

Universiti Teknologi MARA

**Design and development of web-based Career
Management System in UiTM (Career Unit)**

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DECLARATION

I certify that this thesis and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline

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ABSTRACT

DESIGN AND DEVELOPMENT OF WEB-BASED CAREER MANAGEMENT SYSTEM IN UiTM (CAREER UNIT)

Currently, Uitm has its own website for Career unit (Career & Employer Relation Department). The current website has introduced the career unit to others that are interested rather than helping the students to find job especially for job seekers. The website was lack of its functionality and could be expanded for purpose to match person with jobs available. The students also found that jobs in many alternative ways such as advertisement in newspapers. The traditional way took a longer time and rather slow to know the feedback of application. The employees also needed more effective way to find their candidates for job interviews. Advertising in newspaper was rather slow. Therefore, a web-based of Career Management System (CMS) was designed to solve the problems. Basically the proposed system was categorized in two levels which are administrator and jobseeker. In developing the system in to be interactive, the software that used were Macromedia Dream weaver as design interface, Apache as web server, Personal home page (PHP) for server side scripting language and MySQL for database. The research implemented by using Web Development Life Cycle. As a result, this project has generated solution job seekers especially Uitm students to submit their CV and seek jobs in the easiest way. Thus, the qualification and application could be matched and they got faster feedback. As the conclusion, this project improves mobilization of the human resources and ensures the manpower utilization is optimized through the systematic matching of job seekers to job vacancies.

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LIST OF ABBREVIATION

CMS	Career Management System
PHP	Hyper Text Processor
ASP	Active Server Pages

CHAPTER 1

INTRODUCTION

1.0 Introduction

According to William Gibson (2003), the term cyberspace is the mass communication in which humans all over the planet meet, convert and exchange information. This means that people all over the world, by using computer and networks, are communicating and exchanging information in this environment as the net, and others as the Matrix. The word net came from internet. Matrix refers to all communication networks, including the internet and online services. The original language of the Internet was difficult and unfriendly to use. The potential was exciting but a variety of programs such as Telnet, FTP, Archie, and Gopher, to locate and download data.

Timothy Berners-Lee (1989) invented the World Wide Web at the European Laboratory for Particle Physics, Switzerland (CERN), based on the ideas that originated in earlier work on hypertext by Vannevar Bush (1945). Berners-Lee and his associates (2003) developed initial versions of HTML, HTTP, a web server, and a browser-the four key components of the Web. The World Wide Web (WWW or simply Web) can be thought of as a very large subset of the internet that consists hypertext and hypermedia documents.

A hypertext document contains a link or reference to another hypertext document, which may be on the same computer or even on a different computer located anywhere in the world. Hypermedia is similar, except that it provides links to graphics, sound, and video files in addition to text files. Any computer that stores a document anywhere on the Web

and makes that document available to other computers is known as a server (or Web server). Any computer that is connected to the Web and requests a document from a server is known as a client.

1.1 Project background

The project focuses on the students from UiTM who are seeking a job. This management system will operate under career unit in UiTM and co-operation with employees in other company. This system is use to broadcast information about seminars, job searching, writing resume technique and career decision making that will useful for the job seekers to find information. This system also helps students to manage their career direction, get experience in working guide and transaction to life. By using the information provided, hopefully the system will help students to find job according their qualification and skills. This system also helps employees to find suitable candidates for the jobs vacancy according to their requirement.

Maybe the students can register with other websites to find job such as jobstreet.com but there the competition is tougher and the opportunity is low. If UiTM have their own websites for students to register and find job, the certainty to get a job is higher. It is also more impressive when UiTM students can get a chance to find jobs with guideline from this website about writing resume and interpersonal skills that require by employees.

1.2 Problem Statement

Currently, UiTM has their own website which is called www.uitm.edu.my. One of the component or link in this website is career. There are much information about career unit such as department background, vision and mission, broadcast of activities that have

been held for students such as Cairex Expo, seminars, academic counseling, and advertisement of jobs vacancy. The current website is just on introducing of the career unit to others that are interested rather than help the students to find job especially for job seekers. The website is lack of its functionality and can be expand for purpose to match person with jobs available.

The students also find jobs in many alternative ways such as advertisement in newspapers. This traditional way take a longer time and rather slow to know the result of application. It is also not effective with current situation which the competition is high. Some of the student also registers with jobs agencies for faster and easy way. But sometimes is not a safe choice of finding a job because there are cases where the agencies cheat their applicants to gain profit and manipulate the job seekers.

One good example of websites that have same functionality of the system that will be design for this project is Job clearing system provided by the Ministry of Human Resources Malaysia. It is an online automatic job matching system. But the scope is too wide which the system includes the job seekers from Malaysians students studying abroad and potential foreign inventors.

According to the research conducted by the Higher Ministry of Education, there are 45% of the graduates of UiTM students that are still not employed. One of the ways to reduce this percentage is to give career guidelines to the students and more advertisement about the activities that will be held.

For the employees nowadays needs more effective way to find their candidates for job interviews. To advertise in internet are rather slow. If they broadcast in internet the information spread and they get faster feedback. The system will help the employees to find candidates from UiTM with suitable qualification. Based on those problems, a prototype for career management system will be design to solve the problems.

1.3 Project Objectives

This system is developed for use of students in UiTM. In the end of system implementation, this system wants to achieve:

- To design the architecture of web-based career management system for UiTM students to find job that match with their requirement.
- To develop application and submission of job resume.
- To provide information about career management for students.

1.4 Project Scope

Generally, the scope for this project is for students in UiTM to seek especially students from final semester to seek suitable jobs and for employers to get their right candidates. The system will be controlled and managed by Career unit (Career and employment relation department) under HalEhwal Pelajar (HEP) Only news, seminar or events that will be held in UiTM will be advertise in this websites. The system is only providing to the employers who have register with career unit.

Basically this system will be categorized in three levels: administrator, students or job seeker and employees by identify their id and password when they want to access the system. This project will produce an online system that provide application form for the job seekers, job vacancies available, qualification that needed by the employees for the candidates and contact information about employees. The system will match their qualification with the jobs available. The process of the Application will be updated from time to time.

The system will also include the latest training program, seminar or convojobshop that will be held in UITM. To develop the system in interactive way, the software that will be use are Macromedia Dream weaver as design for interface, Apache as web server, Personal home page(PHP) for server side scripting language and MySQL for database. It will be running on Windows XP.

1.5 Project Significance

This system can give a better t solution for the job seekers especially UITM students to submit their CV and seek job in easiest way. It is beneficial for both of users either employees or students to get faster feedback from the process of application. It is also improve mobilization of the human resources and to ensure the manpower utilization is optimized through the systematic matching of job seekers to job vacancies.

For the employees it is more effective to advertise their job vacancies online in order to find suitable candidates and reduce the response time. They also can update and manage their application in the websites for various interactions.

1.6 Overview of the report

This chapter gives an overview, objectives, scope, and the significance of the research. In Chapter 2, theoretical consideration about the framework is discussed.. The research methodology is discussed in Chapter 3. In Chapter 4, it discusses the analysis findings from the information gathered. The conclusion, summary of findings and the recommendation is given in Chapter 5.

1.7 Conclusion

This research is chosen to give useful for the job seekers who find the job through finding new employees. The project focuses on the students from UITM in final semester.

This system also helps employees to find suitable candidates for the jobs vacancy according to their requirement. Employees prefer to get more information via internet because it is more interactive, time saving, less energy and very easy to access at any time.

Students want to apply their resume online. Hopefully the system will help student to gather new information as fast as possible about any advertisement.

CHAPTER 2

THEORETICAL CONSIDERATION

2.0 Introduction

In developing any project a framework is an important thing to be considered. There are three features in a framework which are input, output and the process. The relationship between these three features will make the development of the system more systematic.

2.1 The Design Structure

There are three phase involve in the framework for develop the CMS project. The phases are the interface between user and system, the inference engine between interface between user and system, the inference engine between interface and database and lastly the database itself. (Refer to figure 2.1)

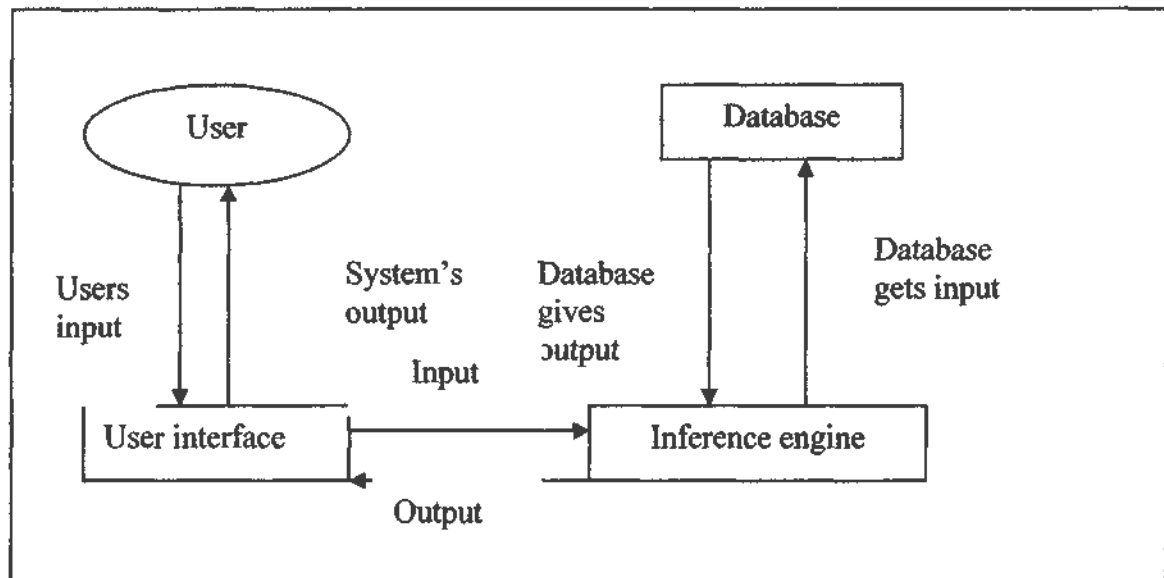


Figure 2.1: A framework of the system

CHAPTER 3

LITERATURE REVIEW

3.0 Introduction

This chapter will cover the full referenced review and discussion of previous studies, which are relevant to the research, include the definition of pertinent technical terminology, different approach or methodology to solve the similar problem and description of all known similar and relevant on-going projects. By conducting a literature review, the researcher can identified problem and web technology that can be use to develop a web.

3.1 Review On Management System

Management systems help us achieve the highest standards in providing world-class services to our customers. They encourage continuous business improvement and the achievement of our goals and objectives while driving customer satisfaction to higher levels. a system for indicating the business policies and goals of an organization; its integrated parts may include e.g. a quality management system.(ROLFE, 2002).)

The record keeping system available with the software. The system can be extensive, with multiple prints out options, or it can be a simple record of total correct answers. Not all software contains a management system. A management system is a systematic process that produces information designed to assist decision makers in selecting cost-

effective strategies and actions to improve the efficiency, enhance the safety, and protect the investment in transportation infrastructure.

3.2 Systematic Matching For Job Application

Systematic matching is to investigate the matching process of job seekers and job vacancies, on different occupational labor markets, and reveals the relative importance of supply and demand factors, and frictions in the job creation process. This section briefly introduces the concept of the matching function and the empirical strategy underlying the analysis below. (René Fahr* and Uwe Sunde 2000)

Empirical matching functions is a frequently used theoretical device to model frictions and therefore to generate unemployment. Rather than only estimating it to validate its use in theoretical models, this study argues that empirical matching functions might be a useful tool for gathering policy relevant information. Its advantages are it is simple and intuitive concept, similar to that of a production function, and can be estimated with reasonably small effort. The empirical results have a clear and intuitive interpretation, providing information on the relative strength of supply and demand factors in the job creation process. (René Fahr* and Uwe Sunde 2000)

The estimation of matching functions delivers several pieces of information that is relevant from the policy perspective. The elasticity of matches with respect to the stocks of job seekers and vacancies, and respectively, reflect the absolute and relative importance of supply and demand in the job creation process. The size of the matching efficiency parameter indicates the extent of frictions on a particular labor market. By analyzing the respective estimate, one can infer the need for, and the scope of, policies improving the matching between job seekers and vacancies by analyzing the estimates and comparing efficiencies of different labor markets.

3.3 Career Planning And Management

Workforce planning enables management to have the needed mix of skills or knowledge at its disposal when and where it is required. It enables organizations to make use, as much as possible, of the talent it presently employs, and avoids shortfalls in skill/knowledge it might require in the future.

Workforce plans can include details of the present workforce, the profile of the workforce expected to be needed in the future in terms of skill/knowledge requirements, number and type of staff in particular scientific areas, number of scientists predicted to retire in the next 5-10 years, number of scientific staff under 35, ratio of professional staff to supporting technical staff (i.e. technicians/technologists), and the needed actions to ensure the continuity of expertise in core scientific areas.

3.4 Definition of Pertinent Technical Terminologies

This is the brief definition of pertinent technical terminologies that will be used in this system. All of the explanation about the technology used as below:

3.4.1 Personal Home Page (PHP)

PHP is among the stable and efficient tools available for creating dynamic, interactive web-server. (Bai et.al, 2002). PHP is offers a simple and universal solution for easy-to-program dynamic web pages. PHP is stands for Hypertext Processor, also called Personal homepage. PHP is a server side in HTML page, similar to JSP and ASP. The PHP engine is implemented in an Apache filter which process page containing PHP code before they are serving to the client.

It is designed as replacement for typical CGI development so that the user could add dynamic features to their pages without having too much about programming. (Daniel et