

Name : Nurayuni Binti Nordin Sin
ID Matric : CA20154

CHAPTER 1

INTRODUCTION

1.1 Introduction/Background of Study

Align with the developing world and countries, technologies become an essential part of people's daily lives. Technologies such as systems or applications and devices contribute to people's lives much easier. For instance, people nowadays are able to pay the bill, order food, learn, and gain any information at their fingertips by using systems or applications only. Hence, people nowadays do not need to queue and wait for a long hour to pay the bill, order food by going to the restaurant and so on.

In Malaysia, companies, governments, non-government, and institutions are starting to utilize system such Project Management systems in their operation and project in achieving the Fourth Industrial Revolution (IR4.0). In fact, the Project Management system has a significant role and supports business and education growth. For example, the Project Management system as the virtual assistant in helping the supervisor or manager to monitor or viewing the progress of a project and task by the supervisee or employee.

In this project, the Project Management system is a system that helps the project operations of the institution become more convenient and systematic. This project will be developed for the final year student in taking and managing their final year project. This Project Management system is mainly focusing on helping the lecturer or known as the supervisor to monitor and view the overall students or supervisee project progress in visualization. The visualization of the supervisee's project progress will be shown according to the submitted task that has been uploaded by the supervisee in this Project Management system platform.

This Project Management system has the specialization in providing the quota for each supervisor every semester. Therefore, this project was able to help the student to find and approach the respective supervisor that they wanted in a more systematic and convenience. In fact, the supervisor is also able to know about their quota and accept the total of students as their supervisees according to the quota provided. As a result, this Project Management system is able to make the students' final-year projects more efficient, organized and systematic.

1.2 Problem Statement

There have various project management system in the market to make the progress of students' final-year projects more efficient and systematic. However, the paid project management system consumes a lot of money. Meanwhile, the open-source project management system has many shortcomings. For instance, the open-source system did not have the functionality to view the supervisor quota and communication platform between the supervisor and supervisee. Hence, it is difficult to find a project management system that fulfils all the requirements and functionality needed at a reasonable price or free.

Furthermore, the Faculty of Computing at the UMP did not have a system to record the supervisees' project progress in a more systematic. The project status and submission that relied on the email or WhatsApp platform is quite difficult for the supervisor to monitor and view the overall of their supervisee's project progress. This is because the supervisor did not have a real-time visualization of the supervisees' project progress and status once the supervisee submitted it through email or WhatsApp platform. Therefore, record in manually is ineffectiveness way and required a lot of time to retrieve and review each supervisee's project progress.

Moreover, the Faculty of Computing at the UMP was utilizing different platforms or applications in order for the supervisor to provide the task to the supervisee, fill in the form for the supervisor application, and review the supervisor quota and supervisor information. For instance, utilizing WhatsApp chat, Google Forms, Google Excel, Google Drive and website Faculty of Computing (FKOM). Hence, the project management becomes not systematic and need to open all

platform in order to perform each task which causes inconvenience. For example, the students need to open Google Excel to review the supervisor quota and at the same time needs to open the FKOM website to review the supervisor's expertise and group. Only then, the students able to select a suitable supervisor for their final-year project.

In conclusion, the development of a Project Management system for the final year students and lecturers in the Faculty of Computing at the UMP is able to make project management becomes more systematic, convenient and efficient. Thus, the supervisor and coordinator also do not need to utilize many platforms or applications in order to easier manage the operation of the final-year project.

1.3 Objective

The Project Management system has three objectives that need to be achieved which are:

- i. To study the functionality and design elements in the existing Project Management system.
- ii. To develop a suitable functional Project Management system for the final-year students and the lecturer.
- iii. To evaluate the effectiveness and functionality of the Project Management system.

1.4 Scope

❖ User

- i. Supervisees that involve final year students in the Faculty of Computing at the UMP.
- ii. Supervisor that involves the lecturers in the Faculty of Computing at the UMP.

❖ Admin

- i. Coordinators of PTA and PSM in the Faculty of Computing at the UMP.

❖ System

- i. The system that can be utilised by the final year students and lecturers in the Faculty of Computing at the UMP only.
- ii. The system that covered the process of supervisor approach and application, supervisor approval, the communication between supervisor and supervisee, the overall progression of the supervisee's project task, and the evaluation of the supervisees' project.

❖ Development

- i. The system that contains the real-time visualization of information.
- ii. The system will be developed using programming languages such as HTML, CSS, PHP and JavaScript.
- iii. The database of the system will be developed using MySQL.

1.5 Thesis Organization

This thesis consists of three chapters. Each chapter has a different discussion. Chapter one discusses the introduction or background of the Project Management system. Besides, in chapter one also discuss the issues or problem statement that needed to be solved using the Project Management system, the objective and scope of the Project Management system.

Chapter two was about the literature review. The literature review discusses the existing project management system. For example, the process of existing project management system work. In addition, the literature review also includes a comparison of the existing project management systems in order to improve the functionality and design of the Project Management system that will be developed. At the end of chapter two will discuss the impact or significant gain from the analysis between the developed Project Management system and the existing project management system including the summary of chapter two.

Lastly, chapter three will discuss the methodology. This chapter will discuss the selected SDLC of the Project Management system in more detail for each phase. Chapter three also will include the project requirement which contains the project-based requirement and user requirement. Moreover, chapter three will consist the propose design and data design. The proposed design was including the flowchart, context diagram, use case diagram and explanation. Meanwhile, the data design contains the ERD design and database dictionary. At the end of chapter three will include the testing or validation plan, the significance of the Project Management system development, and the Gantt Chart.