

Chapter 1

Introduction

1.1 Background

Final Project is one of the graduation requirement for student which is completed in the end of studying period. In the process, student needs to submit a proposal of final project which approved by the advisor. After the proposal approved, then student can start completing their final project. Supervising process for the finishing of student's final project by advisor, committee, and coordinator is still done manually by reading direct report from the students. With the Final Project Tracking System existence—advisor, committee, and coordinator are able to do supervision toward final project development and give a comment that can help student to complete their final project. Deadline will be determined by coordinator so that student can complete their final project in time. Furthermore, coordinator also take parts in supervision of student's development report completion whether it's done or not. In this supervision, coordinator determines the proposal status like rejected, approved, withdrawn, ready to defense, etc.

With Final Project Tracking System existence, controlling during finishing process of student's final project can be performed more efficiently and directed. Final Project Tracking System also take part in helping student during the process of reporting the development to committee, advisor, and coordinator without having to meet them personally, thus finishing process of student's final project can be done faster, directed, and more efficient.

1.2 Objectives

1. To Implement an Information system for monitoring final year projects.
2. To support tracking progress of final year project.

1.3 Scope of Limitation in this Project

The Scope of this Project is :

1. The case study of this project lies in department of computer engineering.
2. The user of this system project coordinator , advisor , committee and student.

Whose permission an particular function are stated in the following :

1. Project Coordinator

- a) View statistics (project statistics by category and status) and news.
- b) Create the news.
- c) Create user accounts.
- d) Register student projects.
- e) Upload document proposal
- f) Setting committee for student's proposal examination
- g) To arrange the schedule of student's proposal presentation
- h) To give the result of student's proposal: approved and rejected.
- i) To give the status of student's final project
- j) To arrange schedule of final project
- k) To give the result on final project

2. Lecturer

1) Adviser

- a) To view statistics (project statistics by category and status) and news.
- b) To view the list of project.
- c) To view proposal's schedule information
- d) To give the status of student's final project and give comment about report.
- e) To view final project's schedule information

2) Committee

- a) To view the list of students who are going to examined
- b) To view proposal's and schedule information
- c) To give comment on student's report
- d) To view the mark of final project's schedule information

3. Students

- a) To view statistics (project statistics by category and status) and news.
- b) To see the schedule of proposal examination.
- c) To see the result of proposal to continue to final project or repeating project with another title.
- d) To submit report wherever we are without going to campus.
- e) To see comment and status of report
- f) To submit report in form of softcopy in order to save the cost.
- g) To see the result of final project

1.4 Research Methodology

The development of Final Project monitoring system application will use the linear sequential method (waterfall). Waterfall method is a developing method for the software which is a systematic and sequential method and it goes until the system progress of analysis, design, code, test and maintenance. Below is the step of waterfall model:

1) Requirement (needs analysis)

This is a step to analyze the needs of the system. The collection of data is obtained from the Thesis coordinator. Students can get the supporting theory obtained from journals, Final Project books, the internet and so on. Data that has been obtained will be analyzed further.

2) System Design

The design of the system design aims to create a model solution to the problem that has been planned completely at the stage of the analysis needs. The design method that will be used is the design that should be done, namely: DFD Design, ERD design, interface design and design flowchart.

3) Implementation

In this stage it is done the translation of data or problem solving that have been designed into the programming language. The programming language used in the monitoring system Final Project practice is PHP and by using MySQL database.

4) integration and testing

The process of testing the system is to apply the black-box testing with a technique known as functional testing and error handling testing, by using the control structure of the program design procedurally as a guide to get the correct program.

5) Operation and Maintenance

This is the latest stage of the waterfall model. The system that has been finished is then run and gotten in maintenance. The maintenance includes the correction of errors that is not found in the previous step.

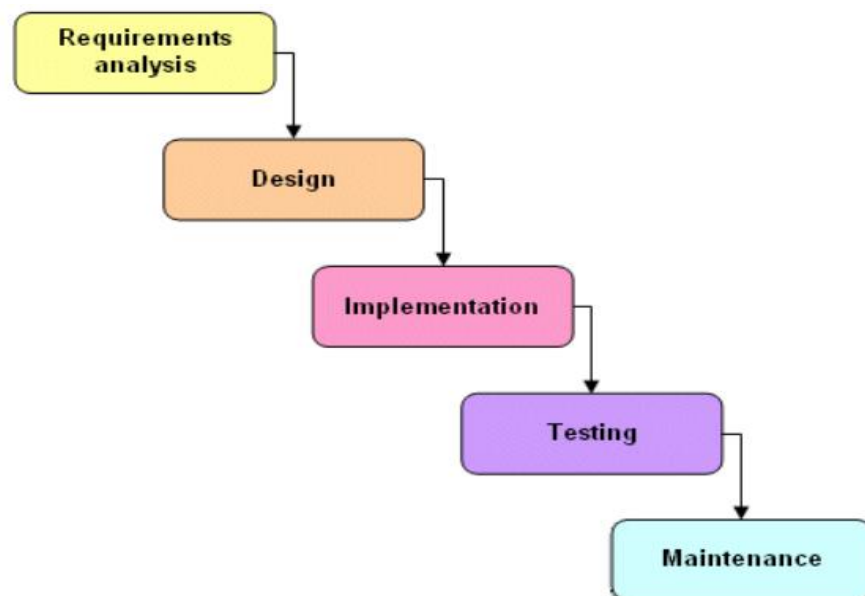


Figure 1.1 Model Waterfall (Royce, 1970)

1.5 Expected Result

The program could be easy to use and operate it is also expected that this program would be highly useful for the university to support the process of student' final project which and supervised by their adviser.

1.6 Systematic of Writing

Systematic of writing can give general information about the restriction contained in each chapter so that the discussion will be easier and focused, systematic of writing a follows:

Chapter 1: INTRODUCTION

Discussing about the background of the problem, problem formulation, problem definition, research objectives, research methodology and system of writing

Chapter 2: LITERATURE REVIEW AND THEORIES

This chapter discusses some of the supporting theories relating to the subject matter and the underlying manufacturing of this final project and why using genetic algorithm for this problem, And this chapter will explain some of the theories associated whit the manufacture of a final project that became the foundation theory in the discussion later.

Chapter 3: DESIGN AND IMPLEMENTATION

Describes the methods and steps of work done in the design of an information system for final year project. And this chapter explains about to implement each of procedure that has been designed in the previous chapter in the form of a programming language to create applications.

Chapter 4: EXPERIMENTAL RESULTS AND EVALUATION

This chapter discusses the testing of applications made by looking at the output generated by the application, and evaluation to know the ability of the application.

Chapter 5: CONCLUSION AND SUGGESTION

Contains a summary of the test results obtained, and suggestions for further system development and perfected in future.