#### UNIVERSITI TEKNOLOGI MARA

## QUARANTINE TRACKER FOR HIGH-RISK COVID-19 INDIVIDUAL USING MOBILE APPS

#### NURSHUHADA BINTI CHE RAMLY

# BACHELOR DEGREE OF COMPUTER SCIENCE (Hons) DATA COMMUNICATION AND NETWORKING

**JULY 2021** 

#### **ACKNOWLEDGEMENT**

First of all, I am really grateful and thankful to God because I can further my studies in degree.

I would like to thank my project supervisor, Encik Muhammad Azizi Mohd Ariffin for sparing his time to assist me in this project and helping me to finish this project proposal. I have got inspiration from his reviews to do my project.

I would also like to thank my lecturers and my friends. They have help me understand things that I am weak on. My greatest thanks for my parents that supporting me through the degree life.

Not forget my thankful for Universiti Teknologi Mara (UiTM) because giving me opportunities to further my studies here and provide good facilities and environment to finish this project proposal.

Last but least, I wanted to thank my families and friends, especially my parent who support me in financial and moral support.

#### **ABSTRACT**

Covid-19 has been spread all over the world. This is a virus from China that spread rapidly especially for old people that have diseases such as diabetes and high blood pressure. People needs to quarantine themselves if they got any symptoms of Covid-19. Some of the people did not follow the rules of self-quarantine makes the pandemic of Covid-19. One of the ways to prevent the spreading is keeping the track of the quarantine patients. Quarantine Tracker for High-Risk Covid-19 Individual Using Mobile Applications is a system that track quarantine patients and monitor them so that they did not going out far from their home. This work by having the user download this application. After they register their personal information in the system, the application will ask the user to turn on GPS. Then the application will always keep track the patient. A notice will be sent to the health authorities if the patient going over 300meters from their house. This project used Android Studio to create an Android application for user App, and website using php and Bootstrap for admin's website. All the information is saved inside the Firebase Realtime Database. There are some functions that will be added in the future like passive tracking and create list of condition based on user's residence, even so Quarantine Tracker for High-Risk Covid-19 Individual Using Mobile Apps was successfully developed and had met the objectives and requirements.

### TABLE OF CONTENTS

CONTENT PAGE
SUPERVISOR APPROVAL
STUDENT DECLARATIONii
ACKNOWLEDGMENTiii
ABSTRACTiv
TABLE OF CONTENTSv-viii
LIST OF FIGURESix-xi
LIST OF TABLESxii
CHAPTER ONE: INTRODUCTION
1.1 Introduction1-2
1.2 Problem Statement2
1.3 Objectives2
1.4 Scope and Limitations
1.5 Significance of the Project
1.6 Summary
CHAPTER TWO: LITERATURE REVIEW
2.1 Mobile Application

#### **CHAPTER 1**

#### INTRODUCTION

#### 1.1 Introduction

The first case of COVID-19 in Malaysia was identified on 25 January 2020 by Chinese nationals who had previously had close contact with an infected person in Singapore. The number of confirmed cases of COVID-19 increased relatively slowly in March 2020, until a religious incident took place in Sri Petaling, Kuala Lumpur, leading to an exponential spike in cases. On 16 March 2020, as the number of positive cases increased beyond 553 cases, Malaysia's Prime Minister declared a Movement Control Order (MCO). The government restricted people from travelling to other states or COVID-19 affected areas. On September 12, health authorities detected a new cluster in Tawau and Lahad Datu. In 10 days, the coronavirus spread from Sabah to all other states in Malaysia (Asita Elengoe, 2020).

In recent updates, there have been an increase on the number of cases, in 10<sup>th</sup> Mac, 129 cases recorded increase to 2766 cases in 31<sup>th</sup> Mac. The number of cases get larger in 31th May, 7819 escalate to 8943 cases in 29<sup>th</sup> July. In 30<sup>th</sup> September, the number is 11 224 cases mount up to 39 357 cases in 7<sup>th</sup> November (worldometer, 2020).

The cases of Covid-19 are raised day by day when certain people did not quarantine themselves from red zones or abroad. They did not obey the SOP declared by the Ministry of Health.