

**MEGASEEK ENGINE  
(MSE)**

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## **Abstract**

FSKPP is using manual Thesis Management System which considered as not efficient to save the entire data of thesis. Thesis can lost easily when manual filing system is used. The current system does not have any secure implementation in order to control this situation. Any unexpected disaster can destroy all the data saved via filing system. Furthermore users have to face difficulties to get access to thesis via manual system as they have to search manually the entire filing system to get a thesis. MegaSeek Engine (MSE) is an information management system which designed for manage thesis of FSKPP final year students. The main objective of this project is to engage all parties in one collaborative online system systematically as a medium in exchanging information for Final Year Project thesis. The entire final year student who finishes their final year project will be able to upload their thesis in this system. This will help the faculty to keep track of final year project title each and every year. PHP, Javascript and HTML language will be used to develop this system and Xampp Server will be used for database as well. Thus this system will help to enhance and standardize FSKPP's thesis management.

## **Abstrak**

FSKKP menggunakan Sistem Pengurusan Tesis manual yang dianggap sebagai tidak cekap untuk menyimpan keseluruhan data tesis. Tesis boleh hilang dengan mudah apabila sistem pemfailan manual digunakan. Sistem sekarang tidak mempunyai apa-apa pelaksanaan yang boleh mengawal keadaan ini. Apa-apa bencana yang tidak dijangka boleh memusnahkan semua data yang disimpan melalui sistem pemfailan. Tambahan pula pengguna terpaksa menghadapi kesukaran untuk mendapatkan akses kepada tesis melalui sistem manual kerana mereka perlu mencari secara manual sistem pemfailan keseluruhan untuk mendapatkan tesis. MegaSeek Enjin (MSE) adalah satu sistem pengurusan maklumat yang direka untuk menguruskan tesis FSKKP pelajar tahun akhir . Objektif utama projek ini adalah untuk melibatkan semua pihak dalam satu sistem dalam talian secara sistematik sebagai medium untuk bertukar-tukar maklumat untuk tesis. Seluruh pelajar tahun akhir yang selesai projek tahun akhir akan dapat memuat naik tesis mereka dalam sistem ini. Ini akan membantu fakulti untuk mengesan tajuk projek tahun akhir setiap tahun . PHP , Javascript dan HTML akan digunakan untuk membangunkan sistem ini dan Server Xampp akan digunakan untuk pangkalan data juga. Oleh itu, sistem ini akan membantu untuk meningkatkan dan menyeragamkan pengurusan tesis FSKKP ini .

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Introduction**

Information Management System (IMS) is a joint hierarchical database and information management system with extensive transaction processing capabilities. [1] IBM designed IMS with Rockwell and Caterpillar starting in 1966 for the Apollo program. IMS's challenge was to inventory the very large bill of materials (BOM) for the Saturn V moon rocket and Apollo space vehicle. However, by some accounts it was accepted too late in the process to make significant contributions to the Apollo program. [2]

The IMS Database component stores data using a hierarchical model.[3] IMS can be applied to any system of software that facilitates the storage, organization, and retrieval of information within a computer system, without the implication that it need have all the

essential characteristics of a DBMS. The information held may include sound fragments, images, and video sequences in addition to the usual textual and numerical information. [4]

Currently FSKKP is using manual Thesis Management System. It is considered as not efficient to save the entire data of thesis. This is because thesis can be lost easily when a manual filing system is used. The current system does not have any secure implementation in order to control this situation. Any unexpected disaster can destroy all the data saved via a filing system. Furthermore, users have to face difficulties to get access to a thesis via a manual system. They have to search manually the entire filing system to get a thesis. This is a very time-consuming job.

MegaSeek Engine (MSE) is an information management system which is designed for managing the thesis of FSKKP final year students. This Web-based system will emerge the paradigm of University Malaysia Pahang thesis management. The manual system is messy and time-consuming with a lack of efficiency. The main objective of this project is to engage all parties in one collaborative online system systematically as a medium for exchanging information for Final Year Project theses.

The entire final year student who finishes their final year project will be able to upload their thesis in this system. This will help the faculty to keep track of final year project titles each and every year. External users also can have access to this system to view the overview of final year project titles of students.

## 1.2 Problem Statement

Problem statements are list why there is the need of developing MegaSeek Engine (MSE). This does also mean that the existing management style is less efficient. Problem that arise in the old management style are:

- i. There is no proper thesis management system for FSKKP.
- ii. Manual filing system is out-dated and less secure.
- iii. No proper access to thesis.

## 1.3 Objective

Objective are what will the new system have that will overcome constraints and problems in the old management system. It will be the goal for designing MegaSeek Engine (MSE). The objectives are:

- i. To develop a web based prototype of MegaSeek Engine (MSE) for FSKKP final year students.
- ii. To manage the thesis in a standardize system with more security.
- iii. To provide students and lecturers with proper and easier access to thesis.



## 1.4 Scope

Scope is the range for the system. Scope that this document highlights is the user of the system, and project boundaries of MegaSeek Engine (MSE). The scopes are:

- i) Project boundaries are:
  - a) Create a website to manage FSKKP of final year project thesis.
  - b) Student able to upload and download thesis information and abstract from site.
  - c) User friendly interface for website.
  
- ii) Target users for the system are:
  - a) Student
  - b) Lecturers
  - c) Researchers
  - d) Admin

## **1.5 Thesis Organization**

This thesis consists of five (6) chapters:

### **Chapter 1: Introduction**

The purpose of this chapter is to introduce to the readers about the project that will be developed later. This chapter contains introduction, problem statement, objective, and scope and thesis organization.

### **Chapter 2: Literature review**

This chapter explains about the reviews for the chosen project. This chapter is divided into two sub reviews that require students to study to get complete information about the project.

### **Chapter 3: Methodology**

This chapter discusses the approach and framework for the project. Method, technique or approach that will be and will be used while designing and implementing the project will be included in the content. Justification and of method on approach used and hardware and software necessary is stated here.

### **Chapter 4: Implementation**

This chapter acts to document all processes that involve in the development of the project. Designed project development is explained here. The content of this project depends on the system. It contains information of database and tools used. Data in database is shown in this chapter.

**Chapter 5: Results and Discussion**

The purpose of this system is to explain about the results and data analysis that had been acquired. Result analysis, project limitation and suggestion and project enhancement are contents for the chapter.

**Chapter 6: Conclusion**

This chapter explains briefly and summarizes the developed project.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This literature review indicates the research innovative and interesting exploration of the research idea that related to the MegaSeek Engine (MSE). It is important element that covers the relevant knowledge to help in project implementation. The literature review begins with the project understanding, followed by comparison of existing system, software process and models. Software Technique, tools and related framework will also be discuss. References made from various resources such as books, conference paper, articles, journals, internet and etc.

Previously there is no proper system to manage the student's thesis information in FSKKP. The program documentation and record has been compiled in spread sheet format and not centralized. The information is not easily accessible either by the student or lecturer. The records become difficult to manage after the program has been running for more than a year.

Among the data that need to be managed properly are student thesis records, thesis title and project specification. The systems will be sharing student record in the database level. Additionally, the above services should be accessible by student and lecturer anytime and anywhere without additional software to install on their computer. From this requirement, the system should be built in web based environment. The details function of the MegaSeek Engine (MSE) component will be further discussed.

## **2.2 Existing System**

### **2.2.1 Manual System**

Currently, there is manual thesis management system that exists in FSKKP. Some faculties didn't have any system to manage the thesis in a standardize system with more security and provide students and lecturers with proper and easier access to thesis. In order to manage the thesis, they use filing system which takes time. They have to arrange the entire thesis in the rack. This is not standardized system and will take a long period to finish the process. This may create some problem in the future. For example the missing of student data, misplacing of the information and so on.

In order for the student or lecturers to get access to the system, they have to meet the in charge person and get their permission to view the related thesis. Then student have to wait few days for the approval. This makes students life harder.

### **2.2.2 Science Direct**

ScienceDirect is a leading full-text scientific database offering journal articles and book chapters from more than 2,500 journals and almost 20,000 books. [5] ScienceDirect is website operated by the Anglo-Dutch publisher Elsevier containing (as of 2013) about 11 million articles from 2,500 journals and 6,000 e-books, reference works, book series and handbooks. The articles are grouped in four main sections: Physical Sciences and Engineering, Life Sciences, Health Sciences, and Social Sciences and Humanities. For most articles on the website, abstracts are freely available; access to the full text of the article (in

PDF, and also HTML for newer publications) requires a subscription or pay-per-view purchase. [6]

ScienceDirect is home to almost one-quarter of the world's peer-reviewed full-text scientific, technical and medical content. Over 15 million researchers, health care professionals, teachers, students and information professionals around the globe rely on ScienceDirect as a trusted source of nearly 2,200 journals, almost 900 serials and close to 22,000 book titles. ScienceDirect supports research and education with interactive elements in articles such as audio, video, graphs, tables and images, and offers tools so users can easily set alerts. Content on ScienceDirect also features embedded links to external datasets, including earth and environmental science data from PANGAEA, abstract and indexing data from Scopus and chemical reactions data from Reaxys. With almost 12 million content pieces available including pre-publication release of articles and open access content from Elsevier journals. ScienceDirect is a premier platform for discovering the world of research. Articles published in ScienceDirect Open Access journals are made permanently free for everyone to access immediately upon publication. [7]

The drawback of this system must be registered by user and pay some amount in order to get full version of data. But still it gives a lot of benefit to society.

The screenshot shows the ScienceDirect main page. At the top, there is a navigation bar with links for Home, Recent Articles, Publications, Search, My settings, My alerts, and Shopping cart. Below this is a search bar with fields for 'All fields' and 'Author', and buttons for 'Home', 'Page', and 'Search'. A central banner promotes the 'WebShop'. The main content area is divided into several sections: 'ScienceDirect' description, 'Open Access' articles, 'Favorite Journals / Books', 'Quick Links in ScienceDirect', 'Quick Links on the Web', and 'Latest Articles'. A sidebar on the left lists subjects like 'Physical Sciences and Engineering' and 'Life Sciences'. A right sidebar contains 'Keep Up to Date' and 'Reference Modules'.

Figure 2.1: Main page of ScienceDirect website.

The screenshot shows a detailed article page on ScienceDirect. The page displays the article title 'Models of e-Learning adopted in the Middle East', authors 'Abdulrahman A. Mitza, Mohammed Al-Azoukareem', and page numbers 'Pages 83-93'. It includes options to 'Show preview', 'PDF (32 K)', 'Recommended articles', and 'Related reference work articles'. A 'Highlights' section is also visible, providing a brief summary of the article's content.

Figure 2.2: Detailed page of ScienceDirect website.