

**MINGGU HALUAN SISWA APPLICATION**



**UNIVERSITI TEKNIKAL MALAYSIA MELAKA**

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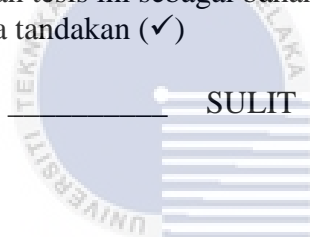
JUDUL: Minggu Haluan Siswa Application

SESI PENGAJIAN: 2020 / 2021

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MINGGU HALUAN SISWA APPLICATION

SITI NUR HANNA BINTI ZAKARIA



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

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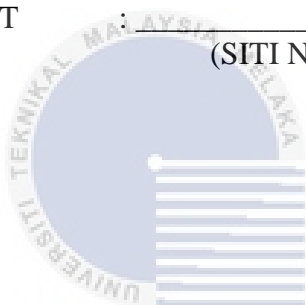
FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY  
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2021

## DECLARATION

I hereby declare that this project report entitled  
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is written by me and is my own effort and that no part has been plagiarized  
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I hereby declare that I have read this project report and found  
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this project report is sufficient in term of the scope and quality for the award of  
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SUPERVISOR : \_\_\_\_\_ Date : 3/9/2021  
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## DEDICATION

My dissertation is dedicated to my family and many friends. I am especially grateful to my loving parent, Zakaria Bin Hussin and Norhasimah Binti Rostam, whose words of encouragement to perseverance ringing in my ears. Furthermore, I would like to thanks to my previous lecturer that taught me in the previous semester. The knowledge that I learn from them are very valuable and can be implemented during the process of completing this project. Lastly, thanks to my lovely classmate and course mate that continually encourage me to complete this project.



## ACKNOWLEDGEMENTS

*“In the name of Allah, most Gracious, most Compassionate”*

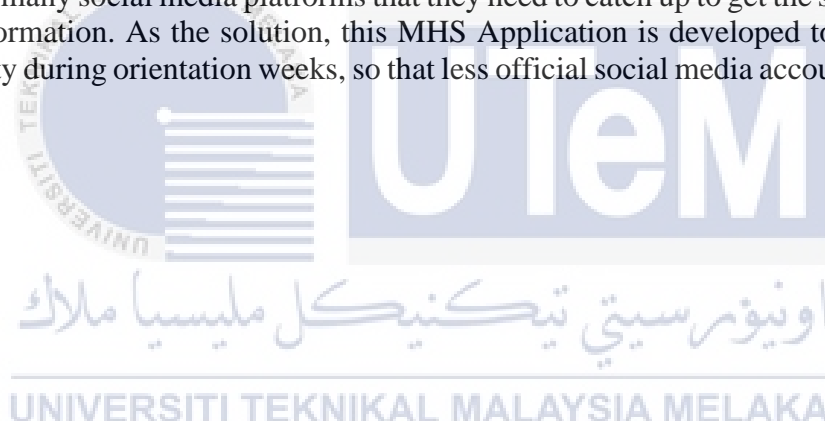
The outcome of this PSM is a great deal of guidance and assistance from many people, First of foremost, I would like to express my heartfelt appreciation to Associate Professor Ts. Dr. Mohd Sanusi Bin Azmi for his guidance and invaluable assistance throughout the project completion.

Furthermore, I would like to express my heartfelt appreciation for encouragement and inspiration received from our faculty members and colleagues. I am extremely grateful to have been placed in the Faculty of Information Technology where I can gain all of the expertise and skills in software development. The knowledge gained will be extremely useful and beneficial during the course of this project's development.

Last but not least, I would like to thank to my family members and dearest classmate for their support, motivation and understanding throughout the project duration.

## ABSTRACT

Minggu Haluan Siswa(MHS) application is a software application to be developed and integrated to manage most activity during the university orientation week(Minggu Haluan Siswa). During pandemic covid-19, the physical orientation week cannot be held, so as alternative way, university use online platform as the official platform to hold the orientation week for new intake student. Sudden change of platform event will give huge trouble and problem to adapt the event environment. So, this MHS Application will be developed to ease the process of orientation week. Based on the previous orientation week, I observed the flow of orientation week (as I am one of the facilitators during the orientation week) and I found several problems that faced during the orientation week. The main problem that faced by the student is that the student needs to follow and catch up the latest information and news on many social platforms such as Facebook, Instagram, WhatsApp. Students tend to lose information as there are so many social media platforms that they need to catch up to get the sudden changes in information. As the solution, this MHS Application is developed to manage most activity during orientation weeks, so that less official social media account to be caught up.



## ABSTRAK

Aplikasi Minggu Haluan Siswa (MHS) adalah aplikasi perisian yang akan dibangunkan untuk menguruskan aktiviti pada minggu orientasi universiti (Minggu Haluan Siswa). Semasa pandemik Covid-19, minggu orientasi tidak dapat dilaksanakan secara fizikal. Sebagai kaedah alternatif, pihak universiti menggunakan platform dalam talian sebagai platform rasmi untuk mengadakan minggu orientasi untuk pelajar pengambilan baru. Perubahan platform acara secara tiba-tiba akan memberikan masalah. Jadi, Aplikasi MHS ini akan dibangunkan untuk memudahkan proses minggu orientasi. Berdasarkan minggu orientasi sebelumnya, saya memerhatikan aliran minggu orientasi (kerana saya adalah salah seorang fasilitator semasa minggu orientasi) dan saya menemui beberapa masalah yang dihadapi semasa minggu orientasi. Masalah utama yang dihadapi oleh pelajar adalah pelajar perlu mengikuti dan mengikuti maklumat dan berita terkini di banyak platform sosial seperti Facebook, Instagram, WhatsApp. Pelajar cenderung kehilangan maklumat kerana terdapat begitu banyak platform media sosial yang mereka perlukan untuk mendapatkan maklumat yang berubah secara tiba-tiba. Sebagai penyelesaiannya, Aplikasi MHS ini dikembangkan untuk menguruskan aktiviti selama minggu orientasi, dan akan memudahkan banyak pihak.

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**LIST OF ABBREVIATIONS**

MHS: Minggu Haluan Siswa

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## CHAPTER 1: INTRODUCTION

### 1.1 Introduction

Minggu Haluan Siswa is a program that conducted by university, being helped by the certain organization, club that will assist new student to adapt to an unfamiliar environment of university. In every new session, there will be new student intake for every university. While adapting the new norm cause by Covid-19, the physical Minggu Haluan Siswa cannot be proceed. Therefore, Minggu Haluan Siswa Application is the alternative way for students joining the orientation activity that conducted by the university. Lots of programs are conducted during Minggu Haluan Siswa to introduce to the new intake student with the rules, or anything related to the policy of the university and with their course. The main purpose to develop this application is to integrate and combine all activity of Minggu Haluan Siswa to one platform. Easy to access and user friendly interface are the important factor to develop this application.

### 1.2 Problem Statement

- The new student find it is hard to find the assigned facilitator to help them in the registration process.
- The student find it is hard to take attendance in online program and tend to miss the timing to turn in attendance.
- The latest or change information are not published in one platform. The new student need to check various online platforms such as university official Facebook, Instagram account and WhatsApp, Telegram messenger to get the newest information.

### 1.3 Objective

- To assist new student find their facilitator that will help them prepare for university admission.
- To allow new student take their attendance easily to every session in Minggu Haluan Siswa.
- To create an application that allows student to get new announcement and the latest information effortlessly.

### 1.4 Scope

#### 1.4.1 Module to be developed

- Authentication Module

Users need to login by using email and password before entering the application.

- Attendance Module

The student needs to take attendance in every session of program in Minggu Haluan Siswa.

- Chat Module

Chat platform between a student and facilitator that will assist and help new students.

- News Module

Student and facilitator can get the newest and changes announcement related to Minggu Haluan Siswa

- Notification Module

The app will notify the user

#### 1.4.1.1 Target User

- New intake student
- Facilitator
- Admin

### 1.5 Project Significance

This application will simplify most of activity of Minggu Haluan Siswa. The new intake student will facilitate in the process of registering for university and will be facilitated during Minggu Haluan Siswa. This app also eases the process of turn in new student attendance thus will save significant time than using the manual form/google form of attendance. By using this system, the new intake student and facilitator will not miss the latest information and announcement

### 1.6 Expected Output

The end product of this system is a mobile application. The Minggu Haluan Siswa Application will provide a platform that allows new students chat with their facilitator, turn in attendance by using QR code and get the announcement regarding Minggu Haluan Siswa.

### 1.7 Conclusion

In conclusion, this application is to be developed to help university to manage the orientation week smoothly without any frustrated user that follow the event. This app will help the new intake student to join the activity that being schedule by university beside they can reach help from the facilitator to guide them during orientation weeks.

## CHAPTER 2: LITERATURE REVIEW AND PROJECT METHODOLOGY

### 2.1 Introduction

Student orientation programs are designed to initiate the integration of newly admitted first-year and transfer undergraduate students into academic, cultural, and social climate of the University (Austin, 2020). Orientation is a chance for students to learn how things work at their new university and meet the other students, faculty, and staff members. A good orientation program gets students excited about starting college and helps them adjust to campus life.

Students should be made aware of opportunities to socially integrate into the college culture during the orientation. Students are less likely to stay at an institution if they do not become socially integrated within the first few weeks of their arrival (LEE, n.d.). Games, special performances, icebreakers, refreshing activity are the examples of social activities. They also can learn about the various student organizations that provided in that university such as Majlis Perwakilan Pelajar (MPP), Ashabul Maqari' (AMQAR), Badan Dakwah Dan Rohani (BADAR), Kelab Fasilitator Sahabat Siswa (FASASI).

Orientation program, on the other hand, should than fun and games. While the social aspect of one's college experience is important, the importance of academics should not be overlooked. As a result, usually student required to register for classes during orientation. Because new students require some direction and guidance when enrolling in classes, faculty members should be able to provide academic advising during orientation. Students will be better prepared to meet the challenges of collegiate academics if they are given a thorough overview of academic expectations.

While it is impossible to tell new students everything for the duration of the collegiate experience, orientation programs should provide a framework in which students will know where to go if they have additional questions.

## **2.2 Facts and finding**

### **2.2.1 Domain**

In the realm of software engineering, domain is commonly used to refer the subjected area on which the application is intended to apply. To put in other ways, domain is the “sphere of knowledge and activity around which the application logic revolves” (Powell-Morse, 2014). In this programming project, the goal of creation is for university. The functionality of this software is built based on the set of requirements that solved the current problems in the orientation week that organized by university.

### **2.2.2 Existing System**

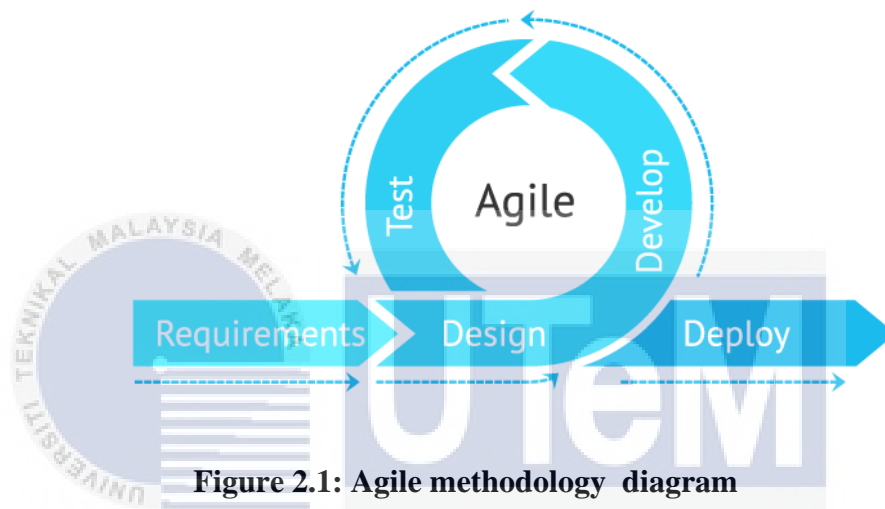
Mostly in university, they do not have any specific computerized system build to handle orientation day/weeks. The university mostly uses a manual system to prepare the orientation day/weeks. The manual ways of handling newly-intake student orientation day/weeks, usually effective and the program can be handled smoothly and efficiently, but since pandemic Covid-19 outbreaks, the physical orientation program cannot be held. The university takes initiative to hold the orientation weeks fully online and use many platforms such as FB live, YouTube Live, Instagram lives.

As the example, University Tunku Abdul Rahman (UTAR) has built a website to manage the orientation week for the new-intake student. For student use the system, they need to register for UTAR email ID. The student can obtain the announcement from the university, the information of UTAR organizations, and the link for the event live streaming.

### 2.2.3 Technique

This project will employ observation as the technique, which will entail a thorough detail study of the data. In this study, all the problem and solution for this project are the results of observing the orientation week that being held in University Teknikal Malaysia Melaka (UTeM) that use online platform as the official platform for orientation week.

## 2.3 Project Methodology



**Figure 2.1: Agile methodology diagram**

MHS application uses agile methodologies as the project management. The primary advantage of iterative work is that less work is wasted. For example, when something about the project changes, the amount of rework that must be done is reduce. In other side, the developer does not have to go too far down one path to discover and turn around to start over. Besides, Agile project management virtually eliminates the possibility of total project failure.

In requirement phase, all the requirements needed for this MHS application are figured out and analyzed particularly with the help of visualization analysis such as a use case diagram to determine which requirement are achievable.

In the design phase, all the critical software design is figured out for example database design, user interface design to find out how reliable, and easy-to-use the product will be.