INTERNSHIP MANAGEMENT SYSTEM

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ABSTRACT

Manual process need to be done for this system, manual process means, the student or intern's candidate need to fill a paper form, and also need to submit it by hand to the office. During the training, candidates need to keep update in the logbook about their daily routine of the training by writing it and paste any attachment in the logbook. Finally, progress of the training in the logbook will be examined by supervisor in company every week, and by university supervisor at the end of the training by write it in the logbook. Internship Management System is a management system that handles the process of the industrial training by computerize and online. Process focus in the system is selection of company, updating their log, and registers the company supervisor in the system.

ABSTRAK

Proses manual perlu dilakukan untuk system latihan industri ini, maksud bagi manual process tersebut ialan pelajar atau calon bg latihan industry ini perlu mengisi borang dan juga menghantar borang tersebut sendiri di pejabat. Semasa latihan, calon hendaklah mengemaskini buku log mereka tentang apa yang dilakukan setiap hari dengan menulis dan juga menampal segala lampiran yang berkaitan didalam buku log tersebut. Yang terakhir, perkembangan bg latihan itu akan di periksa oleh penyelia syarikat pada setiap minggu, manakala, akan di periksa oleh penyelia universiti pada akhir latihan. "Internship Management System ini adalah sistem yang akan menjalankan proses latihan industri ini secara online. Proses yang akan di tangani oleh sistem ini ialah termasuk pemilihan syarikat, mengemaskini buku log, mendaftar penyelia syarikat dan lain-lain.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Internships are the way to explore or expend the related knowledge and skills required in a real world situation and experience to enter into a particular career field. [1] Its basically for undergraduate student, or a trainee, this not only for gaining experience, but also expose them to fine if they a totally interest in the field. Regarding to Dr. Mohamed Ariff Ameedeen, the internship's coordinator FSKKP, the number of student will be out to the industry is roughly 500 people. So, every year about 500 students will be on interns, but this is depending on how many people who qualify to register it. All students must pass the entire subject they taken before they go for interns.

Manual process need to be done for this system, manual process means, the student or intern's candidate need to fill a paper form, and also need to submit it by hand to the office. During the training, candidates need to keep update in the logbook about their daily routine of the training by writing it and paste any attachment in the logbook. Finally, progress of the training in the logbook will be examined by supervisor in company every week, and by university supervisor at the end of the training by write it in the logbook.

Applying a manual process may cause some disadvantages, because it required the user to write it in a paper, instate of write it in computer. Error on filling in the form can be void if it is filling on computer. And the data can't directly use, but need to be rewritten before can be used, this way will have a lot of work on it. Other than that, problem of losing or misplace the form can be avoid, or damaging the hardcopy form will not occur.

1.2 Problem statements

Before going to the industrial training, student need to complete the registration process. The process then need to be done manually, which mean students need to fill and complete in by write it in the form. After receiving offer letter from company, students need to inform faculty's internship coordinator for approving. Beside, when it comes to the day student came to internship place, they need to make a self-report manually by fill in the form in the logbook about details of company. While student undergoing the training, they need to write on the logbook about what they are doing every day in the logbook. Other than that, student performance also had been mark by company's supervisor every week. The mark will be given in the logbook. Furthermore, students need to buy the logbook and the logbook itself easily damage.

1.3 Objectives

- Develop prototype of online internship application system
- Develop prototype of online internship logbook

1.4 Scopes

The scopes of the project are:

I. Faculty of Computer Sciences and Software Engineering
II. Web base application
III. HTML5
IV. 4 users
    - FSKKP's Student
    - Company Supervisor
    - Faculty Supervisor
    - Internship Coordinator

1.5 Thesis Organization

This thesis consists of 6 chapters ranging from Chapter 1 until Chapter 6. Chapter 1 gives an overview of the study conducted. It also supply with the problem statement, objective and the scope of the study. Meanwhile, Chapter 2 reviews the previous research works that was conducted by other researches. All the relevant technical paper, journals, and books taken from those researches will be discussed in detail. Chapter 3 reveals the techniques and the algorithms that will be used in performing this study. It will discuss about the process flow in detail of this research. Details of the implementation of the study will be discussed in Chapter 4. Results of the testing are to be expounding in Chapter 5. Lastly, Chapter 6 concludes the entire thesis.

CHAPTER 2

LITERATURE REVIEW

This chapter is to explain about the reviews for this project. It is divided to two major parts: system/present review and technique, method, equipment, as well technology review.

2.1 Existing System Review

This section is to review the current system and the existing system that related to Industrial Training system.

2.1.1 Industrial Training Online Management System for School of Art and Science Tunku Abdul Rahman College(TAR)

This system consists of 9 modules, i.e. security, job application, allocation, notification, feedback, maintenance, query, report and housekeeping. The project main purpose are to allow student send online resume, coordinator send reminder to collect survey form from student and so on. [2] Figure 2.1 show the example of the system.

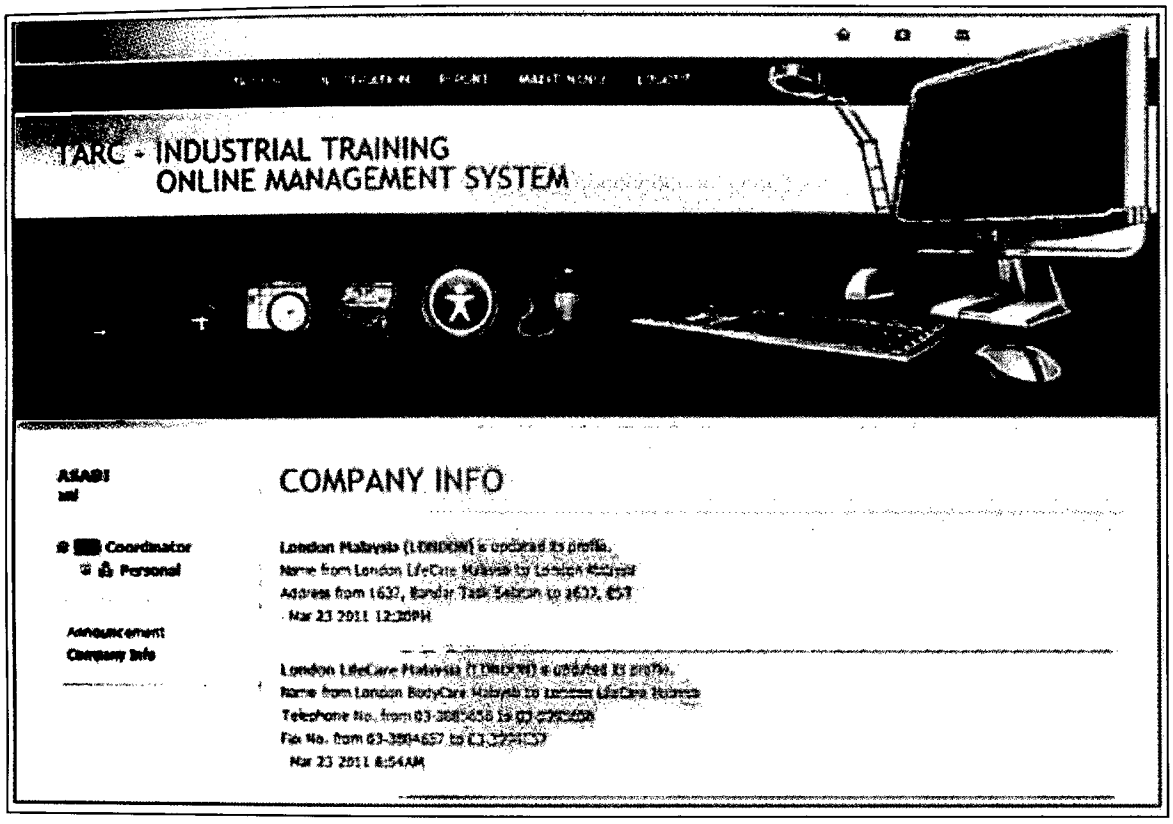


Figure 2.1: View of homepages for TARC Industrial Training Online Management System

2.1.2 Industrial Training System(ITS) for Universiti Teknologi Malaysia

Industrial Training Systems (ITS-UTM) is a web based application system which is developed to manage the industrial training process in Universiti Teknologi Malaysia (UTM). During industrial training, students will be placed at selected organisations for a predetermined duration of time in order for them to obtain exposure to the career world and also for them to be able to relate what has been learned theoretically with the real application. [3]

Modules that consist in the ITS are [3]:

- Main Page
- User Profile Management
- Program Session Management
- User Management by System Admin/Industrial Training Committee
- Student Pre-registration
- Company Management
- Placement and Letters Management
- Supervision
- Event Management
- Assessment
- Survey

2.1.3 Industrial Training System in UMP(current practice)

This system is an application to manage the industrial training process in Universiti Malaysia Pahang. This is a manual system, where student need to buy a logbook, in the logbook candidate need to fill the form of selfreport, and fill the log for everyday buy writing or attach it in every page. The supervisor of the company need to give mark to the student every week, by rate the log in the logbook. Figure 2.2, 2.3, 2.4 show the current system then student need to be fill.

Borang A1

Universiti Malaysia PAHANG

UNIT LATIHAN INDUSTRI
BORANG PENGESAHAN MELAPORKAN DIRI PELATIH& PENDAFTARAN KURSUS LATIHAN INDUSTRI

Catatan:

(i) ***Borang ini hendaklah dilengkapkan oleh pelatih dan disahkan oleh Penyelia Industri tempat menjalani LI sebaik sahaja melaporkan diri di industri.***

(ii) ***Sila fakskan dan poskan borang ini kepada: Unit Latihan Industri, Universiti Malaysia Pahang, Lebuhraya Tun Razak, 26300 Kuantan, Pahang, Malaysia.***
No. Telefon : 09 549 2750 No. Faks : 09 549 2525

(iii) ***Pelatih wajib mendaftar kursus LI secara on-line dalam tempoh yang ditetapkan.***

1. Nama

2. No. Pelajar No. K/P

3. Kod-kod Kursus LI Semester Sem.....Sesi 20...../20.....

4. Program Pengajian

5. Nama & Alamat Industri Tempat LI
Telefon : Faks :

6. Alamat Tempat Tinggal Semasa LI
Telefon : (HP) (R)

7. Tarikh Melaporkan Diri

8. Elaun Diterima RM sebulan.

Saya sahkan maklumat lapor diri dan pendaftaran LI di atas adalah benar.

(Tandatangan Pelatih) *(Tarikh)*

Disahkan benar oleh Penyelia Industri,

Nama:

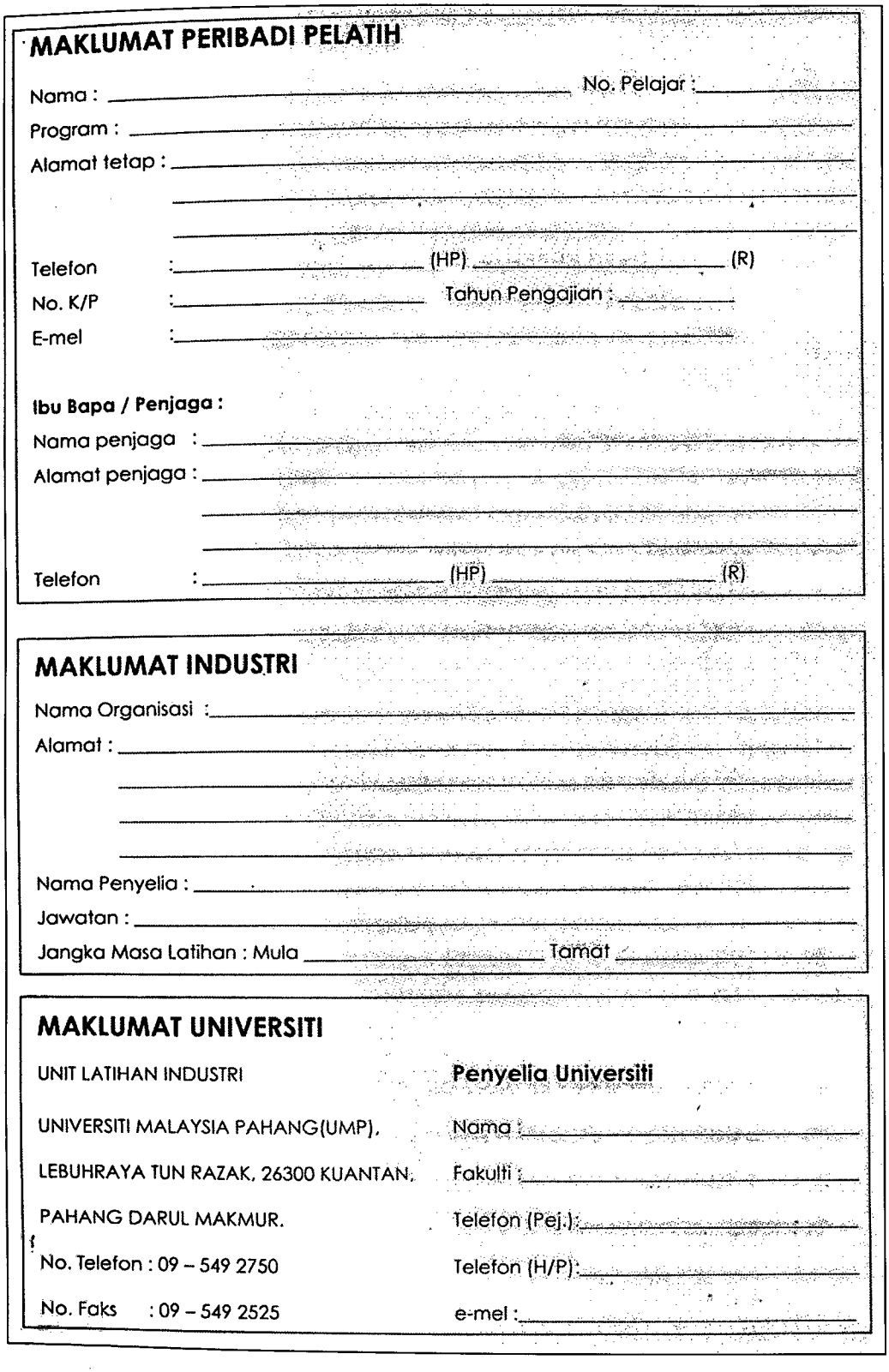
Jawatan :

Emel:

(Tandangan & cop rasmi)
Tarikh:

Tel. : Faks :

Figure 2.2: Form for Selfrepot process



MAKLUMAT PERIBADI PELATIH

Nama : _____ No. Pelajar : _____

Program : _____

Alamat tetap : _____

_____

_____

Telefon : _____ (HP) _____ (R)

No. K/P : _____ Tahun Pengajian : _____

E-mel : _____

Ibu Bapa / Penjaga :

Nama penjaga : _____

Alamat penjaga : _____

_____

_____

Telefon : _____ (HP) _____ (R)

MAKLUMAT INDUSTRI

Nama Organisasi : _____

Alamat : _____

_____

_____

_____

Nama Penyelia : _____

Jawatan : _____

Jangka Masa Latihan : Mula _____ Tamat _____

MAKLUMAT UNIVERSITI

UNIT LATIHAN INDUSTRI

UNIVERSITI MALAYSIA PAHANG(UMP),

LEBUHRAYA TUN RAZAK, 26300 KUANTAN,

PAHANG DARUL MAKMUR.

No. Telefon : 09 – 549 2750

No. Faks : 09 – 549 2525

Penyelia Universiti

Nama : _____

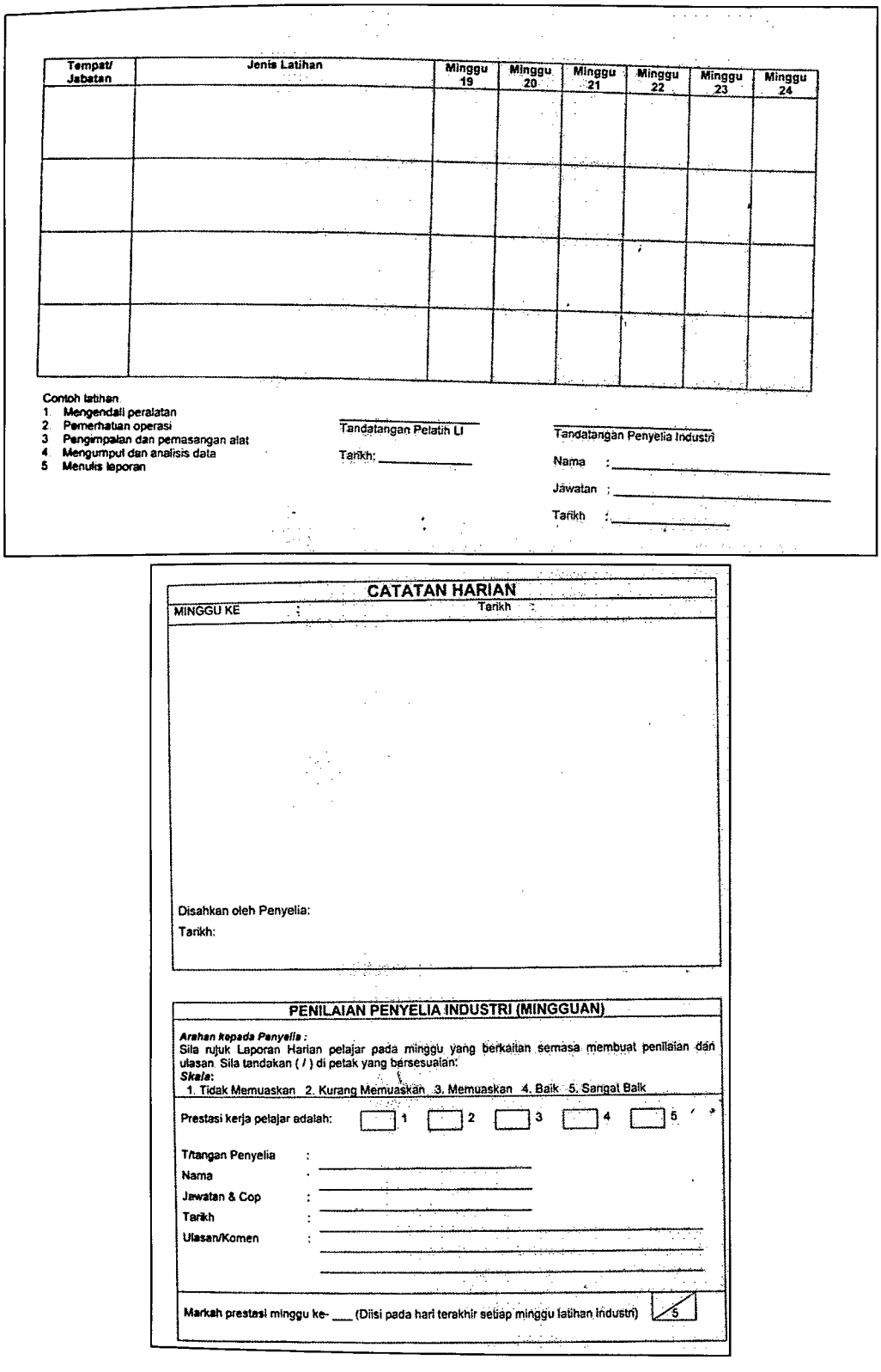
Fakulti : _____

Telefon (Pej.): _____

Telefon (H/P): _____

e-mel : _____

Figure 2.3: Form for Selfrepot process



Tempat/ Jabatan	Jenis Latihan	Minggu 19	Minggu 20	Minggu 21	Minggu 22	Minggu 23	Minggu 24

Contoh latihan
1. Mengendali peralatan
2. Pemerhatian operasi
3. Pengimpalan dan pemasangan alat
4. Mengumpul dan analisis data
5. Menulis laporan

Tandatangan Pelatih LI

Tarikh: _____

Tandatangan Penyelia Industri

Nama : _____

Jawatan : _____

Tarikh : _____

CATATAN HARIAN

MINGGU KE : Tarikh :

Disahkan oleh Penyelia:

Tarikh:

PENILAIAN PENYELIA INDUSTRI (MINGGUAN)

Arahan kepada Penyelia :
Sila rujuk Laporan Harian pelajar pada minggu yang berkaitan semasa membuat penilaian dan ulasan. Sila tandakan (/) di petak yang bersesuaian:
Skala:
1. Tidak Memuaskan 2. Kurang Memuaskan 3. Memuaskan 4. Baik 5. Sangat Baik

Prestasi kerja pelajar adalah: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

T/tangan Penyelia :
Nama :
Jawatan & Cop :
Tarikh :
Ulasan/Komen :

Markah prestasi minggu ke- ___ (Diisi pada hari terakhir setiap minggu latihan industri) /5

Figure 2.4: Log every day with mark need to be given by supervisor

2.1.4 Comparison between all the existing systems.

Table 2.1 show the comparison of all existing system with the propose system.

Table 2.1 : Comparison between all three existing system.

Modules	**TARC industrial system**	**ITS UTM**	**Industrial training system for UMP (current practice)**
Online System	Yes	Yes	No
Self-report on first day of training	No	No	Yes
Log for every day	No	No	Yes
Giving mark base on log	No	No	Yes
Submitting report	Yes	Yes	No

2.2 Technique

This section will review on the current technique on the web application, programming language, framework, database language, web server and methodology.

2.2.1 Web Applications

A web application is an application that is invoked with a web browser over the Internet. Web application development requires agility, the use of standard components, interoperability and close attention to user needs. Web Application is support user participation to add value to the application and collaborate with other users. It has brought new emphasis to the role of (unstructured) data in applications [4]. Web prefetching is a technique that is commonly applied to reduce the access latency perceived by web user. This technique enables a web application to prefetch data from the server so that it is immediately available upon user actions. Web application must prefetch using accurate information in order to achieve reasonable performance that justifies the additional resources consumed (bandwidth, extra server load) [5].

2.2.2 Web browser

Web browser is a software application for retrieving presenting and traversing information resources on the World Wide Web.

2.2.2.1 Google Chrome

Google chrome is compatible with Window XP, Vista and Windows 7. It is initially designed for speed and generally faster browsing from double clicking on the icon on desktop, we can potentially be browsing in less than a few seconds flat. Besides, it is a simple design with rather no clutter in the toolbar and includes an auto update and a builtin malware. This browser also support the HTML5, CSS3 and JS.

2.2.2.2 Mozzila Firefox

Some of the features include tabbed browsing, integrated search box, add-ons and custom skins. Security wise includes anti-spyware, anti-virus, anti-phishing, pop-up blocker and private mode. Configurations are supported with Window Vista, XP and MAC. Also support HTML5

2.2.2.3 Internet Explorer

Internet Explorer 10 is the current version with more features than ever before including a neat tool that allows us to pin sites that we regulary visit and have access to them directly from the toolbar. Other features include a more powerful download manager, enhanced tabbed browsing, search using the address bar as appose to an integrated search box and hardware acceleration to name just a few. Its also support the HTML5, the before version did not support it.

2.2.3 Tools for making dynamic and interactive Web pages

There are many tools can be used to create dynamic and interactive web pages. PHP, ASP.NET and JSP is the most popular programming tools for develop web pages.

2.2.3.1 PHP

PHP is a powerful tool for making dynamic and interactive Web pages. It is the widelyused, free and efficient [6]. PHP and MySQL has been the main web development tool for it is free and open sources. They take PHP as the development language because: free, small size of project, strong supporting, good portability, simple grammer and rapid development. [7]

2.2.3.2 ASP.NET

ASP.NET is a web application framework developed and marketed by Microsoft to allow programmers to build dynamic Web sites, Web applications and Web services [8].

2.2.3.3 JSP

JavaServer Pages (JSP) technology provides a simplied, fast way to create dynamic web content. JSP technology enables repid development of web-based applications that are server and platform independent. [9]

2.2.3.4 Comparison between all the tools

Table 2.2: Comparison between ASP.NET, PHP and JSP[7]

	ASP.NET	**PHP**	**JSP**
Security	Safety is good, but there exist certain degree of security vulnerabilities.	PHP is a recognized safety performance.	Safety is the highest.
Platform incompatibility	Single platform	Multiplaform	Multiplatform
Operating efficiency	High	Higher	Highest
Cost	High	Free	High

2.3 Web server

Web server can be define as either hardware(computer) or the computer software that use to deliver web content that can be accessed through the internet. [10] Any computer can be use as web server by installing server software and connecting the machine to the Internet. There is several web server software application, including public domain software NCSA and Apache.

23.1 Apache

Apache is a software foundation that create and provides a web servers software as an open source software. HTTP server which is the most porpular HTTP server in use today is thier main product. This service is totally free. The advantages of apache is:

- Apache has various useful features
- Apache server and API source code are open to public
- Run faster and consumes less system resource
- Can be run on various operating system

2.3.1.1 XAMPP

XAMPP is a free and open source cross-platform web server stack package. The main tools that contain in it are Apache HTTP Server, MySQL database and interprets for scripts written in PHP and Perl pregramming languages. XAMPP is an easy to install Apache distribution containing MySQL, PHP and Perl [12].