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Projek ini merupakan salah satu keperluan untuk

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ABSTRACT

Nowadays, task monitoring progress for team have become a medium for organizations to manage their workloads in team and organize the team as well as works systematically. The methods or approach to monitor task progress used by individuals are different and various. However, for some who may not know about this task monitoring system, they are still using the traditional ways such as text messaging their friends and asking around about the members progress and the leader might not know what is the progress of each members only in verbally without rigid proof. Therefore, TaPro (Task Progress); A System to Monitor Progress of Students' Task System, allows students to monitor their members progress as well as to avoid "free-rider" in the group. Apart from that, the aim of this project is to develop a web-based system where students can monitor their members task progress as well as organize the team systematically and distribute the workloads equally. According to the literature review, there are three existing applications that are similar to the concept of this proposed system. The methodology used to develop this proposed system is Waterfall model. A questionnaire had been created in Google Forms and shared through media social for UNIMAS students from different faculty to answer to get the requirements to develop and design the proposed system. The proposed system is developed based on the collected requirements and design. The testing such as unit testing, functionality testing and user testing are carried out. Based on the user testing, the proposed system is working well. Last but not least, the conclusion and the future work are discussed to improve this system.

ABSTRAK

Pada masa kini, sistem pemantauan perkembangan tugasan untuk kerja berkumpulan telah menjadi perantaraan untuk sesebuah organisasi menguruskan pembahagian kerja dalam kumpulan dan menyusun kumpulan serta kerja secara sistematik. Cara atau pendekatan untuk memantau perkembangan tugasan yang digunakan seseorang individu ialah berlainan dan pelbagai. Namun begitu, bagi sesetengah orang yang tidak mengetahui tentang sistem pemantauan tugasan ini, mereka masih menggunakan cara tradisional, seperti menggunakan mesej sebaga contoh kepada rakan-rakan dan bertanya tentang perkembangan tugasan ahli kumpulan yang lain, dan ketua kumpulan berkemungkinan tidak mengetahui perkembangan ahli kumpulan berada di tahap apa sekiranya bertanya secara verbal tanpa bukti yang kukuh. Oleh itu, TaPro (TaskProgress); Sistem untuk Memantau Perkembangan Tugasan Pelajar, membolehkan pelajar untuk memantau tugasan ahli kumpulan mereka di samping untuk mengelakkan "free-rider" dalam kumpulan. Selain itu, matlamat projek ini ialah untuk menghasilkan sebuah sistem web yang membolehkan pelajar untuk memantau perkembangan tugasan ahli kumpulan, di samping dapat menguruskan kumpulan secara sistematik dan mengagihkan tugasan secara adil. Berdasarkan tinjauan literature, terdapat tiga sistem yang wujud di pasaran yang mempunyai konsep yang sama dengan sistem yang diusulkan. Metodologi yang digunakan untuk sistem ini ialah "Waterfall Model". Soal selidik telah dihasilkan dengan menggunakan Google Forms dan dikongsikan ke akaun sosial media untuk diisi oleh pelajar UNIMAS daripada fakulti yang berlainan bagi mendapatkan keperluan dan cadangan untuk membangun dan merekabentuk sistem yang diusulkan ini. Sistem yang diusulkan ini direka berdasarkan keperluan dan cadangan yang telah diperoleh. Pengujian, sebagi contoh unit pengujian, ujian fungsi dan ujian pengguna telah dijalankan. Berdasarkan pengujian pengguna, sistem yang diusulkan ini telah berfungsi dengan baik. Akhir sekali, kesimpulan dan kerja masa depan dibincangkan untuk penambahbakan bagi sistem yang dicadangkan.

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CHAPTER 1: INTRODUCTION

1.1 Introduction

As a student, it is normal to have assignments, tasks and projects and normally those will need to be done either in group or individually. Completing the assignments, tasks and projects individually is much easier because you know the flow of your works. Although it seems to be that way, completing those tasks, assignments and projects can lessen the work loads and help student to practice in the real life working environment where require them to work as a team. However, things will be different when student need to encounter his/her team members attitude where some of them do not contribute anything in the tasks, assignment or project.

Therefore, a student monitoring task progress is created to track students work progress as a team. This system can help student to keep track of each other progress in completing a task as a team by showing how much their work progress shown in a progress bar. Everyone in the team can see each other progress. They also can upload their work progress as evidence.

This system will allow members on a team to search for a specific task. When everyone can see what task has been assigned to them, this can reduce redundancy of works which also can save a lot of time as well as result in producing a quality works. Moreover, this system will enhance the teamwork between members. Basically, this system allow add, delete, edit and search function.

1.2 Problem Statement/ Research Problem

Often we heard students complain about their team members did not contribute anything in the group assignment or project. One of the ways to monitor the progress of each team members is to do it manually such as listing down the tasks and distribute the works between members or either through Whatsapp. In a team, there will be a different task assigned to each member in that team when there is assignment or project. Some of the members might not contribute in the task given.

Even through Whatsapp, the team members will still unable to keep track of team members' work progresses especially those who does not contribute anything in the task. Furthermore, without keeping track of progress of the task in group, it will create work redundancy. For example, one of the members does not know on how to complete or understand his/her task, they prone to take others task and this will be time consuming. Besides, without monitoring the progress of their assignment or project, it is hard for them to work systematically. This is to make sure team members become more productive, produce more quality works as well as reduced stress due to the pressure of doing last-minute work (Why Organizing the workplace is important, 2019). Hence, it is a need of the team members to monitor each other progresses.

1.3 Project Scope

This system is for students that work in team for assignment and project to monitor individually work progress in a team. This system is limited for students to monitor progress of their assignment and project as a team.

1.4 Objectives

The objectives of this project:

    a) To develop a system that allow team leader to monitor team's work progress.

    b) To generate a system that can reduce work redundancy.

    c) To automate a system that can keep track of team members' work progresses.

1.5 Brief Methodology
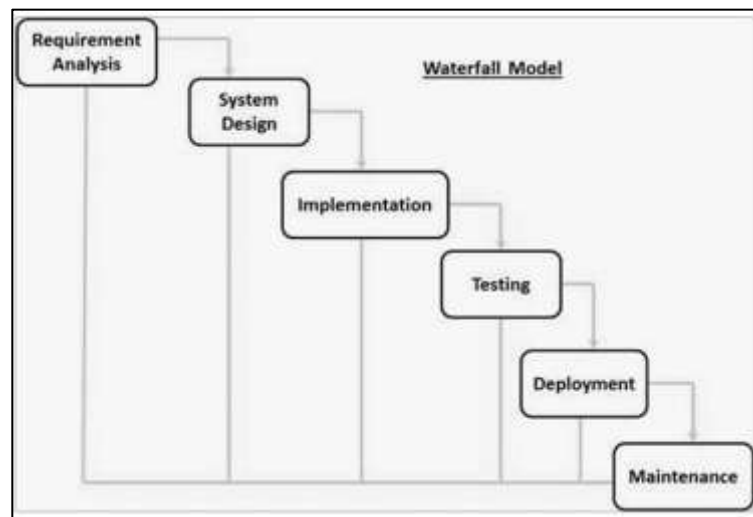
Figure 1.1 Waterfall Model (SDLC - Waterfall Model, 2019)

This system is using Waterfall Model also referred to as a linear-sequential life cycle model (SDLC - Waterfall Model, 2019). In a waterfall model, each phase must be completed before the next phase can begin and there is no overlapping in the phases where the result of one phase acts as the input for the next phase sequentially (What Is SDLC Waterfall Model, 2019). Waterfall Model is being chosen because the requirements are very well documented, clear and fixed as well as no ambiguous requirements. Moreover, Waterfall Model is simple and easy to understand. Besides, it is easy to manage due to rigidity of the model where each phase has

specific deliverables and a review process. Furthermore, the completion of each phases are one at a time making it easy to understand. Other than that, Waterfall Model works well for smaller project where the requirements are easy to understand and to arrange task. The process and results of the system will be well presented using this Waterfall Model might add-on to advantages.

The sequential phases in Waterfall model are :

1.5.1 Requirement Gathering and analysis

All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification document. This will help to plan or identify what to do for the next phase. For example, what to have inside the system, how the system will work, who is the target user and any related field that will help in gathering and analysis. This can be obtain through survey, questionnaire as well as interviewing the targeted user or respondent.

1.5.2 System Design

The requirement specifications of the system from first phase are studied in this phase and the system design is prepared. This system design helps in specifying hardware and system requirements and helps in defining the overall system architecture.

1.5.3 Implementation

With inputs from the system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality, which is referred to as Unit Testing.

1.5.4 Integration and Testing

All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures. This will help to identify the lacks of the system to improve the system or remove any error.

1.5.6 Deployment of system

Once the functional and non-functional testing is done; the product from the system is deployed in the customer environment or released into the market to get their reviews on the system.

1.5.7 Maintenance

Maintenance is when there are some issues which come up in the client environment. To fix those issues, patches are released. Also to enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment.

1.6 Significance of Project

With the existence of this web-based system, team leader can monitor team's work progress. Moreover, this system helps to reduce redundancy. In addition, this project can help to keep track of team members' work progress.

1.7 Project Schedule

A timeline have been created as a guideline in order to complete this project on time according to the schedule. This is to ensure that there is enough time to complete this project and able to keep track on what to do next. A Gantt Chart is created to record the schedule (Please refer to Appendix A).

1.8 Project Outline

There are six (6) chapters in this project that is described as below:

- Chapter 1 is the Introduction. In this chapter, it will give a brief idea on what is the system is about, why it is being carried out, the objectives or purpose of the system as well as what will be done to achieve the objectives of the project.

- Chapter 2 is Literature Review. This chapter will concern about the background of the project which include the studies and review of journals, conferences, articles, website or any medium that are related to this project. All of this studies will help to identify the content requirement and the web-based system concept for the proposed solution.

- Chapter 3 is Requirement Analysis and Design. This chapter will mention about the courseware for the proposed solution. The requirement obtained will be analysed, documented, make decision and prepared for the design of the project. The design framework afterwards will provide rough idea about the project.

- Chapter 4 is Implementation. In this chapter, the design framework of the proposed solution will be carried out and implemented into the system to give an overall idea of the proposed solution. What is done during analysis will be applied in this chapter.

- Chapter 5 is Testing and Evaluation. This chapter is when the testing and evaluation is done on the target or potential user of the system which in other case is to determine whether the system meets the requirement specification.

- Chapter 6 is Conclusion. For this chapter, it indicates that the project is completed and brief explanation on what improvement can be done in the future for the system.

1.9 Expected Outcome

A web-based system that can monitor students' work progresses which can display the percentage of the complete task is expected as a result.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter, Chapter 2, which is literature review done on the similar existing system of monitoring progress of students' task. In this chapter, we will get to make comparisons on a few types of existing system that similar to the monitoring progress students' task system as well as to guide or as a references for this proposed system later.

For this chapter, we will go further on the detail review on similar existing application as well as comparison between the existing system to analyze the strength and weaknesses each one of the system to compare it with the proposed system. This help to improve the performance of the proposed system in the future. In another meaning, this review is to examine the important specification that a student's task monitoring progress system should have.

2.2 Current Scenario Analysis

Student task monitoring progress system is not something that is unusual among students and exist for quite sometimes. This system helps student in many ways such as organized students' task systematically and efficiently especially when it involves team work. However, the used of task monitoring progress system is not widely used among students as they prefer to do it manually which is whether by dividing task through Whatsapp or write it on a piece of paper to record their task and project.

The proposed system is targeting students especially university students as they need to do assignment or project mostly in team. Whether you need to assign, prioritize, manage, or complete tasks, a task management system can help by automating and streamlining tasks so you and your team can be more productive where your team can create an efficient task management