

FTMK INTERNSHIP PLACEMENT SYSTEM



UNIVERSITI TEKNIKAL MALAYSIA MELAKA

FTMK INTERNSHIP PLACEMENT SYSTEM

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This report is submitted in partial fulfillment of the requirements for the Bachelor of
[Computer Science (Software Development)] with Honours.

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

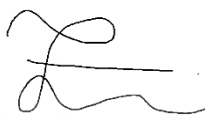
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DECLARATION

I hereby declare that this project report entitled

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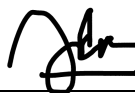


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I hereby declare that I have read this project report and found
this project report is sufficient in term of the scope and quality for the award of
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SUPERVISOR: _____

Date: 10/09/2021

(MRS. ZARITA MOHD KOSNIN)

DEDICATION

This study is wholeheartedly dedicated to our beloved parents, who have been our source of inspiration and gave us strength when we thought of giving up, who continually provide their moral, spiritual, emotional, and financial support. To our brothers, relatives, mentor, friends, and classmates who shared their words of advice and encouragement to finish this project. And lastly, we dedicated this project to the Almighty God, thank you for the guidance, strength, power of mind, protection, skills, and for giving us a healthy life. All of these, we offer to you.



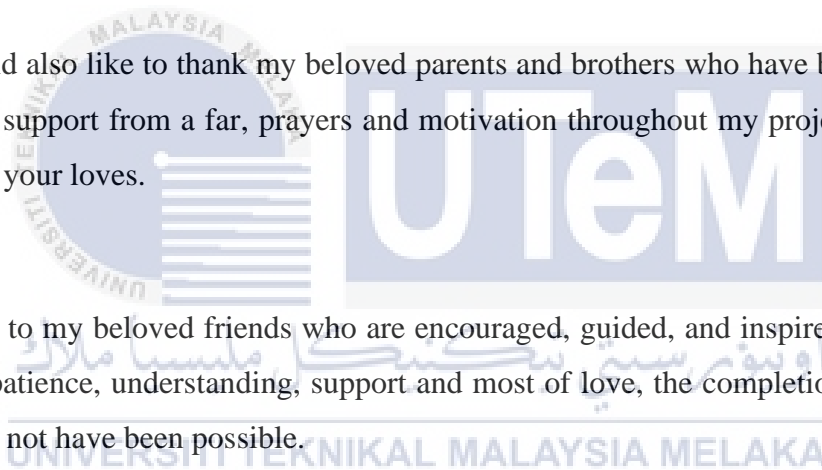
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ABSTRACT

FTMK Internship Placement System (FIPS) is a system to help manage students for industrial training. The industrial training period is essential for UTeM student and staff, thus the FIPS will be able to help facilitate UTeM staff during the students industrial training period. The problem statement for this project is the student face difficulty to find the organization for industrial training that aligns with their study programme. The faculty coordinator and supervisor also have difficulty to monitor and track all the student internship application status and industrial training progress. The internship students having trouble for determining the organizational criteria required to undergo industrial training. To overcome these problems, the FIPS will be developed. The objective for this project is to develop web-based system as a platform for students to search and apply industrial training by referring to the requirements given by the organization and to allow internship committee to monitor and track student's internship application status and industrial training progress. Next is to design a solution that facilitate students, internship committee and organizations related to industrial training. Finally, to test the system for efficiency and user satisfaction in terms of usability by the students, internship committee and organizations. The FIPS consist of 5 users which are the system administrator, coordinator, supervisor, student, and organization. This project is using System Development Life Cycle (SDLC). The phases of the methodology are Requirements and Analysis, System and Software Design, Development and Implementation, and System Testing. FIPS will be developed using Yii2 Framework (PHP Framework), and MySQL for the Relational Database Management System (RDBMS). The testing is done using unit testing and user acceptance testing from organization and student.

ABSTRAK

FTMK Internship Placement System (FIPS) adalah sistem untuk membantu menguruskan pelajar untuk latihan industri. Tempoh latihan industri sangat penting bagi pelajar dan staf UTeM, oleh itu FIPS akan dapat membantu memudahkan kakitangan UTeM semasa tempoh latihan industri pelajar. Penyataan masalah untuk projek ini adalah pelajar menghadapi kesukaran untuk mencari organisasi latihan industri yang sesuai dengan program pengajian mereka. Penyelaras dan penyelia fakulti juga menghadapi kesukaran untuk memantau dan mengesan semua status permohonan magang pelajar dan kemajuan latihan industri. Pelajar magang menghadapi masalah untuk menentukan kriteria organisasi yang diperlukan untuk menjalani latihan industri. Untuk mengatasi masalah ini, FIPS akan dibangunkan. Objektif untuk projek ini adalah untuk mengembangkan sistem berasaskan web sebagai platform bagi pelajar untuk mencari dan menerapkan latihan industri dengan merujuk kepada keperluan yang diberikan oleh organisasi dan untuk membolehkan jawatankuasa magang memantau dan mengesan status permohonan magang pelajar dan kemajuan latihan industri. Seterusnya adalah merancang penyelesaian yang memudahkan pelajar, jawatankuasa magang dan organisasi yang berkaitan dengan latihan industri. Akhirnya, untuk menguji sistem untuk kecekapan dan kepuasan pengguna dari segi kebolegunaan oleh pelajar, jawatankuasa magang dan organisasi. FIPS terdiri daripada 5 pengguna iaitu pentadbir sistem, penyelaras, penyelia, pelajar, dan organisasi. Projek ini menggunakan System Development Life Cycle (SDLC). Fasa-fasa metodologi tersebut adalah Keperluan dan Analisis, Reka Bentuk dan Pembangunan Sistem dan Perisian, dan Pengujian Sistem. FIPS akan dibangunkan menggunakan Yii2 Framework (PHP Framework), dan MySQL untuk Relational Database Management System (RDBMS). Pengujian dilakukan menggunakan ujian unit dan ujian penerimaan pengguna dari organisasi dan pelajar.

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LIST OF ABBREVIATIONS

FTMK	-	Fakulti Teknologi Maklumat dan Komunikasi
FIPS	-	FTMK Internship Placement System
UTeM	-	Universiti Teknikal Malaysia Melaka
HTTP	-	Hypertext Transfer Protocol
HTML	-	Hypertext Markup Language
DBMS	-	Database Management System
RDBMS	-	Relation Database Management System
PHP	-	PHP: Hypertext Preprocessor
JS	-	JavaScript
AJAX	-	Asynchronous JavaScript and XML
XML	-	Extensible Markup Language
DOM	-	Document Object Model
MiCoST	-	Melaka International College of Science and Technology
IS	-	Information System
UTM	-	Universiti Teknologi Malaysia
ITS	-	Industrial Training System
UiTM	-	Universiti Teknologi MARA

STIS	-	Student Internship Training Information System
MARA	-	Majlis Amanah Rakyat
STIS	-	Student Internship Training Information System
SDLC	-	System Development Life Cycle
ERD	-	Entity Relationship Diagram
DDL	-	Data Definition Language
AMTIS	-	Advance Management Technology in Intelligence System
UAT	-	User Acceptance Testing



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CHAPTER 1: INTRODUCTION

This chapter introduces the overview of project background and rationale on the project entitled FTMK Internship Placement System. In this chapter, the project background and the problem statement are discussed further on the next section which are introduction, problem statement, objective, scope, project significance, expected output, and conclusion.

1.1 Introduction

An internship or industrial training is a period of work experience offered by an organization for a limited period. The internship program provides student an opportunity to expose themselves to the real work environment and link theory with practice and further gaining relevant skills and experience in particular field. Internship program is an essential process in all universities. Before the student graduate, they need to undergo the internship program. However, management of internship placement can be differing for each university.

FTMK Internship Placement System (FIPS) is a system to help manage students for industrial training. The industrial training period is essential for UTeM student and staff, thus the FIPS will be able to help facilitate UTeM staff during the students industrial training period.

By using this system, the student can get an internship placement in a short time. The registered companies will provide an internship plans for the students to choose from. This system facilitates the process of students eligible for industrial training to find a place to undergo such industrial training. This system can be used as a platform for industrial training supervisor to keep track and monitor the student internship application status.

1.2 Problem Statement

While the study on FTMK Internship Placement System implementation, only slightly specific attention considered to measure the successful or failure. The list of problem that have been discovered are:

- Student face difficulty to find the organization for industrial training that aligns with their study programme.
- Faculty coordinator and supervisor have difficulty to monitor and track all the student internship application status and industrial training progress.
- Internship students having trouble for determining the organizational criteria required to undergo industrial training.

1.3 Objective

This section explains the objective of developing the project that should be achievable at the end of this project:

- To develop web-based system as a platform for students to search and apply industrial training by referring to the requirements given by the organization and to allow internship committee to monitor and track student's internship application status and industrial training progress.
- To design a solution that facilitate students, internship committee and organizations related to industrial training.
- To test the system for efficiency and user satisfaction in terms of usability by the students, internship committee and organizations.



1.4 Scope

The FTMK Internship Placement System is focus for use in Universiti Teknikal Malaysia Melaka (UTeM).

Modules:

- i. User Authentication Module
 - Authenticate user, and authorize user based on access control.
- ii. Management Module
 - Manage user, department, programme, state, language, and session.
- iii. Announcement Module
 - Post announcement.
- iv. Resume Module
 - Generate resume from the system.
- v. Internship Application Module
 - Manage internship application, apply internship, compare organization, generate offer letter, and feedback form.
- vi. Organization Profile Module
 - Generate organization profile from the system.
- vii. Internship Recruitment Module
 - Advertise organization's requirements and review student for industrial training.
- viii. Supervision Module
 - Manage and assign supervisor with student.
 - View assigned students.
- ix. Report Module
 - Provide dynamic statistic report.