pengetua
- Pentadbiran
- Person
- Projek
- Reply
- WakilTingkat

As the feedback form is being filled up and submitted, the database tables will be updated from time to time. The design for each table will be described in next page.



Announcement Table

This table contains the details of the announcements made by the administrator, which includes the message's ID, subject, contents and the date when the announcement is updated.

Field Name	Data Type	Description
MessageID	Auto Number	Message's ID
MessageDate	Date/Time	Message's Date
MessageSubject	Text	Message's Subject
MessageBody	Memo	Message's Body

Table 4.2 Announcement Table

Bulletin Table

This table contains the details of the bulletins made by the administrator, which includes the bulletin's ID, date, subject and the body of the bulletin.

Data Type	Description
Auto Number	Bulletin's ID
Date/Time	Bulletin's Date
Text	Bulletin's Subject
Memo	Bulletin's Body
	Auto Number Date/Time Text

Table 4.3 Bulletin Table

GuestBook Table

This table contains the details of the comments about this KKTAZHP made by the users around the World Wide Web.

Data Type	Description
Auto Number	Message's ID
Date/Time	Message's Date
Memo	Message's Body
Text	User's Email
Text	User's Name
	Auto Number Date/Time Memo Text

Table 4.4 GuestBook Table



Complain Table

This table contains the details of the complains made by the users, which includes his/her name, email address, room number, complain's date, ID and the body of their complains.

Field Name	Data Type	Description
ComplainID	Auto Number	Complain's ID
ComplainDate	Date/Time	Complain's Date
ComplainBody	Memo	Complain's Body
NomborBilik	Text	User's Room Number
Email	Text	User's Email
Name	Text	User's Name

Table 4.5 Complain Table

JIK Table

This table contains the details of the committee of Jawatankuasa Induk Kolej (JIK), which includes his/her name and his/her position in the committee.

Field Name	Data Type	Description
ID	Auto Number	Committee's ID
Nama	Text	His/Her Name
Jawatan	Text	His/Her Position

Table 4.6 JIK Table

JKP Table

This table contains the details of the committee of Jawatankuasa Perkembangan Kolej (JKP), which includes his/her name and his/her position in the committee.

Field Name	Data Type	Description
ID	Auto Number	Committee's ID
Nama	Text	His/Her Name
Jawatan	Text	His/Her Position

Table 4.7 JKP Table



JKPAddin Table

This table contains the details of the committee of Jawatankuasa Kerja Perkembangan Intelektual Kolej Kediaman Tun Ahmad Zaidi (JKP Addin), which includes his/her name and his/her position in the committee.

Field Name	Data Type	Description
ID	Auto Number	Committee's ID
Nama	Text	His/Her Name
Jawatan	Text	His/Her Position

Table 4.8 JKPAddin Table

JKPHati Table

This table contains the details of the committee of Jawatankuasa Kerja Perkembangan Kerohanian dan Etika Kolej Kediaman Tun Ahmad Zaidi (JKP Hati), which includes his/her name and his/her position in the committee.

Field Name	Data Type	Description
ID	Auto Number	Committee's ID
Nama	Text	His/Her Name
Jawatan	Text	His/Her Position

Table 4.9 JKPHati Table

JKPKemasTable

This table contains the details of the committee of Jawatankuasa Kerja Perkembangan Kebajikan dan Kemasyarakatan Kolej Kediaman Tun Ahmad Zaidi (JKP Kemas), which includes his/her name and his/her position in the committee.

Field Name	Data Type	Description
ID	Auto Number	Committee's ID
Nama	Text	His/Her Name
Jawatan	Text	His/Her Position

Table 4.10 JKPKemas Table



JKPSeniTable

This table contains the details of the committee of Jawatankuasa Kerja Perkembangan Kesenian dan Kreatif Kolej Kediaman Tun Ahmad Zaidi (JKP Seni), which includes his/her name and his/her position in the committee.

Field Name	Data Type	Description
ID	Auto Number	Committee's ID
Nama	Text	His/Her Name
Jawatan	Text	His/Her Position

Table 4.11 JKPSeni Table

JKPSukanTable

This table contains the details of the committee of Jawatankuasa Kerja Perkembangan Sukan dan Rekreasi Kolej Kediaman Tun Ahmad Zaidi (JKP Sukan), which includes his/her name and his/her position in the committee.

Field Name	Data Type	Description
ID	Auto Number	Committee's ID
Nama	Text	His/Her Name
Jawatan	Text	His/Her Position

Table 4.12 JKPSukan Table

KakitanganTable

This table contains the name of all the office workers of Kolej Kediaman Tun Ahmad Zaidi.

Field Name	Data Type	Description
IDKakitangan	Auto Number	Worker's ID
Nama	Text	His/Her Name

Table 4.13 Kakitangan Table



Kelab Table

This table contains the details of the clubs in Kolej Kediaman Tun Ahmad Zaidi.

Field Name	Data Type	Description
ID	Auto Number	Club's ID
Kelab	Text	Club's Name
Pengerusi	Text	Club's Director
JKPPelaksana	Text	Name of the JKP

Table 4.14 Kelab Table

PasswordAdminTable

This table contains the username and password of the administrator.

Field Name	Data Type	Description
ID	Auto Number	Password's ID
Password	Text	Password
Username	Text	Username

Table 4.15 PasswordAdmin Table

PengetuaTable

This table contains the details of the comments about this KKTAZHP made by the users, which includes his/her name, email address, date, ID and the body of their comments.

Data Type	Description	
Auto Number	Master's ID	
Text	Master's Name	
Memo	His/Her Biography	
oar Text Path for His/Her F		
	Auto Number Text Memo	

Table 4.16 Pengetua Table



Pentadbiran Table

This table contains the details of the administrator of Kolej Kediaman Tun Ahmad Zaidi, which includes their names and position such as Master, Secretary, Treasurer and Supervisor.

Field Name	Data Type	Description
PentadbiranID	Auto Number	Administrator's ID
Nama	Text	Administrator's Name
Jawatan	Text	His/Her Position

Table 4.17 Pentadbiran Table

Projek Table

This table contains the details of the projects in Kolej Kediaman Tun Ahmad Zaidi.

Field Name	Data Type	Description
ID	Auto Number	Project's ID
Projek	Text	Project's Name
Pengerusi	Text	Project's Director
Pelaksanaan	Text	Duration of the project

Table 4.18 Projek Table

WakilTingkat Table

This table contains the name of the floor representative in Kolej Kediaman Tun Ahmad Zaidi.

Field Name	Data Type	Description
ID	Auto Number	Floor rep.'s ID
Nama	Text	Floor rep.'s name
WakilTingkat	Text	Floor
Pelaksanaan	Text	Duration of the project

Table 4.19 WakilTingkat Table



Message Table

This table contains the details of the discussions made by users, which includes

Field Name	Data Type	Description
ParentID	Text	Parent's ID
MessageID	Auto Number	Discussion's ID
MessageDate	Date/Time	Discussion's Date
MessageFrom	Text	User's Name
Emailaddress	Text	User's Email Address
MessageSubject	Text	Discussion's Topic
MessageBody	Memo	Discussion's Content

Table 4.20 Message Table

Reply Table

This table contains the details of the replies made by users, which includes his/her name, email address, date, contents, topic and parent's ID.

Filed Name	Data Type	Description
ReplyID	Auto Number	Reply's ID
ReplyFrom	Text	User's Name
Email	Text	User's Email Address
ReplyBody	Memo	Reply's Content
ReplyDate	Date/Time	Reply's Date
ParentID	Text	Parent ID
Topic	Text	Reply's Topic

Table 4.21 Reply Table



Person Table

This table contains the details of all the students or residents of Kolej Kediaman Tun Ahmad Zaidi such as his/her name, room number, matric number, IC number, address, telephone number, sex etc.

Field Name	Data Type	Description
PersonID	Auto Number	Student's ID
Nama	Text	Student's Name
NomborBilik	Text	His/Her Room Number
Blok	Text	His/Her Block
Floor	Text	His/Her Floor
Jantina	Text	His/Her Sex
ICNo	Text	His/Her IC Number
KadMatrik	Text	His/Her Matric Number
Fakulti(Tahun)	Text	Faculty and Year
AlamatAsal1	Text	His/Her Address
AlamatAsal2	Text	His/Her Address
Poskod	Text	Postcode
Bandar	Text	His/Her Town
Negeri	Text	His/Her State
Negara	Text	His/Her Country
NomborTelefon	Text	Telephone Number
EmailAddress	Text	His/Her Email Address
Password	Text	His/Her Password
Active	Yes/No	Validity
LastLogin	Date/Time	Last Login Date/Time

Table 4.22 Person Table



4.2 System Development

The KKTAZHP was developed using the prototype approach as mention in Chapter Three. The development of KKTAZHP can be divided into two phases, which are the web pages development and the database development.

4.2.1 Web Pages Development

This KKTAZ homepage has been developed mainly using Hypertext Markup Language (HTML), ASP coding and JavaScript. HTML is used to develop and create the setting and contents of the web pages while ASP codes are used in to create essential functions inside a system. JavaScript is used mainly for passing the parameters from one applet to another in different web pages.

This KKTAZ homepage is divided into two parts; the information part and the latter is the part for users or administrators to login into the system. For the information part, all the web pages are developed using frames while no frames is used for the login part.

JavaScript has been coded in some of the HTML documents to perform some functions such as the current date and time of the system, to interpret the parameter passing through a URL address etc. Besides, the HTML codes were modified continuously until the desired layout of the web pages had been achieved or satisfied.

The ASP codes have been coded in most of the HTML documents to perform all the functions required in the system such as login, updating records, discussion box, complain box and etc. This ASP codes were also modified continuously until the required function of each form was accomplished.

The main flow of the HTML documents for users' page and the administrator page are shown in Figure 4.10 and Figure 4.11.



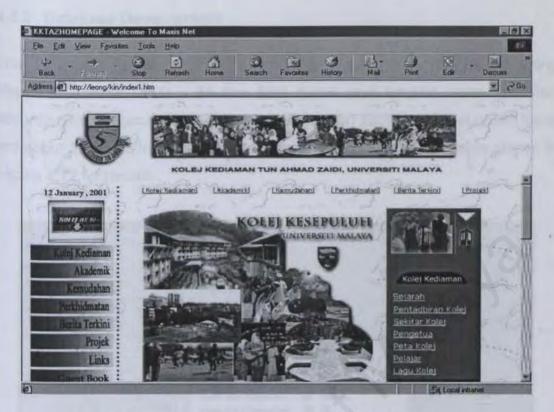


Figure 4.10 User Homepage Main Screen



Figure 4.11 Administrator Homepage Main Screen



4.2.2 Database Development

The database for this KKTAZ's homepage has been formulated using Microsoft Access 2000. All the field types and lengths were specified according to the functional requirement. As stated earlier in this chapter, there are about 22 tables involved in developing this KKTAZ homepage as shown in Figure 4.12 for details.

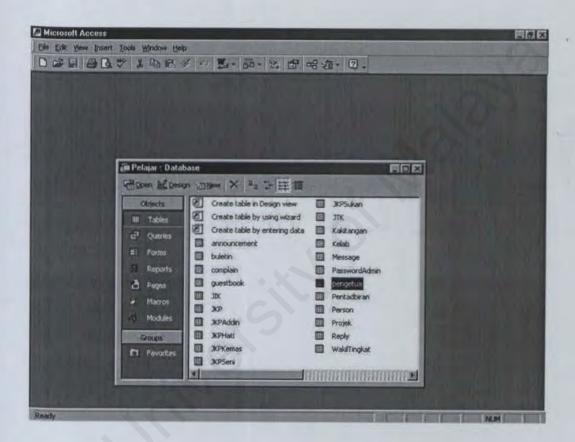


Figure 4.12 Tables for KKTAZHP Database

SYSTEM TESTING



CHAPTER FIVE: SYSTEM TESTING

5.1 Introduction

A system that cannot be trusted to work correctly has no value. This means that the programs must function correctly and there must be a way to determine that the results that come back are valid and complete. Writing the code with the ability to fully test itself solves the first problem and makes coding easier in the process.

Testing is a normal routine that involves testing newly developed or modified programs. Testing is vital in any program because it is during these stages that the strengths and weaknesses of a program are identified.

System testing is a predetermined combination of tests that, when executed successfully, satisfy management that the system meets specifications. It is also used to validate that the system was built right.

5.1.1 Unit Testing

Unit testing focuses verification effort on the smallest unit of software design. This process enables the tester to detect errors in coding and logical mistakes. In unit testing, interactions between modules are avoided. The unit tests that were performed for KKTAZHP are as follow:

- Error Handling to ensure all error handling paths are tested
- Interface Testing to ensure that information flows well into and out of the program unit under test.

5.1.2 System Module Testing

System module testing is performed after completion of coding for each module in the system. This process ensures that all units in the module will function accordingly when integrated and have fully satisfied its functional requirements.

In KKTAZHP, a few sets of input data were submitted to the feedback form, discussion form, reply form and the complain form in the user module. This



was done to ensure an expected output be confirmed in the confirmation form as these data are being updated in the database.

5.1.3 Integration Testing

System testing is a process of verifying that the system components work together as described in the system and program design specifications (Pfleeger, 1998). Testing was performed on group of related modules to ensure that data and controls are passed properly between modules. This process was performed in this KKTAZHP by ensuring that the parameters passing had been successfully made and no errors occurs while it is being used.

5.1.4 Regression Testing

Regression testing identifies new faults that may have been introduced as current ones are being corrected. Testing after changes have been made to ensure that no unwanted changes were introduced to the software or system. In other words, regression testing is a test applied to a new version or release to verify that it still performs the same functions in the same manner as an older version or release (Pfleeger, 1998). This process was carried out each time the KKTAZHP system modules had undergone changes.

ONOTEN ENAMINATION



CHAPTER SIX: SYSTEM EVALUATION

6.1 Features of System

This KKTAZ Homepage was specially developed in order to give students or any users information about Kolej Kediaman Tun Ahmad Zaidi. This site was designed in such a way that will benefit users as well as the administrator of Kolej Kediaman Tun Ahmad Zaidi who would like to update information or obtain up-to-date and useful information about Kolej Kediaman Tun Ahmad Zaidi.

Basically KKTAZHP is an informative site. This site contains a series of web pages that provide users the up-to-date information and links to some useful and relevant sites. Besides it also provide the authorized users the online chatting, discussion and complain facilities as well as enable them to edit their own profiles and search for students' information.

This KKTAZHP also provides a convenient way for the administrator to update any relevant information, view the guest book and complain box or make any new announcements and bulletins.

Furthermore, the web pages itself provide another interesting feature about this KKTAZHP. The web pages interfaces that were developed are attractive with colorful, simple and user-friendly features. Users who are familiar with World Wide Web should have no problem at all in browsing and using this system.

Finally, the feedback or guest book form in this system acts as an evaluation form to the system to know the weakness and strengths of the system from the users and improve it.



6.2 System Strengths

Evaluation of the strength for this KKTAZHP's system is mainly focus on the ASP codes and JavaScript that was used. By using the ASP codes and JavaScript, the system that was developed is able to deliver a dynamic and interactive content on the Web.

Moreover, this system's features such as discussion box, complain box, chatting module, user profile editing module and searching module for student provide the uniqueness for this KKTAZ's homepage. There are only a few or none of the other websites in the World Wide Web that provide such features in their system.

For the administrator module, this KKTAZHP enables the authorized administrator to update new information such as new organization structure, staff, projects, clubs and they even can update the students' database from time to time. Furthermore the administrator can make and update new bulletin or announcement through the administrator module. All these features also play an important role in providing uniqueness for this KKTAZHP.

6.3 Evaluation By Endusers

Questionnaires have been prepared in order to get comments and opinion from users around University of Malaya. These questionnaires are mainly targeted for the residents of Kolej kediaman Tun Ahmad Zaidi who are currently living in this college. This survey uses 40 undergraduates as the survey sample. Besides that, these questionnaires have been send to the administrator of Kolej Kediaman Tun Ahmad Zaidi in order to get their comments and opinions about this homepage especially for the administrator module.

After all the questionnaires have been given to the users, then the process of gathering back all the questionnaires is done after 1 or 2 days later. All the information that have been gathered are used in the system evaluation and the results of the survey are explained below.



From the students 'point of view

- Most of the students agreed that this homepage provides enough information and up-to-date information for them.
- Some of them think that this homepage should include an English version that enables users from all the World Wide Web to understand the information provided in this homepage.
- Majority of them suggested that the "Lagu Kolej" page should include a button that once it is clicked, will enable the users to listen to the college's song.
- This homepage should provide an online booking facility that enables them to do online booking through the Internet.
- Majority of them agreed that the features in this homepage are easy to use and user friendly.

From the administrators' point of view

- Majority of them agreed that this system provides a convenient and easy way for them to update any information and maintain the student database.
- Some of them suggested that the administrator module should include a module that enables the administrator to print reports according to the appropriate report format.
- Some of them suggested that this homepage should include a module that enables the administrator to sort for the students who are potential to live in college for the following semester such as by evaluating their participation in college's activities and the gross salary of their family per month.



6.3 System Constraints

Due to time constraint, there are some weaknesses in this KKTAZHP. The weaknesses are elaborated as follow:

- This homepage is mainly written in Bahasa Malaysia, hence the information provided is limited for those who can understand Bahasa Malaysia.
- This homepage doesn't include a module that enables the administrator to print any report in an appropriate report format.
- The college's song is not available in the "Lagu Kolej" page because at this moment there is no one who takes initiative to record the college's song.
- This system doesn't provide online booking facilities for students.

6.4 Future Enhancements

This KKTAZ's homepage was developed around 2 to three months. Since system development is a dynamic process, hence new ideas have come about when developing this system. Nevertheless, due to time constraint, not all of these ideas could be incorporated into the system. Some of the new ideas are elaborated below:

- In order to make this homepage an informative website, an English version of this homepage should be included.
- This homepage should include a module that enables the administrator to print report in an appropriate report format.
- This homepage should include a module that enables the administrator to sort for the students who are potential to live in college for the following semester such as by evaluating their participation in college's activities and the gross salary of their family per month.
- An online booking for facilities will be added in this homepage to enable users to do booking through the Internet.
- The college's song will be available in the "Lagu Kolej" page.



6.5 Problems Encountered

In the beginning, many problems occurred, as I never used some of the software to develop this KKTAZHP such as JavaScript, ASP and Visual Interdev 6.0. Consequently, it took me some time to learn these softwares and programming languages. Besides, in the beginning Visual Interdev 6.0 was the proposed tool in developing KKTAZHP. But, due to time constraint, Visual Interdev 6.0 was switched to Microsoft FrontPage 2000.

6.6 Knowledge Gained

Throughout the whole process of developing KKTAZHP, I really have learned a lot of knowledge as mentioned below:

- Learn how to use ASP and JavaScript, which I have never learned before.
- 2. Techniques to plan and develop an interactive and dynamic web page.
- Gained knowledge and a better understanding of Internet and World Wide Web.
- 4. Techniques in designing and maintaining database.
- 5. Skills in finding information and problem solving.

6.7 Concluding Remarks

The main objective for developing this KKTAZHP is to develop and design an interactive and dynamic web site that provides useful and up-to-date information about Kolej Kediaman Tun Ahmad Zaidi. Besides, it is also aimed to provide a convenient way for the administrator to update any new information and also provide an easy way to maintain the database. While for the students in Kolej Kediaman Tun Ahmad Zaidi, developing this homepage will enable them to edit their own profiles, chatting, or make discussions and complains. Although this system meets its goals and specifications, but there



are still plenty of rooms for improvements as mentioned earlier in future enhancements.

Developing this KKTAZHP has given me a golden opportunity to learn ASP coding and JavaScript. Knowledge gained in this field is very valuable especially when I enter the real working environment and tend to serve the rapid growing Internet industry in the world currently.

Finally, developing this KKTAZHP enabled me to be more discipline in which I need to work and complete tasks within a specific period of time besides enabled good planning and problem solving due to time constraints. It is hoped that this KKTAZHP will provide users useful and up-to-date information about Kolej Kediaman Tun Ahmad Zaidi.

DEFENDENCES



REFERENCES

- Chris Ullman, David Buser, Jin Duckett, Brain francis, John Kauffman, Juan T.Llibre, David Sussman, 1999. Beginning ASP 3.0. Wrox Publishing.
- A.Keyton Weissinger, 1999. ASP In A Nutshell "A Dekstop Quick Reference". O'Reilly Publishing.
- Gary B. Shelly, Thomas J. Cashman, Judy Adamski, Joseph J. Adamski, 1991. Systems Analysis and Design. Boyd & Fraser.
- Gerald A. Silver, Myrna L. Silver, 1989. System Analysis and Design.
 Addisson-Wesley Publishing Company.
- Shari Lawrence Pfleeger, 1998. Software Engineering: Theory and Practice. Prentice-Hall International, Inc.

Sites on Web Designing

- 6. http://www.atomor.demon.co.uk/design/index.htm
- 7. http://www.webattack.com/freeware/gmm/fwgraphicedit.shtml
- 8. http://webdesign.about.com/compute/webdesign/library/weekly/

ASP Sites

- 9. http://www.stardeveloper.com/asp_tutorial.asp
- 10. http://www.aspdeveloper.net/starting.htm
- 11. http://www.geb.net/asp/samples/
- 12. http://www.support.nedcomp.nl/iishelp/iis/htm/asp/iiatovr.htm
- 13. http://www.haneng.com/lessons.asp



Visual Interdev 6.0

- 14. http://www.academicoop.com/Curriculum/visualinterdev.asp
- 15. http://www.msdn.microsoft.com/vinterdev/
- 16. http://www.aspdeveloper.net/VInterDev/page1.asp

Microsoft FrontPage 2000

- 17. http://www.microsoft.com/catalog/display.asp?site=769&subid=22&pg=1)
- 18. http://msdn.microsoft.com/workshop/languages/fp/2000/tutorial2000/de fault.asp
- 19. http://www.actden.com/fp2000/java/
- 20. http://www.siec.k12.in.us/~west/online/website/

Macromedia Flash

- 21. http://hotwired.lycos.com/webmonkey/multimedia/shockwave_flash/tuto
 rials/tutorial6.html
- 22. http://www.flashkit.com/
- 23. http://www.echoecho.com/flash.htm
- 24. http://mig.msu.edu/Followups/flash/
- 25. Multimedia University

 http://www.mmu.edu.my/
- 26. Beloit University

 http://www.beloit.edu/



27.College of Engineering http://www.eng.vt.edu/

28.Ecircles.com http://www.ecircles.com/

29.Patimas Computer Berhad http://www.patimas.com/

30.Harvard University
http://www.harvard.edu/campus/student.html

31.Manhattan College
http://www.manhattan.edu/

32.Trinity College
http://www.trincoll.edu/pub/

APPENDIN



APPENDIX A: USER GUIDE

Introduction

Welcome to Kolej Kediaman Tun Ahmad Zaidi Homepage (KKTAZHP). This system provides adequate, useful and up to date information about KKTAZ to the users. Besides that, this system enables the successful login users to change their own profiles and password, search for students, chat, make complains and discussions while for other users, they are able to give their comment or share their opinion about the site by filling up the form provided in the guest book. For the administrator module, the successful login users will be able to update relevant information such as announcements, bulletins, students' information etc.

This system is easy to use and user friendly. All the functions provided in this system can be easily executed by just clicking on the hypertext and icons. Below is a user manual to provide guidance on how to use the system.

Getting Started

The first thing a user has to do is to type the Web Site address of KKTAZHP in the address box of the Internet Explorer. The URL address for KKTAZHP is http://kktaz.um.edu.my.

User Homepage

After the user has type in the URL address of KKTAZHP, then the web browser will display the introduction page of KKTAZHP which is made by Macromedia Flash. At this page, users have two choices that are whether to wait until the Flash finishes or directly proceed to the main page by clicking the "skip intro" button. Please refer figure A1.1 for the introduction page.



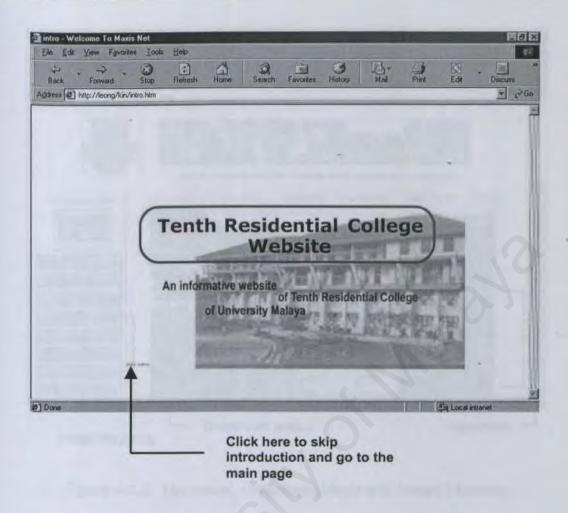


Figure A1.1 Introduction page

After the introduction page, then it will automatically switch to the main page which has many hypertexts, dropdown menus and image mapping where users can perform selection by using the mouse as shown in Figure A1.2. This page is divided into three parts. The first part is accessible for all users, which contains information about Kolej Kediaman Tun Ahmad Zaidi while the second part is the menu for the authorized users who are able to login to the system. The last part is the administrator menu, which is only accessible for the administrator of Kolej Kediaman Tun Ahmad Zaidi. The authorized user menu and the administrator menu will be discussed later in the following sections.



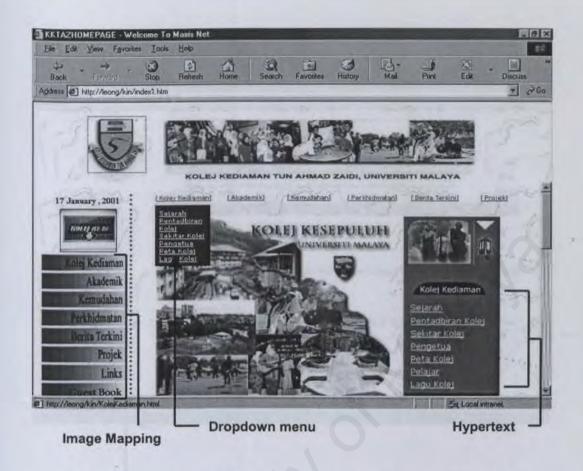
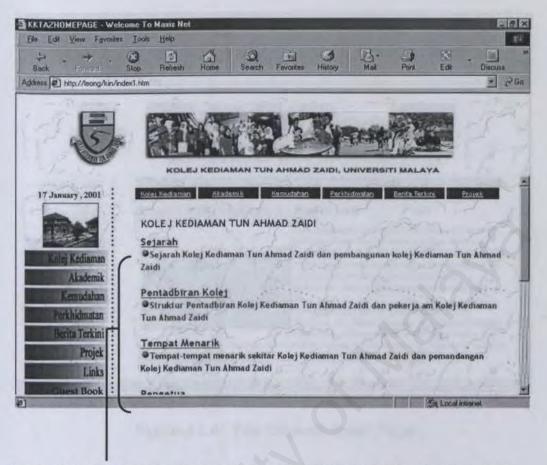


Figure A1.2 Hypertext, Dropdown Menu and Image Mapping

- In this section we will discussed about the general menu for all the users in the World Wide Web. Once the users are already in the main page, they can navigate or browse all the pages in this KKTAZHP such as the history of the college, the facilities and services provided, college's bulletin and announcement, make comments and etc. by clicking on the hypertext or the image mapping in this page.
- If users want to know about the history of the college, the organizational structure of the administrator of Kolej Kediaman Tun Ahmad Zaidi, the college's master, some pictures of the college, college's map and college's song can click the "Kolej Kediaman" button on the left hand side of the main page or by clicking it on the top of the dropdown menu. After clicking this button, then the user will be directed to the "Kolej Kediaman" menu as shown in Figure A1.3.



Hyperlink to other pages such as college's history, organizational structure etc.

Figure A1.3 The Kolej Kediaman Page

Once the user is in the "Kolej Kediaman" page, then he/she can click on the hypertext to view the college's history by clicking on the "Sejarah", the organization structure by clicking on the "Pentadbiran Kolej", beautiful scenery of KKTAZ by clicking on the "Tempat Menarik", college's master by clicking on the "Pengetua", college's map by clicking on the "Peta Kolej" and the college's song by clicking on the "Lagu Kolej". Please refer to Figure A1.4 to Figure A1.9 in the following pages.



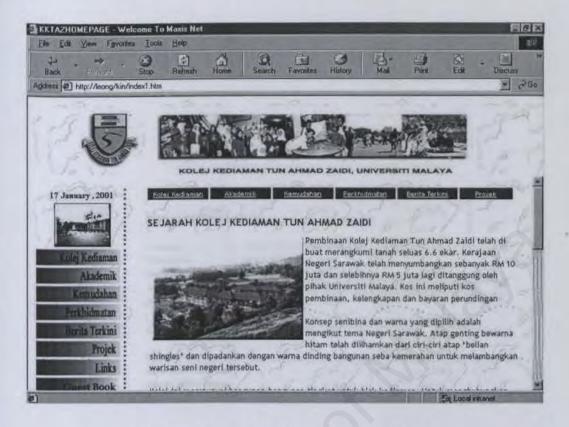


Figure A1.4 The "Sejarah Kolej" Page

- This page will give a brief description about the history of Kolej Kediaman Tun Ahmad Zaidi from the beginning of its development until now. This includes some description about the concept of the architecture and design used in building this college, the facilities available, the structure building of the college etc.
- The "Pentadbiran Kolej" page will display the most updated organization structure of the administrator of Kolej Kediaman Tun Ahmad Zaidi. This includes the college's master, secretary, treasurer, supervisor and all the staff who are currently working at the office of Kolej Kediaman Tun Ahmad Zaidi. This page is a dynamic page, which means that the name of the people in this organization can be changed or updated from time to time through the Administrator module which will be discussed later. Please refer Figure A1.5 for details.



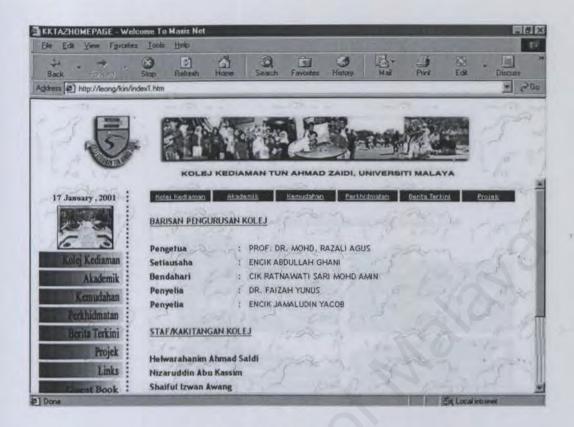


Figure A1.5 The "Pentadbiran Kolej" Page

- The "Pengetua" page will display the personal details and the photo of the master of Kolej Kediaman Tun Ahmad Zaidi as shown in Figure A1.6. This page is also a dynamic page which all the information can be updated or changed by the administrator.
- Some beautiful sceneries of Kolej Kediaman Tun Ahmad Zaidi are available in the "Tempat Menarik" page. This includes photos taken around the compound of Kolej Kediaman Tun Ahmad Zaidi such as the basketball court, blocks, car park and etc.





Figure A1.6 The "Tempat Menarik" Page

- The personal details and photo of the college's master are available in the "Pengetua" page. All the information about the college's master can be updated and changed through the administrator menu. Please refer Figure A1.7 for details.
- The "Peta Kolej" page will display the route to University of Malaya and all the ways from University of Malaya to Kolej Kediaman Tun Ahmad Zaidi as shown in Figure A1.8 in next page.



Figure A1.7 The "Pengetua" Page

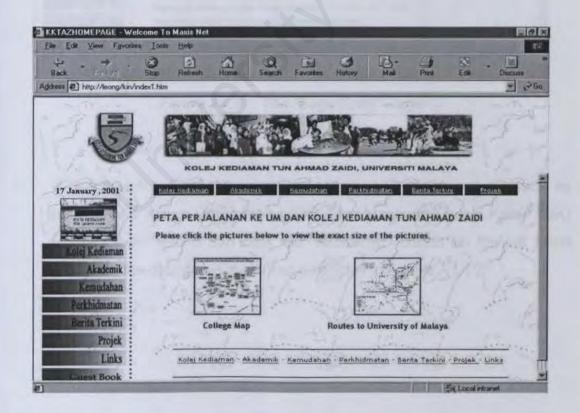


Figure A1.8 The "Peta Kolej" Page



The "Lagu Kolej" page will display the official song's lyric of Kolej Kediaman Tun Ahmad Zaidi. Please refer the below figure for details.

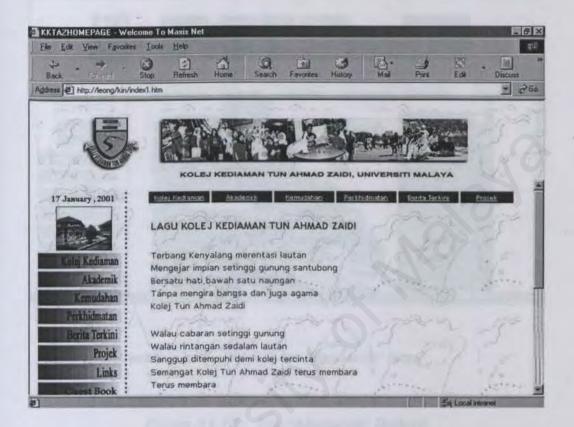


Figure A1.9 The "Lagu Kolej" Page

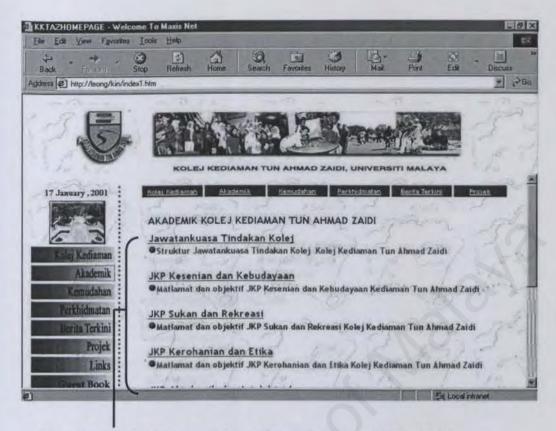
If users wish to know the organization structure of the college such as the college's Action Committee (JTK), "Jawatankuasa Induk Kolej" (JIK) and etc. then he/she can click the "Akademik" button on the left hand side or on the dropdown menu bar as shown in Figure A1.10.



Click this button to go to the "Akademik" Page

Figure A1.10 The "Akademik" Buttons

Once the user has clicked the button, then the "Akademik" page will be displayed as shown in Figure A1.11 in next page. This page consists of hyperlinks, which will direct the user to pages such as "Jawatankuasa Tindakan Kolej (JTK)", Jawatankuasa Induk Kolej (JIK) etc.



Hyperlink to other pages such as "Jawatankuasa Tindakan Kolej (JTK)","JKP Sukan dan Rekreasi" etc.

Figure A1.11 The "Akademik" Page

The "Jawatankuasa Tindakan Kolej" page will display the organizational structure of the college's JTK, JIK, JKP and "Wakil Tingkat". This is also a dynamic page, which the administrator have to update it every year. Please refer figure A1.12 for details.



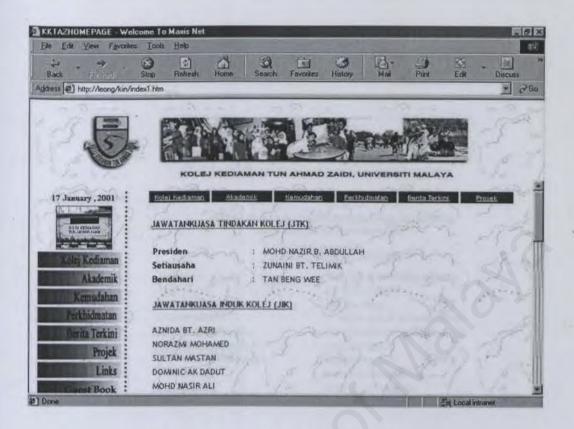


Figure A1.12 The "JTK Kolej" Page

The "JKP Sukan" page will display the objective and the organizational structure of "Jawatankuasa Sukan dan Rekreasi" as shown in Figure A1.13. For the remaining pages such as "JKP Kemas", "JKP Addin", "JKP Seni" and "JKP Hati", the format of these pages are similar to the format of "JKP Sukan" page except the objective and organizational structure for each of these "JKP" are different.

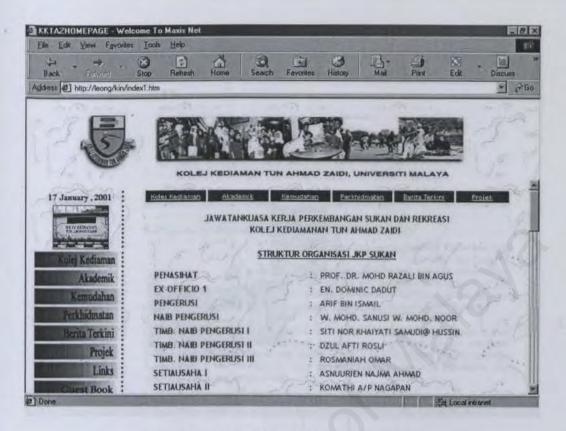
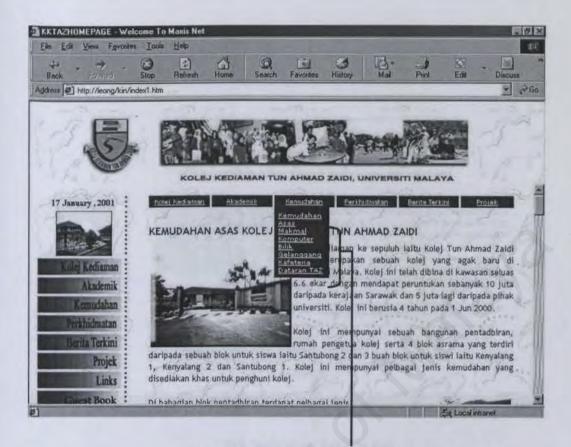


Figure A1.13 The "JKP Sukan" Page

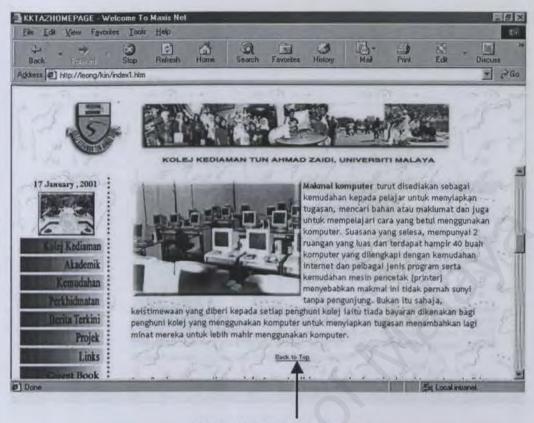
The next button is the "Kemudahan" button, which contains information about the facilities available in Kolej Kediaman Tun Ahmad Zaidi. After clicking the "Kemudahan" button, the user will be directed to the "Kemudahan" page as shown in Figure A1.14. The user can get information about the different facilities such as computer lab, cafeteria etc. by clicking on the hypertext in the dropdown menu of "Kemudahan" as shown in figure A1.14.



Hypertexts which link to different facilities such as "Makmal Komputer", "Kafeteria" etc.

Figure A1.14 The "Kemudahan" Page

For example if the user wishes to know more about the computer lab of this college, then he/she can click on the hypertext named "Makmal Komputer" on the dropdown menu bar. Once the user has clicked "Makmal Komputer", then the computer lab description will appear on the screen as shown in Figure A1.5. This steps repeat if the user wishes to get information about other facilities such as cafeteria, rooms available etc.



Click here to go back to top

Figure A1.15 The "Makmal Komputer" Page

Vers can get to know about the services available or provided in Kolej Kediaman Tun Ahmad Zaidi by clicking the "Perkhidmatan" button. After clicking this button, the user will be directed to the "College Cybercafe" page. This page will display some information about the cybercafe of Kolej Kediaman Tun Ahmad Zaidi together with the time schedule and payment that will be charged for every hour. Please refer figure A1.16 for details.

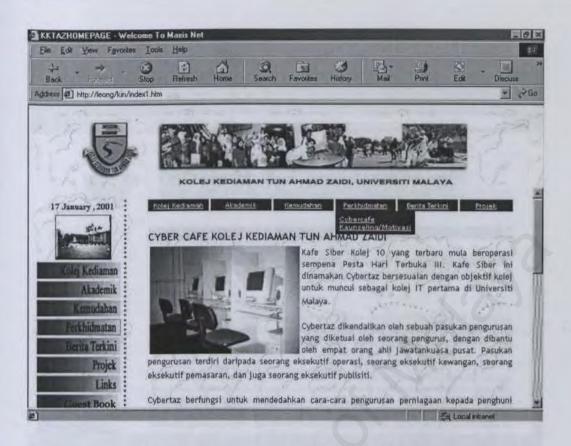


Figure A1.6 The "Perkhidmatan" Page

Another service that is available in Kolej Kediaman Tun Ahmad Zaidi is "Perkhidmatan Motivasi dan Kaunseling Kelab Rakan Motivasi TAZ (KMRTAZ)". Users have to click the "Kaunseling/Motivasi" hypertext, which is on the dropdown menu bar in order to go to this page as shown in Figure A1.17. All the information about "KMRTAZ" will be displayed in this page.

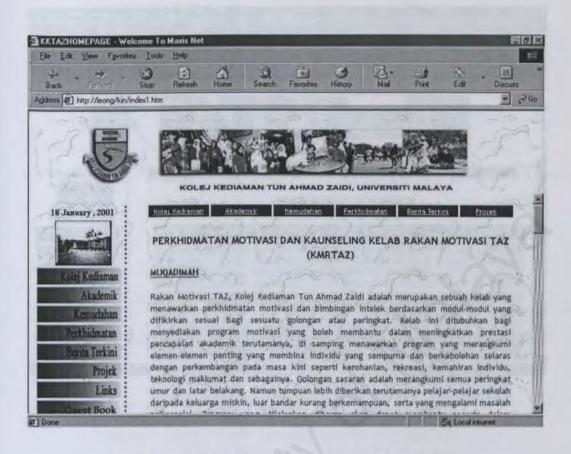


Figure A1.17 The "Kaunseling/Motivasi" Page

The "Berita Terkini" button will display the up-to-date announcements and bulletins of Kolej Kediaman Tun Ahmad Zaidi to users. These announcements and bulletins will be updated from time to time by the administrator. Please refer Figure A1.18 and A1.19 to view the "Berita Terkini" and "Pengumuman" page.



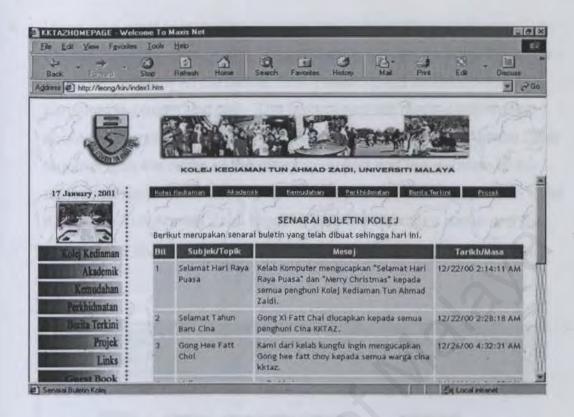


Figure A1.18 The "Berita Terkini" Page

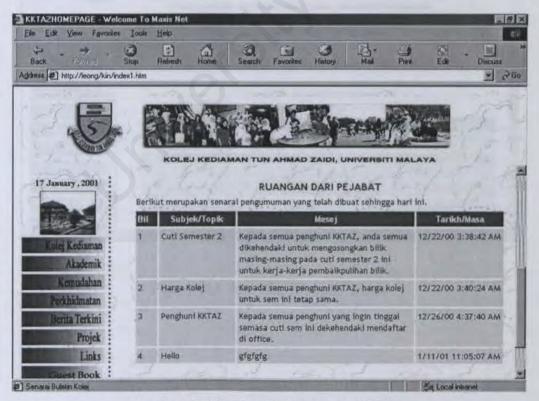


Figure A1.19 The"Pengumuman" Page



Ahmad Zaidi can click on the "Projek" button in order to enter this page as shown in figure A1.20 below. The "Projek" page is divided into two parts that is project and club. The project part will display information about the current and past projects in Kolej Kediaman Tun Ahmad Zaidi together with the name of the director, project and the duration of the project. While the club will display information about all the clubs in Kolej Kediaman Tun Ahmad Zaidi together with the director's name and the name of the club.

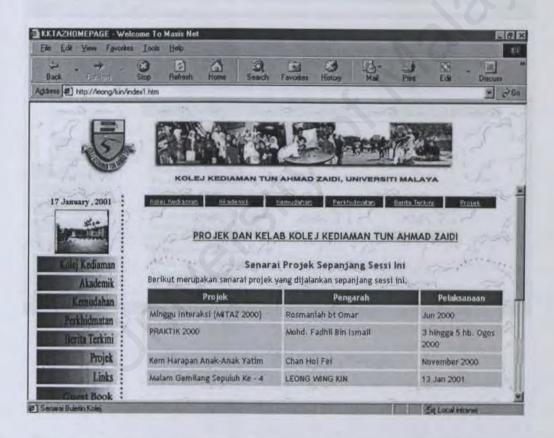


Figure A1.20 The "Projek" Page



By clicking the "Links" button on the left hand side of the menu bar, users are able to go to the "Links" page as shown in figure A1.21 below. This page provides users a convenient and easy way to link to other local and foreign universities' homepages. Besides that, they are able to link to some useful newspaper's sites such as "Berita Harian", New Strait Times and "Utusan Malaysia".

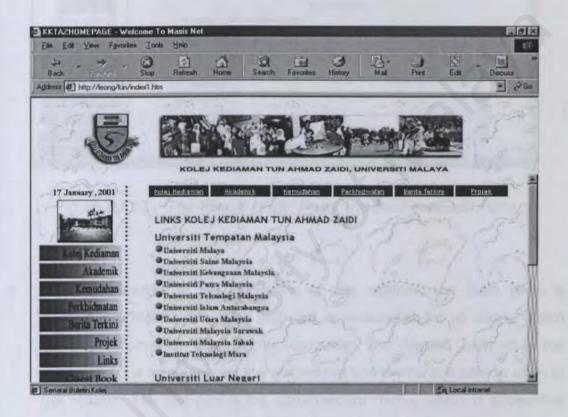


Figure A1.21 The "Links" Page

The last button available for users is the "Guest Book" button. This button enables users to give their comment or share their opinion about this site by filling up the feedback form available in the "Guest Book" page. Please refer figure A1.22 for details.



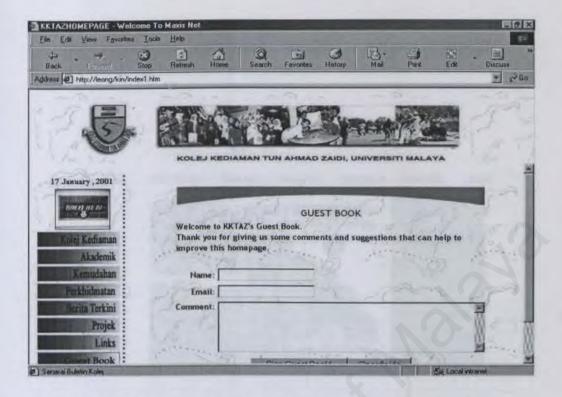


Figure A1.22 The "Guest Book" Page and the FeedBack Form

- As stated earlier at the beginning of this chapter, the main page is divided into three parts. The first part is accessible for all users, which contains information about Kolej Kediaman Tun Ahmad Zaidi while the second part is the menu for the authorized users who are able to login to the system. The last part is the administrator menu, which is accessible for the administrator of Kolej Kediaman Tun Ahmad Zaidi only.
- At this point, I will discuss about the second part of the menu, which is the part that only authorized users are able to access into the system only. The first thing users need to do is to click on the hypertext named "Pelajar" in the main menu in order to proceed to the login page. Please refer Figure A1.23 for details.



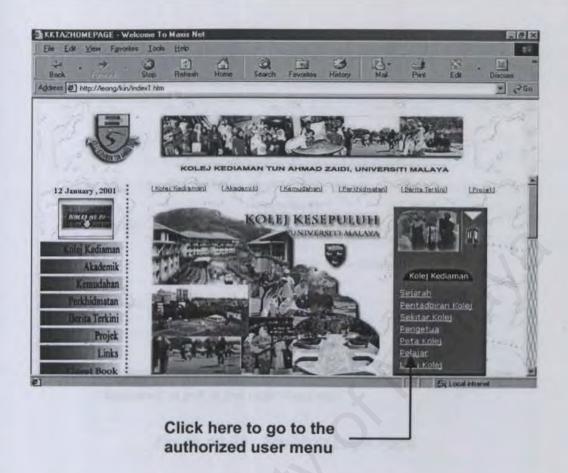
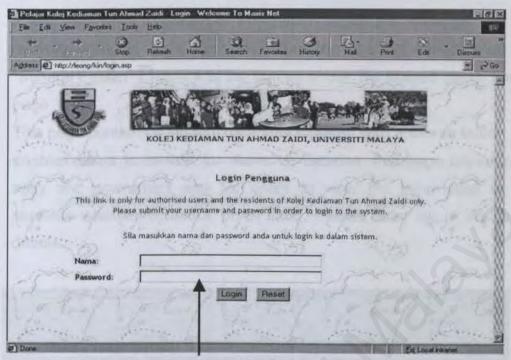


Figure A1.23 Main Page

- Once the user has click "Pelajar", then he/she will be directed to the login page as shown in Figure A1.24. The user has to fill in the username and password in order to login to the system.
- Once the user has successfully entered the username and password, he/she will be directed to the "Menu for registered user" page. This page contains hyperlink that will direct users to the appropriate page they wish to go such as "Senarai Pelajar", "Edit Maklumat Pendaftaran", "Chatting", "Discussion" and "Complain". Please refer figure A1.24 for details.





Required to put in the username and

Figure A1.23 The User Login Page

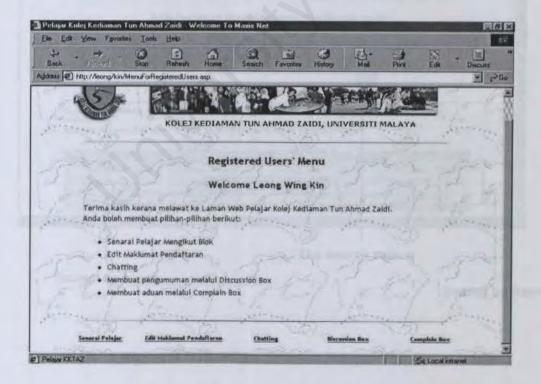


Figure A1.24 The "Registered Users' Menu" Page



- If the user wish to view the information about the students who are currently living in Kolej Kediaman Tun Ahmad Zaidi can click on the "Senarai Pelajar" hyperlink at the bottom of the "Registered Users' Menu" page.
- This page contains a student database together with a search button that enables users to search for students. Besides, this page provides an easy and convenient way for users to view the information of the students whether by block or by floor. Please refer figure A1.25 for details.

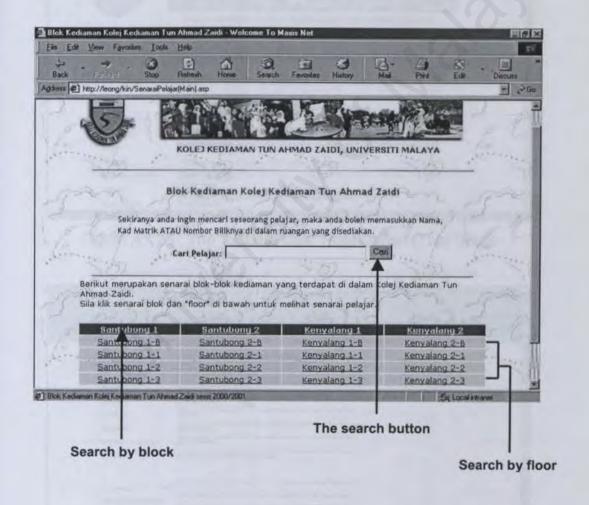


Figure A1.25 The "Senarai Pelajar" Page



Users who wish to edit their profiles or password can click on the "Edit Maklumat Pendaftaran" in order to proceed to this page. Once the user has done that, then he/she will be directed to the update user registration menu as shown in figure A1.26 and A1.27 below. Users can update or change their profiles such as address, password etc. in this page.

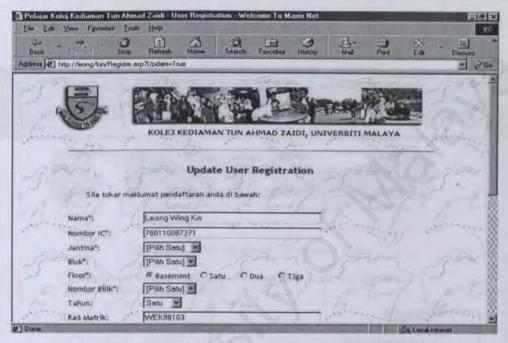


Figure A1.26 The "Update User Registration (Top)" Page

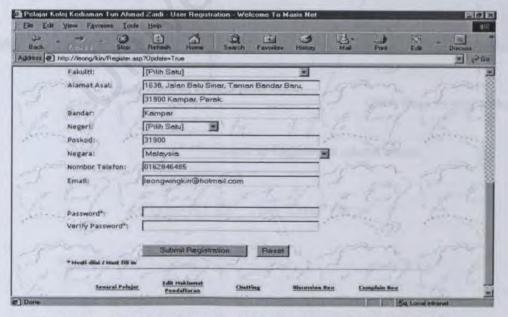


Figure A1.27 The "Update User Registration (Bottom)" Page



The next module we will discuss here is the chat module. Users can click the "Chatting" hypertext in order to go to this page. In this page, users can create their own chat room by clicking the hypertext "di sini" or they can join a chat by clicking the button "Enter" on the right hand side of the page. If the user click "Kembali ke Main Menu", then he/she will be directed to the "Registered Users' Menu". Please refer figure A1.28 for details.

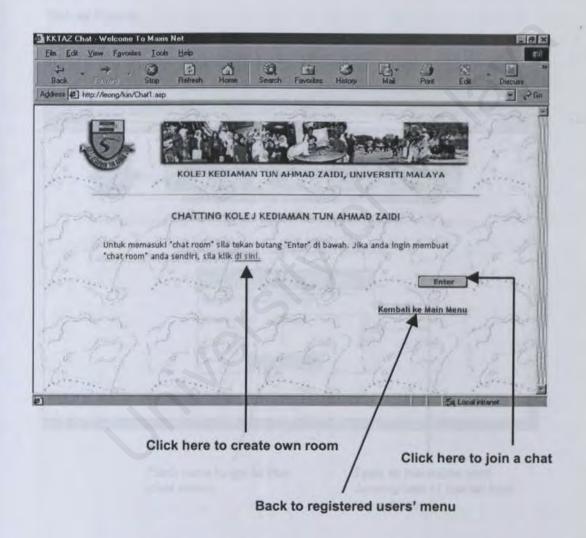


Figure A1.28 The "Chat" Page



If the user click the "di sini" hypertext, then he/she will be linked to the "Create room" page as shown in figure A1.29 below. In this page, user is required to key in the name of the ad hoc room he/she wishes to create. Besides that, user is also required to key in the description of the ad hoc room. For example, if the user wish to name the room as Testing and Test for the description of the room, then the steps are similar to the below figure.

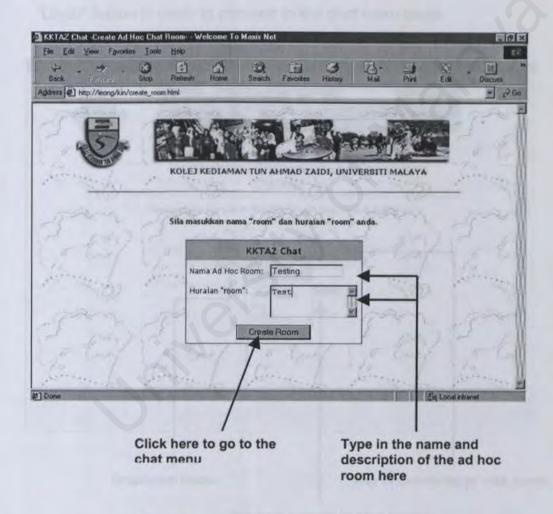


Figure A1.29 The "Create Room" Page

Once the user has finished keying in the name and description of the ad hoc room, then he/she has to click the "Create Room" button to go back to the "chat" page as shown in figure A1.28 above.



Once the user has been directed back to the "chat" page, then he/she can click the "Enter" button to proceed to the "chat menu" page, which is a new window. In this page, user has to key in their name or nick name in the box provided. Besides that, the user has to select the respective room he/she wishes to join or select the ad hoc room he/she has created from the dropdown menu. Please refer figure A1.30 below for details. The example below used "hello" as the user name and "Testing" for the room that he/she wishes to join. After that, the user has to click the "Login" button in order to proceed to the chat room page.

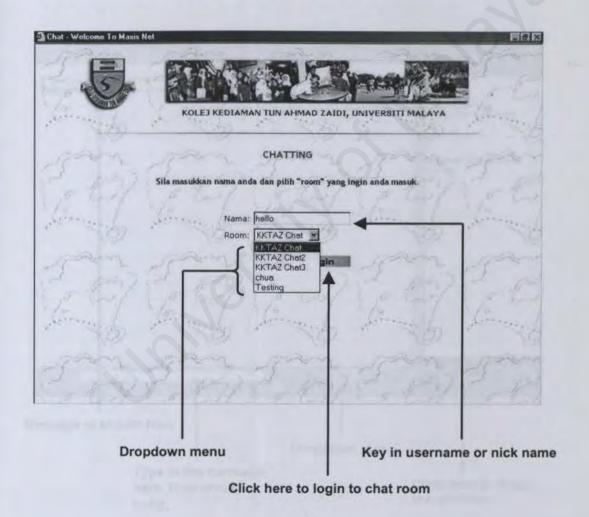


Figure A1.30 The "Chat Menu" Page



Once the user has login into the chat room page which is also a new window, then he/she has successfully joined the chat room. He/she is able to join the chat by typing messages in the message box as shown in figure A1.31 below. Besides that, the user is able to give private message by clicking on the person's name and choose the desire refresh rate by selecting it from the dropdown menu on the bottom right of the page. Finally, if the user clicks the button "Logout", then the chat room window will close automatically and he/she will be directed back to the "Chat" page.

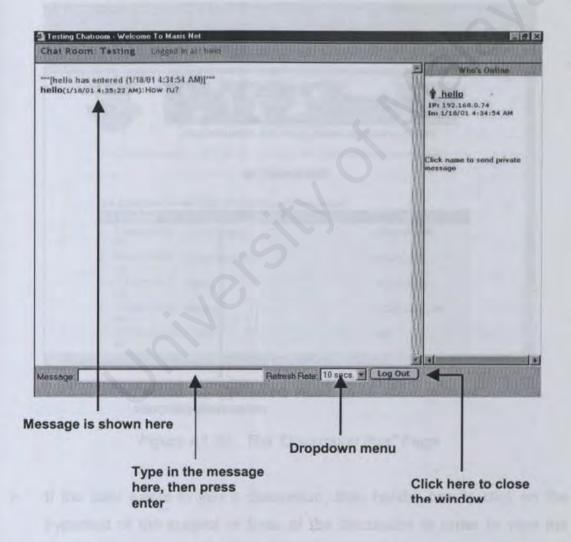
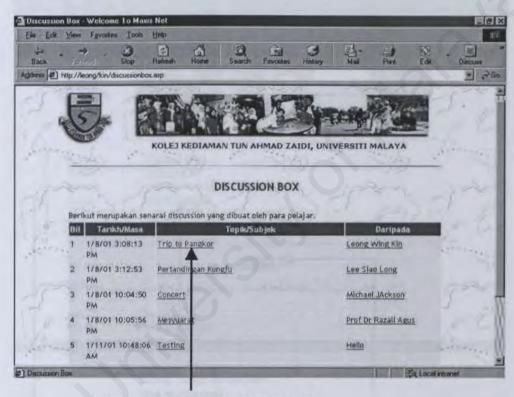


Figure A1.31 The "Chat Room" Page



If user wants to make any new discussion or view the discussions made by other users, then he/she has to click the "Discussion" hypertext to go to the "Discussion box" page. Once the user has done that, then he/she will be linked to the "Discussion box" page as shown in figure A1.32 below. This page displays all the discussions made by other users together with the name of the creator, date, time and subject of the discussion.



Click on the hypertext to view the complete discussion

Figure A1.32 The 'Discussion Box" Page

If the user wants to join a discussion, then he/she has to click on the hypertext of the subject or topic of the discussion in order to view the complete discussion. Once he/she has done that, then a new page will appear which is the "Show Message" page as shown in figure A1.33 in next page.



This "Show Message" page is divided into two parts. The first part is the original message or discussion together with the creator's name and the topic of the discussion. While the second part consists of all the replies of the original discussion. If the user want to give any reply, then he/she has to click the 'Reply" button to proceed to the "Reply" page. Please refer the figure below for details.

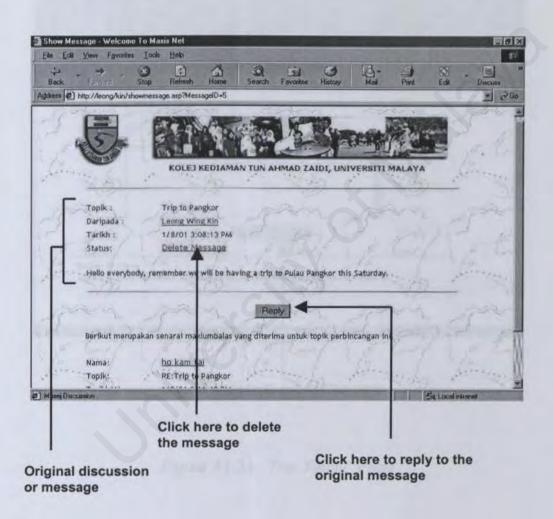


Figure A1.33 The "Show Message" Page



In the "Reply" page, user needs to fill up the reply form, which consists of name of the user, email address, discussion topic and message of the reply. Please refer figure A1.34 below for details. After he/she has finished fill up the form then he/she has to click the "Submit Reply" button to go back to the "Discussion Box" page.

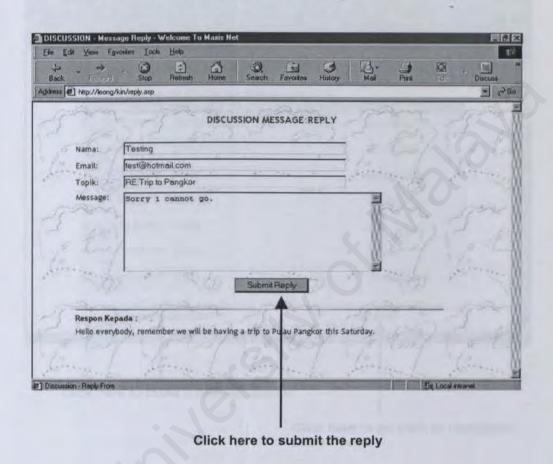


Figure A1.34 The "Reply" Page



If the user wants to make a new discussion, then he/she has to click the "Menambah Discussion" hypertext in order to link to the "Add discussion" page. Please refer figure A1.35 below for details.

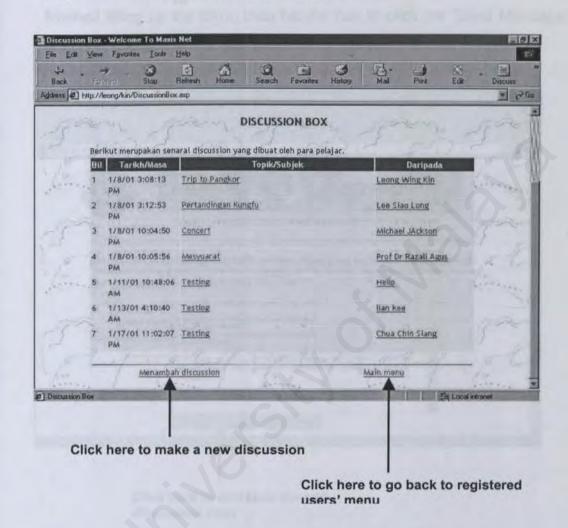


Figure A1.35 The "Discussion Box (Bottom)" Page

Once the user has done that, then he/she will be directed to the "Add Discussion" page as shown in figure A1.36.



In this page, the user is required to fill up a add discussion form. The user is required to key in his/her name, email address, discussion topic and discussion message in order to complete the form. After he/she has finished filling up the form, then he/she has to click the 'Send Message' button to go back to the "Discussion Box" page.

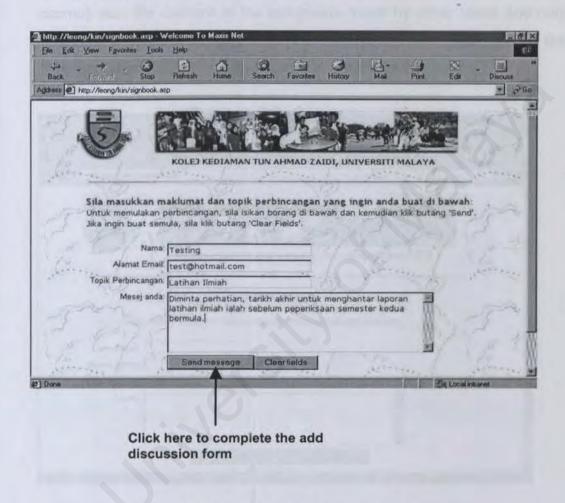
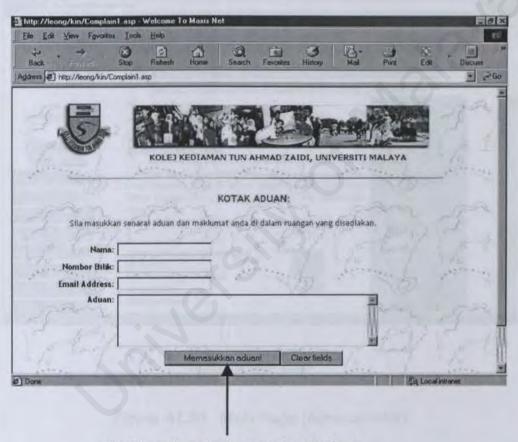


Figure A1.36 The "Add Discussion" Page



The last feature in the authorized user menu page is the complain box. User has to click the "Complain Box" hypertext in order to proceed to the "Complain" page. Please refer to figure A1.37 below for details. The "Complain" page contains a complain form that requires user to fill up his/her information such as name, room number and complain. User cannot view the content of the complains made by other users and only the administrator is able to view the complains. User has to click the "Memasukkan Aduan" button in order to complete this form.



Click here in order to complete the form

Figure A1.37 The "Complain" Page



Administrator Module

As stated earlier at the beginning of this chapter, the administrator module can be accessed by clicking the hypertext named "Administrator" in the main page. Please refer figure A1.38 below for details.

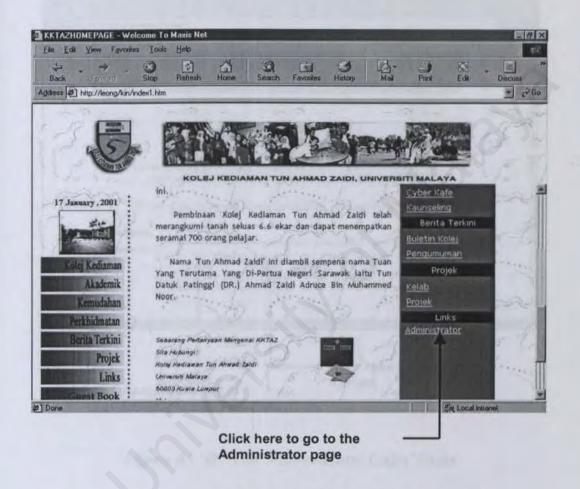


Figure A1.38 Main Page (Administrator)

Once the user has clicked "Administrator", then a new window will appear and he/she will be directed to the "Administrator Login" page.



The "Administrator Login" page requires the administrator to key in the user identification and password in order to login to the system. Please refer to figure A1.39 for details.

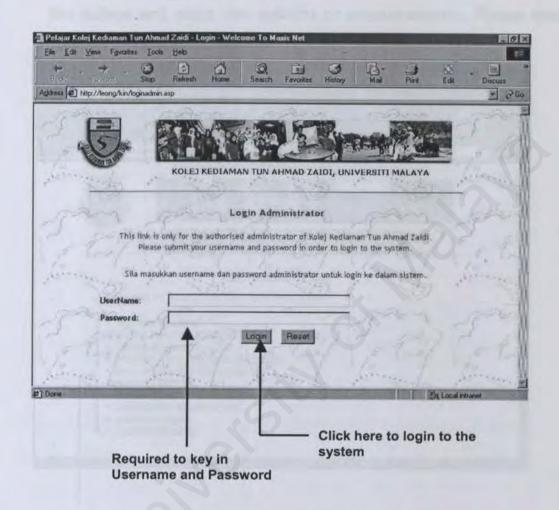
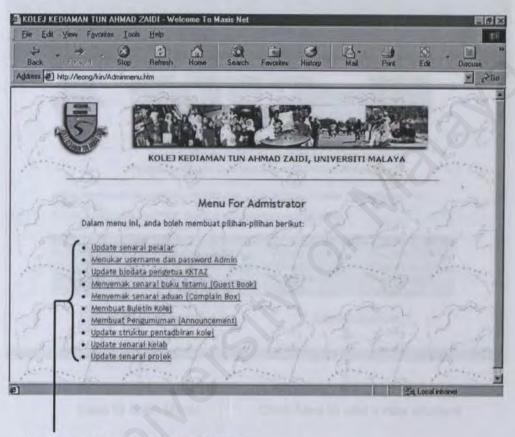


Figure A1.39 The "Administrator Login" Page

Once the administrator has finished keying in the username and password, then he/she has to click "Login" button to login to the system. When the administrator has successfully login into the system then he/she will able to access the "Menu for Administrator" page as shown in figure A1.40 in next page.



This "Menu for Administrator" page contains hyperlinks that enables the administrator to update and maintain the student database, view the guest book, complain box, update the organizational structure of the college and make new bulletins or announcements. Please refer figure A1.40 below for details.



Hypertexts that link to other pages

Figure A1.40 The "Menu For Administrator" Page



If the administrator want to update the student database then he/she can click the "Update Senarai Pelajar" hyperlink which will direct the administrator to the "Senarai Pelajar" page as shown in figure A1.41 below.

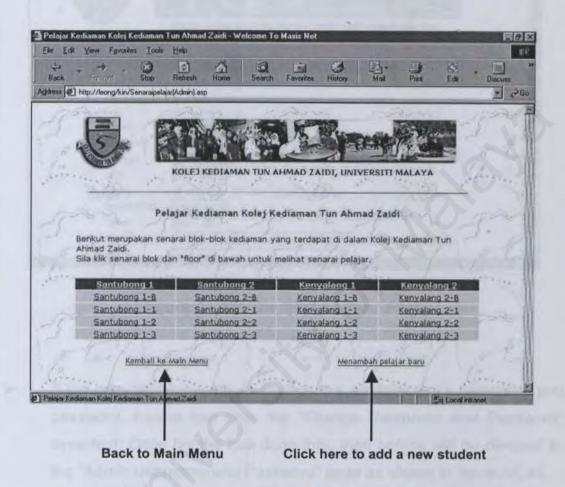


Figure A1.41 The "Senarai Pelajar" Page

- If the administrator want to add a new student record, then he/she has to click the "Menambah Pelajar Baru" hypertext in order to link to the "Pelajar Baru" page as shown in figure A1.42 in next page.
- This page contains a form that requires the administrator to key in the information about the student.



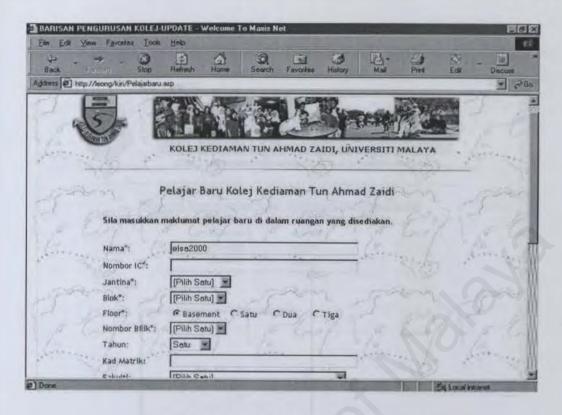


Figure A1.42 The "Pelajar Baru" Page

- If the administrator wants to change the administrator's username and password, he/she can click the "Change Username and Password" hypertext. Once he/she has done that, then he/she will be directed to the "Admin Username and Password" page as shown in figure A1.43.
- In this page, the administrator has to click the "Change" hypertext to proceed to the "Change username and password" page.



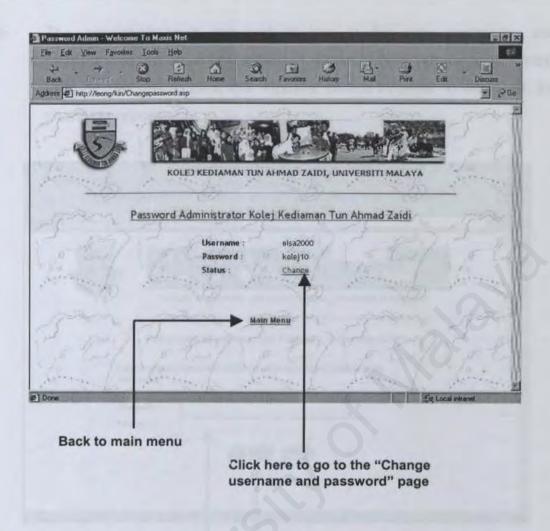


Figure A1.43 The "Admin Username and Password" Page

Once the administrator has click "Change", then he/she will be directed to the "Change Username and Password" page as shown in figure A1.44.



The administrator is required to key in the new username and password in the input box provided. Once he/she has done this step, then he/she has to click the "Update" button in order to complete the changing process.

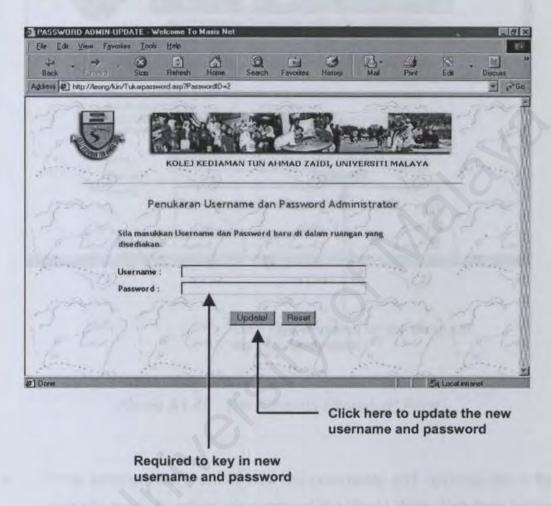


Figure A1.44 The "Change Username and Password" Page

The hypertext "Update Biodata Pengetua" enables the administrator to update the personal details and picture of the new headmaster of Kolej Kediaman Tun Ahmad Zaidi as shown in figure A1.45. The administrator has to key in the name, picture and personal details of the new headmaster in the space provided in the "Change pengetua" page.



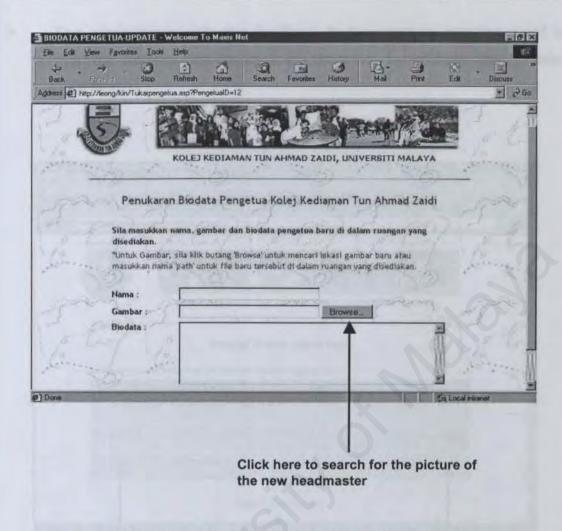


Figure A1.45 The "Change Pengetua" Page

If the administrator want to view the comments and opinions about this web site made by other users around the World Wide Web then he/she has to click "Menyemak senarai buku tetamu (GuestBook)" hypertext in order to proceed to the page. Once he/she has done that, the "Guest Book" page will appear as shown in figure A1.46.



The administrator can give feedback to the users by sending email to them or he/she can delete the comments by clicking the "Delete" hypertext.

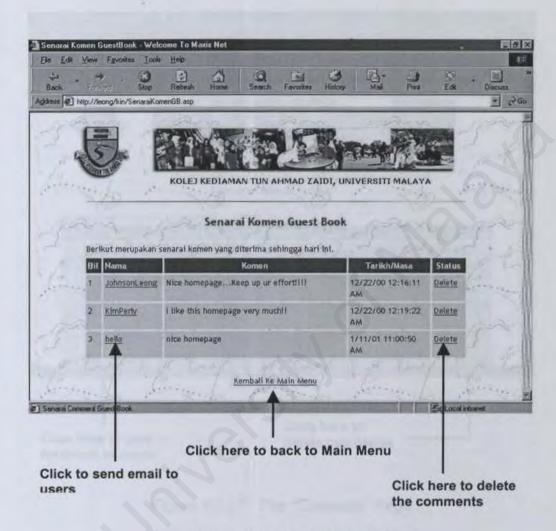


Figure A1.46 The "Guest Book" Page

Then if the administrator wants to view the complains made by the authorized users or students, he/she can click the "Menyemak senarai aduan (Complain)" hypertext. Once this is done, then he/she will be linked to the "Complain" page as shown in figure A1.47.



The administrator can give any necessary feedback to the users by sending email to them. Besides that, he/she can also delete any complains by clicking the "Delete" hypertext.

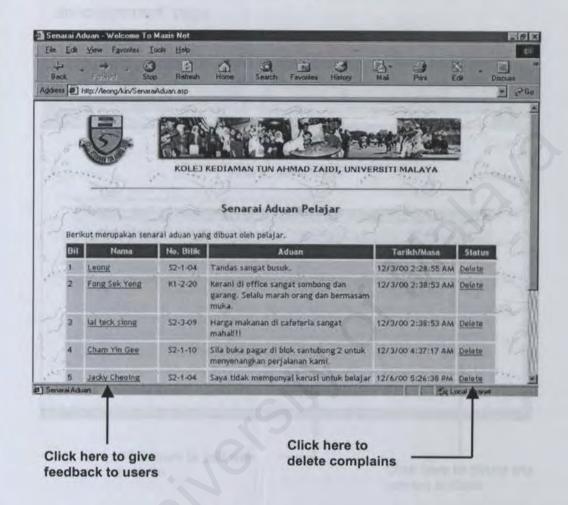


Figure A1.47 The "Complain" Page

The new bulletins and announcements are made by clicking the "Membuat Buletin Kolej" and "Membuat Pengumuman" hypertexts in the "Menu for administrator" page. In the "Bulletin" page, the administrator has to click "Membuat bulletin baru" in order to add a new bulletin. Please refer figure A1.48 for details.



The step described in the previous page is repeated for the "Announcement" page which the administrator has to click the "Membuat pengumuman baru" hypertext to proceed to the "Add announcement" page.

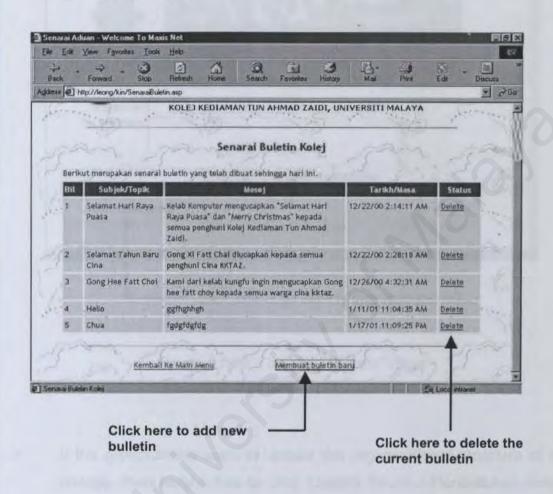


Figure A1.48 The "Bulletin" Page

Both the "Add Bulletin" and "Add Announcement" pages have a form that requires the administrator to fill in such as the topic/subject of the new bulletin or announcement and the content of the bulletin or announcement. Please refer figure A1.49 for details.



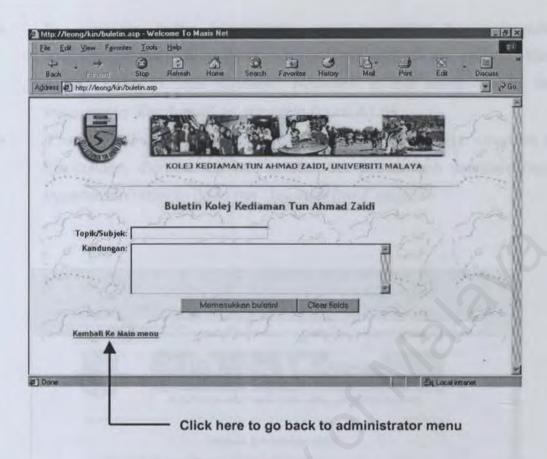


Figure A1.49 The 'Add Bulletin" Page

If the administrator want to update the organizational structure of the college, then he/she has to click 'Update Struktur Pentadbiran Kolej". When this is done, then a new page called "Menu For Update Struktur Pentadbiran Kolej" will appear which contains hypertexts that link to other pages such as "Update Barisan Pengurusan Kolej", 'Update Kakitangan Kolej", "Update Senarai Wakil Tingkat" and etc as shown in figure A1.50 in next page.



- For example, if the administrator want to update the managerial structure of the college such as the treasurer of the college, then he/she need to click "Change" hypertext in the same line of the treasurer or 'Bendahari" as shown in figure A1.51.
 - If he/she want to add in a new position in the managerial structure of the college, then he/she has to click the 'Menambah Jawatan Baru" hypertext in order to go to the "Jawatan Baru" page.

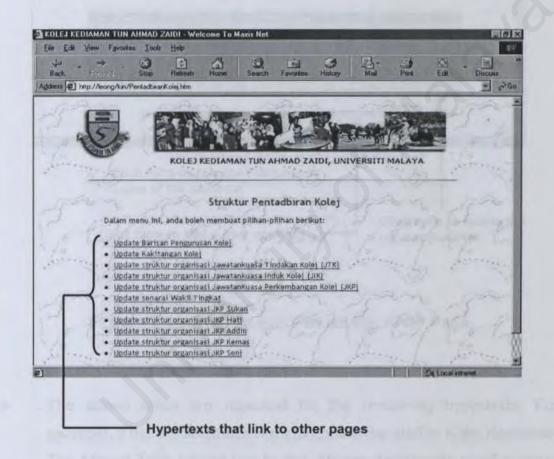


Figure A1.50 The ""Struktur Pentadbiran Kolej" Page



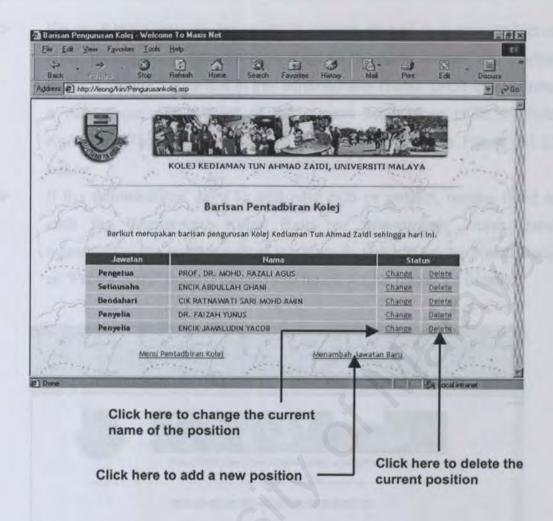


Figure A1.51 The "Barisan Pentadbiran Kolej" Page

The above steps are repeated for the remaining hypertexts. For example, if the administrator want to update the staff in Kolej Kediaman Tun Ahmad Zaidi, he/she has to click 'Update kakitangan kolej" in order to proceed to the "Kakitangan Kolej" page. Then the administrator has to click "Change" for any changes occur in the list of the current staff or click "Menambah Kakitangan Baru" to add a new staff.



APPENDIX B: QUESTIONNAIRE FOR ENDUSERS

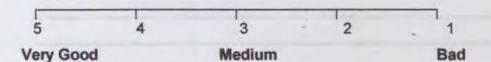
TOPIC: KOLEJ KEDIAMAN TUN AHMAD ZAIDI'S HOMEPAGE
Kindly please fill the survey form and give us your opinion.

	A En American		
t	A : General Questions		
	Are you an Internet user?		
	() Yes ()No		
	If Yes, please state the reasons v	vhy you	use Internet? You may t
	more than one?		-
	() Entertainment) Sports
	() Search Information	() Games
	() Computing	() News
	() Music	() Business
	() Health	() Automobiles
	() No reason	()Others, please specify
	Are you currently staying in colleg	ie?	
	() Yes () No		
	If Yes, please state the college's	name i	n the box below.
	to principal to the second		



Part B: Questions On Homepage

What do you think about this web site?Please refer the below rate.



- () User Friendly
- () Attractive
- () Easy to use
- () Provides accurate and up-to-date information
- () Easy to understand
- () Texts used inside this homepage easy to read
- () Graphic used in this web site
- () Provides enough information
- () Dynamic and interactive
- () Fulfill your requirements
- 7. In your opinion, do you think that this web site should be enhanced?
 - () Yes () No
- 8. If Yes, what are the things that should be enhanced?

(You can choose more than one)

- () Graphic
- () Information inside this homepage
- () Texts
- () Background Color
- () System for authorized users and administrators
- () Links
- () Others, please specify



	-	*

Thank you very much!

I really appreciate your cooperation and your response will be meaningful to my research survey.



APPENDIX C: SAMPLES OF SOURCE CODE FROM KKTAZHP

Source code for user login

```
<HTML>
<HEAD>
<TITLE>Pelajar Kolej Kediaman Tun Ahmad Zaidi - Login</TITLE>
</HEAD>
<BODY background="Images/toptxtr.gif">
<font face="Trebuchet MS"</pre>
   color="#008080"><b>&nbsp;Login Pengguna</b></font>
  <font size="2"><font face="Trebuchet MS"</pre>
   color="#800080">This link is only for authorised users and the
   residents of Kolej Kediaman Tun Ahmad Zaidi only.
   </font><align="left"><font face="Trebuchet MS" color="#800080">
   <BR>Please submit your username and password in order to login to
   the system.</font></font>
 <BR>
<%
If Request("SecondTry") = "True"
 If Request("WrongPW") = "True" Then
```



Response.Write "Password salah!!!!!.

Else

Response.Write "Nama anda tiada dalam rekod!!!!!
"

End If

End If

Response.Write "<CENTER>Sila masukkan nama dan password anda untuk login ke dalam sistem."

%>

Nama:

<INPUT TYPE="Text" NAME="Nama"

<% If Request("SecondTry") = "True" then %>

value="<%= Session("Nama") %>"

<% End If %>

size="40">

Password:

<TYPE="Password" NAME="Password" SIZE="40">



<INPUT TYPE= "Submit"

VALUE="Login"> <INPUT TYPE=RESET

src="images/reset(H).gif"></TD>

</form>

</BODY>

</HTML>



Source code of Guest Book Page

<%

DIM cm, iLength, Email, Body, Date, MessageFrom, objConn, objParam, strProvider, strQuery, StrSort

If ((request("REQUEST_METHOD") = "POST") and ((request("CONTENT_LENGTH") > 0) and (request("CONTENT_LENGTH") < 1700))) then %>

<%

If request("EmailAddress") <> "" Then

Email = request("EmailAddress")

Else

Email = "no email"

End If

If request("Message") <> "" Then

Body = Request("Message")

Else

Body = "blank"

End If

If request("MessageDate") <> "" Then

Date = request("MessageDate")

Else

Date = (month(now) & "/" & day(now) & "/" & year(now) & "

"& time())

End If

If request("Name") <> "" Then

MessageFrom = request("Name")

Else

MessageFrom = "anonymous visitor"

End If

If Body = "" Then



iLength=255

Else

iLength = Len(Body) End If

Set objConn = Server.CreateObject("ADODB.Connection")
objConn.Open "Provider=Microsoft.Jet.OLEDB.4.0; " & _
"Data Source= C:\datastores\pelajar.mdb"
set cm = Server.CreateObject("ADODB.Command")

cm.ActiveConnection = objConn

cm.CommandText="INSERT INTO guestbook (MessageFrom,

MessageDate, Email, MessageBody)

Set objParam=cm.CreateParameter(, 200, , 255, MessageFrom)

cm.Parameters.Append objParam

Set objParam=cm.CreateParameter(, 201, , 255, Date)

cm.Parameters.Append objParam

Set objParam=cm.CreateParameter(, 201, , 255, Email)

cm.Parameters.Append objParam

Set objParam=cm.CreateParameter(, 201, , iLength, Body)

cm.Parameters.Append objParam

cm.Execute

%>

<HTML>

<HEAD><title>Thanks!</title>

<TITLE>Guest Book</TITLE>

</HEAD>

<BODY BGColor="#FFFFFF" background="Images/toptxtr.gif">



```
<TABLE BORDER=0 cellspacing=0 cellpadding=1 width="80%"
ALIGN=CENTER >
<TR><TD>&nbsp:</TD></TR>
<TR>
   <TD><CENTER><H4><font color="#008080" face="Trebuchet
MS">Thank you <%=trim(request("Name"))%>! Your comment has been
written in our guest book!!</font></H4></center><TD>
</TR>
</TABLE>
<BR>
<TABLE BORDER="0" WIDTH="80%" CELLSPACING="1"
CELLPADDING="1" ALIGN=CENTER>
<TR>
  <TD WIDTH="30%"><FONT SIZE=2><B><font face="Trebuchet
MS">Name:</font></B></font></TD>
  <TD><FONT SIZE=2><%=trim(request("Name"))%></TD>
</TR>
<TR>
  <TD WIDTH="30%"><FONT SIZE=2><B><font face="Trebuchet"
MS">Email:</font></B></font></TD>
  <TD><FONT SIZE=2><%=trim(request("EmailAddress"))%></TD>
</TR>
<TR>
  <TD WIDTH="30%"><FONT SIZE=2><B><font face="Trebuchet
MS">Comment:</font></B></font></TD>
  <TD><FONT SIZE=2><%=trim(request("Message"))%></TD>
</TR>
<TR>
  <TD WIDTH="30%"><FONT SIZE=2><B><font face="Trebuchet
MS">Date/Time:</font></B></font></TD>
  <TD><FONT SIZE=2><%=trim(request("MessageDate"))%></TD></TR>
```



```
</TABLE><P><BR>
<TABLE BORDER=0 WIDTH="80%" ALIGN=CENTER>
<TR><TD Colspan=2><HR></TD></TR>
<TR><TD Align="left" Colspan=2>
 <a href="index1.htm"><img border="0"</pre>
src="Images/home.gif"></a>
</TD></TR>
</TABLE>
<%Else%>
</font>
>
<BR>
    <TABLE BORDER=0 WIDTH="100%" ALIGN=CENTER
BACKGROUND="Images/toptxtr.gif"><TR><TD>
    <TABLE BORDER="0" WIDTH="85%" ALIGN=CENTER
CELLSPACING="1" CELLPADDING="1">
    <TR>
    <TD><CENTER>
  <img border="0" src="IMAGES/curve drab.gif"
   width="485" height="30">
  <font color="#008080" face="Trebuchet MS"><span style="text-transform:</pre>
  uppercase"><b>Guest Book</b></span></font></CENTER>
```



width="100%">Welcome to KKTAZ's Guest Book.

Thank you for giving us some comments and suggestions that can help to improve this homepage .

<FORM ACTION="guestbk.asp" METHOD="post"> <TABLE>

<TR>

<TD ALIGN="right"><FONT SIZE="2" face="Trebuchet

MS">Name:</TD>

<TD><INPUT TYPE="text" NAME="name" SIZE="20">

</INPUT></TD></TR>

<TR>

<TD ALIGN="right">

 Email: </TD>

<TD><INPUT TYPE="text" NAME="EmailAddress" SIZE="20">

</INPUT> </TD>

</TR>

<TR>

<TD ALIGN="right" VALIGN="top"><FONT SIZE="2" face=

"Trebuchet MS"> Comment: </TD>

<TD><TEXTAREA NAME="Message" rows="5"

cols="50"></TEXTAREA></TD>

</TR>

</TABLE>

</TD></TR></TABLE>

<TABLE BORDER="0" WIDTH="35%" ALIGN=CENTER>

<TR>



<TD><INPUT TYPE="submit" VALUE="Sign Guest

Book!"></INPUT><INPUT TYPE="RESET" VALUE="Clear fields">

<INPUT TYPE=hidden name=MessageDate value="<% response.write</p>

(month(now) & "/" & day(now) & "/" & year(now) & " " & time()

)%>"></TD>

</TR>

</TABLE></FORM>

<% End If %>

</BODY>



Source Code for Deleting Records from the Guest Book

<%

Dim objConn

Set objConn=Server.CreateObject("ADODB.CONNECTION")

objConn.Open "Provider=Microsoft.Jet.OLEDB.4.0; "&_

"Data Source= C:\datastores\pelajar.mdb"

Dim rs

Set rs=Server.CreateObject("ADODB.Recordset")

Dim strSQL

strSQL = "delete from GuestBook where MessageID="&

Request.QueryString("CommentID")

rs.Open strSQL, objConn

Set rs = objConn.EXECUTE(strSQL)

objConn.Close

Set objConn=Nothing

%>

<BASEFONT FACE="trebuchet ms, arial, helvetica">

<HTML>

<HEAD>

<TITLE>DELETE RECORD</TITLE>

</HEAD>

<TABLE BORDER=0 WIDTH="85%" ALIGN=CENTER>

<TR>

<TD><CENTER>Record No.

<%=trim(Request.QueryString("CommentID"))%> was successfully deleted

from the database.</center></TD>

</TR>

</TABLE>



<P>

</TABLE>

<TABLE BORDER=0 WIDTH="85%" ALIGN=CENTER>

<TR>

<TD><CENTER>Kembali Ke Senarai Komen

</TD>

</TR>

</TABLE>

</BODY>

</HTML>



APPENDIX D: GLOSSARY

Browser

A program that accesses and displays files available on the World Wide Web.

HTML

Is also called Hypertext Markup Language. A standardize system of tagging text for formatting, locating images and other non-text files, and placing links or other references to other documents.

GUI

Graphical User Interface. An interface having windows, graphical symbols, pop-down menus, and other structures that are often manipulated with a mouse pointer.

GIF

Graphic Interchange Format. A service mark used for color graphics file format, often used on the World Wide Web to store graphics.

HTTP

Hypertext Transfer Protocol. A standardized means of using TCP/IP for communicating HTML documents over networks.

Internet

A World-Wide computer network which links up thousands of computer networks that is linked together using a common communication protocol called Transmission Control Protocol/Internet Protocol (TCP/IP).

URL

Universal Resource Locater. The address of the file on the Internet.



KKTAZ

Kolej Kediaman Tun Ahmad Zaidi or Tenth Residential College in University of Malaya.

www

World Wide Web. A collection of Internet sites that offer text and graphics and sound and animation resources through the hypertext transfer protocol.

Jscript

A scripting language in Visual Interdev 6.0

SQL

Structured Query Language. A language for defining the structure and processing of a relational database.

WYSIWYG

What You See Is What You Get. A term used with form and report generators, in which the DBMS recreates exactly what the developer types on the screen while developing forms and reports.

ASP

Active Server Pages. A technology that allows us to dynamically generate browser-neutral content using server-side scripting. The code for this scripting can be written in any of several languages and is embedded in special tags inside the otherwise normal HTML code making up a page of content.

VBScript

A scripting language in Visual Interdev 6.0.