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CMS engine for strategic information systems planning
subject / Mohd Rizal Abdul Rahman.

**CMS ENGINE FOR STRATEGIC INFORMATION SYSTEMS PLANNING
SUBJECT**

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KOLEJ UNIVERSITI TEKNIKAL KEBANGSAAN MALAYSIA

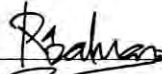
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DECLARATION

I hereby declare that this project report entitled

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

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ABSTRACT

This project papers is discuss about “CMS Engine for Strategic Information Planning System Subject”. The project will be implemented specifically for lecturers to manage the website. It is easy to use and easily to manage the website without have many problem. For update content this website, lecture just login to the website and choose the form update, type or edit old content and save. The new content automatically will be display on the spot after refresh the web browser. The module of this project can be extensible in the future following the time changes. This project using the RUP methodology while developing the CMS Engine because it is reliable and suitability for the dynamic website development. Software is used in developing the CMS Engine for Strategic Information System Planning Subject is like as Dreamweaver MX, Microsoft Front Page 2003, MySQL and XAMPP.

ABSTRAK

Dprojek ini membincangkan tentang "CMS Engine for Strategic Information System Planning Subject". Projek ini akan dilaksanakan dan dikhususkan untuk pensyarah menguruskan laman web. Ia mudah diuruskan tanpa menghadapi sebarang masalah. Untuk mengemaskini isi kandungan laman web ini, pensyarah hanya perlu "login" ke dalam laman web dengan memilih borang "update", taip atau kemaskini isi kandungan lama dan simpan. Isi kandungan terbaru akan dipaparkan serta merta selepas "refresh" pelayan laman web. Modul projek ini boleh ditambah di masa depan bergantung pada perubahan masa. Metodologi yang digunakan dalam membangunkan "CMS Engine for Strategic Information System Planning Subject" adalah RUP metodologi kerana ia sesuai untuk membangunkan laman web dinamik. Perisian yang digunakan dalam "CMS Engine for Strategic Information System Planning Subject" adalah seperti Macromedia Dreamweaver MX, Microsoft Front Page 2003, MySQL and XAMPP.

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LIST OF ABBREVIATIONS

ABBREVIATION	DESCRIPTION
CMS	Content Management System
SISP	Strategic Information Systems Planning
KUTKM	Kolej Universiti Teknikal Kebangsaan Malaysia
FTMK	Fakulti Teknologi Maklumat dan Komunikasi
RUP	Rational Unified Process
UML	Unified Modeling Language
LAN	Local Area Network

CHAPTER I

INTRODUCTION

1.1 Project Background

The task of lecture is very important because they are the one who will educate the student of today. So, it is very important that the lecture come to class well prepared and full of confident of what they are going to teach. But today most of the lectures are burdened with other a part of teaching. Besides teaching, among the lecture tasks are outlining syllabus manually, teaching planning, getting ready quizzes questions, preparing examination question, grading student and a lot more.

In this project among the task chosen are creating and modification syllabus, teaching planning and assessment or quizzes. This is the main part of the project. The reason why creating and modification syllabus including to the system is because before the lectures construct the syllabus manually and there no system that will manage and store the teaching syllabus, which is a very important part of teaching. With a system that manage the syllabus, the syllabus making process is more organize and coordinative which will benefited the lectures. In FTMK, if lectures want to uploaded note for student, they upload as usual. But if the notes have the error to change each of information have to be made in slide or document and then being uploads again. This task is not efficient because waste the time to edit, modified and uploaded again. Why not we have the system user friendly, easy to use and the most important is to economize the time.

The project is a web based system. It is in a form of a portal which is the most suitable because the lecturer could easily access and monitor the system and can change any content that they want. So hopefully the task of the lecture will be lessened so that they have more time for other task that could improve their productivity.

1.2 Problem Statements

There are some problems that have been capture and identified such as the following:

- Content None Systematic To Manage

Usually the content not systematic and is hard to manage because it is scattered and not centralized. The probability that the lost the files is also high. This is maybe caused by technical failure or human carelessness.

Besides that the content is not manage properly and systematically. It will be better if there is a system that let the lectures to input and it will save it in a database.

- Time Usability

The current system always takes a long time to accomplish each task or process has doing. For example if lecture want to edit content about each topic, they must read one by one, line by line the coding to find content want to change. Sometimes we doing same task twice. This task takes time to find content. Probability have mistake or error is high.

1.3 Objectives

- a) To develop CMS engine for simplify process for manage any changes for text content in the web based system.

- b) To make easier for the management to update certain data. User for this system no needs to search from one file to other file for updating.
- c) To provide a secure management system by using a user authentication. All the data saved will be more safety. Problems like lost, damaged and updated by unauthorized user no more existed.

1.4 Scope

The scope of this project are to develop a prototype for CMS engine that can do as the following:

Authentication

Authentication is very important part for any system made nowadays. This especially applied to a web base system. Without authentication, just about anybody could access it and the security of the content is questionable. So with authentication the system will be secure and safe.

Construct Management Unit

- Create new content (only for text)
This is where the lecture could create and construct their content. In this system a dynamic interface is provided for the lecture to just fill in the content for their subject.
- Manage the content (only for text)
Whenever the lectures wanted to edit or modified the content the system provide the function for them to edit or modified. After the lecturers finish modifying and saving the modified content, the system will be then automatically update the new content in the database.

1.5 Project Significance

The project is important because it will give benefit to the lecturer. With this project the lectures have something a useful that could help them in their teaching process such as constructing own content for the subject and modified the content without use the coding or database. Other than that the lecture can improve the productivity because they will work hard to give the best excellent to the student.

Besides that, some of the burdens on the lecturers are lifted because the system will replace them to handle some of the workload that the lectures have to carry before. The lecturers have to do is to manage and keep track of the details thing in the system. This surely will improve the productivity of the lecturers.

Last but not least, the significance of this system will reduce the time. When reducing the time, more time can spend to other task. At least probability doing mistake can minimize and the management process will be more systematic and well organized.

1.6 Expected Output

The expected outputs of this system are:

- The time for task changes the content can be less because the developers not spend more time to edit and modified system manually. It is just changes the content directly without viewing the coding.
- Process for updating the content is very easy because these systems have user-friendly interface and simple interface.

1.7 Conclusion

This chapter discuss about the introduction of the project which gave the idea of this project briefly. The problem face also discussed. This problem is what triggers the idea to start this project and also the objectives of this project. Without problem the project could not be done. The objectives of this project also discussed to show what this project could do who will benefit from it. The scope is written in detail to give a glimpse of idea of what the project is all about. The functions of this project are also listed for easier understanding.

Chapter II will explain on the methodology and literature review for this project.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

Literature study is important for ensuring the project that will be developing is meaningful and reliable. This is because the sentences, phrase, and writing in the report based on the real situation. Literature review is needed in order to improve current system by making some improvement especially to the system robustness. Normally, the literature review is obtained by searching, collecting, analyzing and drawing conclusion from all debates and issues raised in relevant body of literature.

2.2 Fact and Finding

Fact and finding for CMS Engine for SISP subject arise as analyzed and described as the following

2.2.1 The Concept

A content management system (CMS) is a system used to manage the content of a Web site. Typically, a CMS consists of two elements the content management application (CMA) and the content delivery application (CDA). The CMA element allows the content manager or author, who may not know Hypertext Markup Language (HTML), to manage the creation, modification, and removal of content from a Web site without needing the expertise of a Webmaster. The CDA element uses and compiles that information to update the Web site.

(<http://searchwebservices.techtarget.com/sDefinition>)

Case study 1:

Business Management System (BMS)

<http://www.webbms.com/index.html>

In 2002, the Business Management System Application was formed to fill the void in the market for a powerful, integrated, web-based, and complete business management system. The Business Management System was developed for business professionals by business professionals. Overall, BMS is and will continue to be one of the most complete and easiest to use business management solutions on the market.



Figure 2.1 BMS website

It became apparent that many businesses as a whole demanded such a system, and development began on the newest generation of software, using the full power of internet and web-based applications. CEC Controls has created the business management solution with the flexibility to meet an organization's needs.

Businesses today are highly competitive and have been forced to carefully analyze the business side of their profession. The advancement of technology now requires the use of powerful networked databases accessible from within or outside the organization. These programs now must streamline the creation, processing and

storage of documents and employee records, the keeping of training records, returned material, and all types of data.

The Business Management System will enable organizations to operate more efficiently and with less overhead, resulting in a more profitable firm.

The following global features are among the many benefits found in the Business Management System:

- Implementation of web-based technology
- Data Overview for quick referencing
- Advanced data search capabilities
- Automatic lookup capabilities using drop down lists
- Pre-existing forms to ensure precise data entry
- Report generation and printing for each module
- Password protection to ensure the security of sensitive information
- Platform independent

Case study 2:

Portal Pendidikan Bestari Utusan

<http://www.tutor.com.my/tutor/index.asp>

The screenshot shows the homepage of the 'Portal Pendidikan Bestari Utusan'. At the top, there is a navigation bar with the following links: LAMAN UTAMA, E-TUISYEN, BANK SOALAN, BILIK GURU, INTERAKTIF, KOMUNITI, and PETA LAMAN. The main content area is divided into several sections. On the left, there is a 'BANK SOALAN' section with a list of subjects: Bahasa Melayu, Bahasa Inggeris, Matematik, Sains, Geografi, Tambahan, Fizik, Kimia, Biologi, Pengajian Am, and Ekonomi. In the center, there is a 'BERITA PENDIDIKAN' section with a headline 'ADaP : Membuka minda pelajar' and a sub-headline 'PIBG dan Pusat Sumber Sekolah Kebangsaan (SK) Seksyen 7, Bandar Baru Bangi, Selangor telah menganjurkan Bengkel Akhbar Dalam Pembelajaran (ADaP) baru-baru ini.' On the right, there is a 'BILIK GURU' section with a headline 'Khusus untuk para guru' and a sub-headline 'Dapatkan Rancangan Menajar 2005, Kurikulum Sukatan Pelajaran dan lain-lain...'. At the bottom, there are several advertisements, including one for 'JAM Menangi RM5,000!' and one for 'Klinik SPM III : Membina Jurutera Global KOLEJ Universiti Kajuterana Utara Malaysia (KUKUM), Utusan Malaysia dan Tutor akan menganjurkan Klinik SPM III bertemakan Membina'.

Figure 2.2 Portal Pendidikan Bestari Utusan

The currently developed online service is not a stable version of the online service because of its online service was not functioning according to user's request.

As for its functionality, it involves only web pages information about education and view search and not authentication in this system.

The search process allows the user to search for available information for the selected education. The view search education allows the user to view the search education that was done previously by the user as to see the availability of the education.

As for conclusion, this education service does not allow the user to just view for information and revision.

Comparison of Case Study

After review has been done, there is much comparison and the similarity between the current system and the new system that will be develop. Table 2.1 is show the comparison of the system based on system, interface, security, technology, and scripting language.

Table 2.1 Compare of the System

Comparison Item	Business Management System (BMS)	Portal Pendidikan Bestari Utusan	CMS Engine for Strategic Information Systems Planning
System	Business management solution	Education Online System	Web based system with CMS Engine
Interface	User-Friendly	User-Friendly	User-Friendly
Security	Flexible controlled access provides user level permissions to ensure the security and integrity of your company's data.	Not secured because not have user lever.	Secured and have user lever for lecture login