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JUDUL: **FKP VISUALIZATION FLOOR PLAN SISTEM**

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FKP VISUALIZATION FLOOR PLAN SYSTEM

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This report is submitted in partial fulfillment of the requirements for the
Bachelor of Computer Science (Software Development)

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

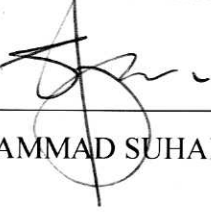
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DECLARATION

I hereby declare that this project report entitled
FKP VISUALIZATION FLOOR PLAN SYSTEM

is written by me and is my own effort and that no part has been plagiarized without
citations.

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DEDICATION

To my beloved parents, supervisor, lecturers, and my friends for giving assistant
to complete this project successfully

ACKNOWLEDGEMENTS

Alhamdulillah, praise to Allah s.w.t, I am very pleased and grateful of being able to finish my final project. First and foremost, I would like to thank my beloved parents and my family for their support and motivation throughout my project.

I would like to express my gratitude to my supervisor, En Muhammad Suhaizan bin Sulong, who expertise, understanding, and patience, added considerable to my success of completing this thesis. I appreciate his vast knowledge and skill in many areas and his assistant in writing and completing this report.

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ABSTRACT

The system developed for Projek Sarjana Muda (PSM) is entitled FKP Visualization Floor Plan System which is a web based system that can view the position of lecturer room, laboratory, technician room, store, staff room and etc. The user, especially students can search the lecturer's room based on the floor plan. It can search by lecturer's name. Besides that, it is easier for the students and lecturers to search the lecturer room and it can view a position of lecturer room in the map. With this system, users will get the information about the location in the faculty. It should interest the users to search the location of the whole faculty very easily. Then, the users only choose what place they need to know such as the laboratory. The administrator can maintain this system with edit, update and delete staff and facilities. It can help the system more interactive and suitable to use to user because the interesting interface and user friendly can attract the lecturer, staff and student to use the system. Besides, they also can register a new staff and facilities. The administrator generate a report of lecturers in the faculty and statistics of lecturer who take study leave whether they active or not. Hopefully, FKP Visualization Floor Plan System capable to help users to search the location easily.

ABSTRAK

Sistem yang dibangunkan untuk Projek Sarjana Muda (PSM) ini dikenali sebagai 'FKP Visualization Floor Plan System' yang mana sistem ini merupakan sistem berasaskan web yang akan membolehkan pengguna mendapatkan kedudukan bilik pensyarah, makmal, bilik juruteknik, stor, pejabat pentadbiran dan sebagainya. Pengguna, terutama pelajar boleh mencari bilik pensyarah berdasarkan pelan lantai. Selain itu, ia adalah untuk memudahkan para pelajar dan pensyarah untuk mencari bilik kuliah serta bilik pensyarah dengan melihat satu kedudukan dalam peta. Dengan sistem ini, pengguna akan mendapat maklumat mengenai lokasi di fakulti dan ia harus menarik minat pengguna untuk mencari lokasi fakulti seluruh amat senang. Kemudian pengguna hanya pilih lokasi yang mereka pilih. Pentadbiran boleh menyelenggara sistem ini dengan mengubah, mengemaskini dan memadam pegawai dan kemudahan fakulti. FKP Visualization Floor Plan System berkemampuan untuk membantu pengguna-pengguna untuk mencari lokasi dengan mudah.

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LIST OF ABBREVIATIONS

FKP	- Fakulti Kejuruteraan Pembuatan
FVFPS	- FKP Visualization Floor Plan System
UTEM	- Universiti Teknikal Malaysia Melaka
FTMK	- Fakulti Teknologi Maklumat dan Komunikasi
PHP	- Pre-Hypertext Processor
MYSQL	- Structured Query Language
DFD	- Data Flow Diagram
ERD	- Entity Relationship Diagram
LAN	- Local Area Network
PSM	- Projek Sarjana Muda
LDM	- Logical Data Model
DBMS	- Database Management Systems
DDL	- Data Definition Language
RAM	- Random Access Memory

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CHAPTER I

INTRODUCTION

1.1 Project Background

The system that will be developed is entitled FKP Visualization Floor Plan. It is a web based system that can view the position of lecturer room, laboratory, technician room, store, staff room, lecture room prayer room and miscellaneous room. The user, especially students can search the lecturer's room based on the floor plan. It can search by lecturer's name. Besides that, it is easier for the students and lecturers to search the lecturer room and it can view a position of lecturer room in the map. This project will be using PHP as the programming code and MYSQL as the database.

This system has six modules such as Admin authentication, search, registration, user and report module. The module can help the system more interactive and suitable to use to all people because the interesting interface and user friendly can attract the lecturer, staff and student to use the system. Macromedia Dreamweaver MX 2004 is used to build the system more interesting and show the visualization of the whole part of faculty. By implementing the system, it should interest the users to search the location of the whole faculty very easily. Then, the users only choose what place they need to know such as the lab. The other module is the search module. This module able the lecturer to search the room for another lecturer to know their latest information and status of their work or on study leave.

The Admin should authenticate the system by log in their username and password. After logged-in, admin can know the statistics and how many lecturers, professors, and staff work in the faculty. The last module is the report module; this module is used to generate the report of how many lecturers, professor, and staff in the faculty and can view the statistics of how many lecturers who continue their study.

1.2 Problem Statement

FKP Visualization Floor Plan is developed to solve the problem of lecturers, staff and students to find the information about office, lecture room, lab, lecturer's room and mislicious room. This is because the faculty is newly constructed and difficult to the lecturers, staff and students to accustom with new environment. They did not know where the place is located. So, this system can help them to know about the location of lecturers' room, labs, prayer rooms, stores, staff rooms and tutor rooms. It will give benefit to the lecturers, staff and students to search the whole faculty.

With using manual system, the admin is difficult to decide the lecturer's rooms. They did not know to place the location of the lecturer's. The floor plan that shows at the board was display the limited information of the floor plan. It is difficult to know the detail information about the rooms in this faculty.

Before this, the position of Manufacturing Engineering Faculty is situated at the 5th floor Academic Building, Industry Campus (CUBIC). With a small place, it is difficult to locate the new lecturer or staff room. Other than that, the position of Phase B Lab is far from Industry Campus, and it is difficult to the student who does not have a transport to get there. So, this system is developed to ease to the users to search the information about the whole faculty when the building for faculty of Manufacturing Engineering (FKP) is ready to use.

Further to that, the 5th floor Academic Building at Industry Campus (CUBIC) has located 2 faculties in the same floor. This will cause anteroom between both faculties become narrower and uncomfortable for the lecturer and staff. Now, there is no system use in this faculty because both faculties are temporary. After this, this faculty will be move to the Main Campus in Durian Tunggal. The system will be used by the lecturers; staff, students, and admin when this faculty is ready. Another than that, based on manual system, the floor plan will be pasted on the notice board.

1.3 Objective

FKP Visualization Floor Plan is implemented in order to achieve the objectives that benefit to the users. The objectives of this project are:

1. To help users especially the lecturer and staff to know their position in Faculty.
2. To help the student to get the information easily about the whole of faculty in UTeM Main Campus.
3. To manage data systematically and can produce the statistics or report
4. To ease uses in locating rooms, laboratory, and lecture rooms with necessary information
5. To analyses and collect the data about users who access the system.
6. To assist administrator in assigning lecturers or staff to their respective rooms.
7. To produce and manage data for generating reports or statistics.

1.4 Scope

FKP Visualization Floor Plan has been classification into several scopes. There are:

1. Can help the users to get the location which they want to go.
2. Lecturers, staff, students and admin can use this system
3. This system provides the information about the whole of faculty.
4. Admin can also maintain this system and print the statistics or report

1.5 Project Significance

FKP Visualization Floor Plan will be built to make easier to the lecturer, staff and students to get the information in terms of location about the whole faculty such as labs, lecturer rooms, lecture rooms, staff rooms, and prayer rooms. It can attract the people to use this system

The Administrator can login the system and able to obtain number of lecturers and staff. They also can know whether the lecturer who's on study leave, is active or not. In addition, the system also shows the facilities and some addition information about the faculty.

This system hopefully can give benefits to the users by guiding them to search the facilities in the faculty.

1.6 Expected Output

The expected output from this web-based system is to know the location of the whole faculty, the report of how many lecturers and staff have in the faculty, and the statistics of how many lecturers who continue to study and whether they are active or not.

1.7 Conclusion

As the conclusion, FKP Visualization Floor Plan is developed as a web-based system to help the lecturers, staff, and students to know the location of faculty. This system has a user friendly interface that can attract the users to access the system.

Chapter I described each problem occurred by using the current system. Objective and scope identified the solution for each of the problem. Project Significance explained the benefits that can be gathered from this system. The chapter also presented the whole function of the system and how the system should works. This system hopefully is able to overcome the problem in the current system.

The next chapter will discuss on literature review of the project and the methodology that use in developing the system.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

Literature review is a summary of previous research on a topic. A literature review discusses published information in a particular subject area, and sometimes information in a particular subject area within a certain time period. The purpose of literature review is to convey to the reader what knowledge and ideas have been established on a topic and what are the strengths and weaknesses. This chapter explains about facts or statement which known as Literature Review that will be used as guidance in developing the system.

Methodology tells what need to do and to manage projects from start to finish. It describes every step in the project life cycle in depth. Other than that, methodology will elaborate Prototyping model approach. Normally only the end goal of the process is manifested as a physical work product. In software, the analysis and design activities are normally governed by a specific methodology. The Literature Review part acts as a mean to discover what the methodology should be chosen in developing this system.

2.2 Facts and Findings

Facts and findings establishes what the existing system does and what the problems are, and leads to a definition of a set of options from which users may choose their required system (Yeates and Wakefield, 2004).

This section will maps out different perspective which related to the project that will be developed. It shows the visualization of Faculty of Manufacturing Engineering. In the other situation, it will describe any element or method which is useful to be used for the purpose of searching and gathered useful information in developing this system

Case Study 1: Using Director and Flash to create an Award-Winning Multimedia Application

According to Thomas Biedorf(2004), The "HUGO BOSS, HUGO Academy: CD-ROM Fall/Winter 2003" CD-ROM won the coveted Grand Award for Best Application at the New York Festivals 2003 competition. The Frankfurt-based agency Biedermann und Brandstift designed a training CD-ROM for HUGO shop employees whose main content was created in Flash. The application's skeleton was developed by bytes in motion using Director MX.

Director allowed us to meet HUGO BOSS's quality requirements as far as the application was concerned, and Flash MX enabled the designers to create the content according to specifications. The high degree of integration between these two Macromedia products yielded a relatively smooth workflow since Flash professionals who aren't familiar with Director, and Director Professionals who aren't familiar with Flash, can cooperate quite easily.

The training CD-ROM was used to train HUGO shop employees worldwide. The content covered company philosophy and marketing as well as the current collections and merchandising products. A shop overview and interactive group games completed the CD-ROM, which was produced as part of a two-year series.

The CD-ROM was presented by the shop owner (moderator) using a video projector. The employees formed three groups that had to compete against each other in the interactive games (see Figure 1). A comprehensive printed training guide provided the shop owner with complete information about the application. The total playing time of individual chapters and the total training time were tracked. This data, together with general assessment feedback, could be e-mailed to headquarters.

Case Study 2: Adobe Case Study- United States Air Force

According to Julie Campagna, she talked the details about Updating Airforce.com one section at a time; Tribal DDB used Macromedia Flash MX to develop an interactive Timeline. The multimedia supervisor Kent Rice said that "There's a big difference between Flash 5 and Flash MX. The whole interface for ActionScripting has improved; the customizable development environment makes it easy for me to arrange my workspace; and video support is a great addition too," The Timeline chronicles the events that have influenced the history of flight and ultimately helped influence and evolve today's Air Force

Besides, Airforce.com account supervisor Jeff Erickson said that "We want to show visitors where the Air Force has been. Hopefully, after visiting our site, visitors will want to get involved with where the Air Force is going,". Its use to help drive interest in enlistment, Airforce.com needed a solution that not only presents information in an intriguing manner, but also gives the site credibility with a typically difficult-to-engage audience.

According to multimedia developer Chris Griffith, "Macromedia Flash was the only answer. We had to load a century's worth of content into the Timeline. Using templates, I could break it down by decade, and hand the templates off to different producers and we could all work simultaneously."

On the backend, Tribal DDB uses PHP to pass variables between Macromedia Flash movies (on multiple pages). "Combining PHP and Flash, we can track navigation state, section and page info, as well as determine whether a user has already seen the Flash intro during a session," added Griffith.

For end users, this means faster page loads. "Instead of loading five movies at once, we dynamically load the movie that the user requests. This reduces download time by about 80% and translates into a better user experience," said Griffith.

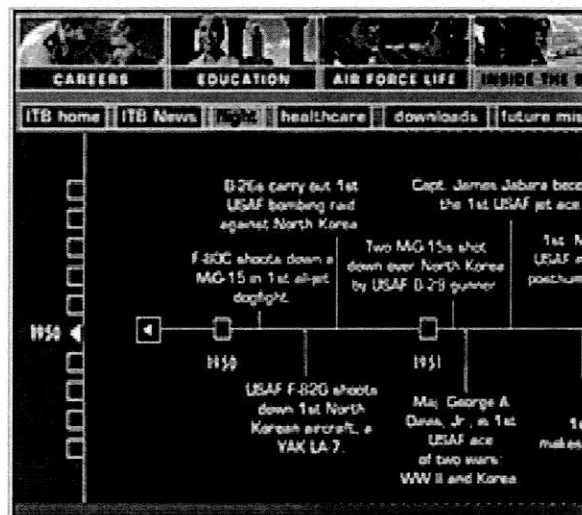


Figure 2.1: United States Air Force

Additionally, with Macromedia Flash MX, it's easy for Tribal DDB to replicate the Air Force "Cross into the Blue" national brand campaign (developed by GSD&M) online. "We can produce animation, sound, and interactivity that mirror the TV campaign—this would be extremely difficult with any other tool," said Rice.

Benefits ROI for Airforce.com:

1. One site accessible to everyone, including people with disabilities: Macromedia Flash MX makes it easier for Airforce.com to extend the reach of their website, while eliminating the need for a separate HTML site.