UNIVERSITI TEKNOLOGI MARA

The Development of a Mobile App for Reporting Crimes at Tasek 64 Community.

(Spot Alert)

NURUL RABIAH BINTI NOR EFFENDI

Thesis submitted in fulfilment of the requirement for Bachelor

of Information Technology (Hons.)

Faculty of Computer and Mathematical Sciences

FEBRUARY 2022

ACKNOWLEDGEMENT

All praise and thanks to Allah SWT and His favor for the successful completion of this final year project. I thank Allah for all of the chances, difficulties, and strength that have been bestowed upon me in order to complete the development of my final year project. During this process, I learned a lot about myself, not only academically, but also personally.

From the beginning, I would want to express my gratitude to my supervisor, Dr. Nor Diana Binti Ahmad, and my previous supervisor, Pn. Zatul Amilah Shaffiei for their direction, understanding and patience, as well as for providing positive support and a kind attitude in the execution of this final year assignment. It has been a privilege and an honor to have them as my supervisor.

My heartfelt thanks go to Dr Emma Nuraihan Mior Ibrahim, my final year project lecturer,for her unending support and constructive criticism, which helped shape and enhance myfinal year project report in a variety of ways. Every work and time she devote to all of the students under her supervision from Project Formulation (CSP600 and CSP650) cannot be reimbursed.

Next, I would like to dedicate this project to my examiner, PM Dr Fariza Hanis Abdul Razak for her insightful remarks and ideas on my final-year effort.

I would also love to thank my beloved mother,   and father, Nor Effendi for their encouragement and prayers during my education. It would be impossible to finish this final year assignment without their assistance.

Finally, I would want to give special thanks to all my dear friends for sticking with me through thick and thin as we worked night and day to complete the final year project. I really thank them.

ABSTRACT

Spot Alert is a mobile application for reporting crimes specifically developed for the Tasek 64 community in Bandar Seri Alam, Johor. This project allowing them to report crimes virtually and send the report to *Perbadanan Pengurusan Flat Tasek 64*. The objective of this project is to identify requirements, design and develop a mobile application for reporting crimes for the community of Tasek 64. The scope of this project is to assist the community of Tasek 64 in reporting crimes via mobile app and to manage the administrator mobile app by *Perbadanan Pengurusan Flat Tasek 64*. The methodology adopt for this project is Mobile Application Development Life Cycle (MADLC) and will be developed until testing phase. The features for this project are user sign up, crime photo upload, submit real time report and track progress of submitted report. For the admin's part, the features are a dashboard displaying the information of the reporting details and managing the report. This project is using System Usability Scale (SUS) for user testing. Future development proposed to include location detection and notification to admin when user submit a report.

Keywords: Online reporting, Mobile Application Development Life Cycle (MADLC), Firebase, Android Studio, real-time report, community, crime

TABLE OF CONTENTS

CHAPTER ONE

INTRODUCTION

Chapter Overview

This chapter defines the study context, including the problem statement, aim, objectives, scope, limitations, and significance of the project. The project's background would provide readers with an idea of what the initiative is all about. Furthermore, the problem description relates to the present difficulties that have been identified following the project's requirements. Plus, the project's aim and objectives defined the project's target and outcome. Last but not least, the scope is justified, the limits are recognized, and the project's importance is explained.

1.1 Project Background

As criminal behavior is a prominent concern in contemporary culture and society, most countries are experiencing intolerable levels of crime. The term "crime" refers to a wide range of illegal activities (Anderez et al, 2021). Violent crime has a devastating effect not just on the victims, their families, and friends, but also on the surrounding citizens and their communities. For instance, high crime rates do happen in the neighborhood. During the pandemic in 2020, the Movement Control Order (MCO) was issued by the Malaysian government to restrict the spread of the coronavirus stated (Salim et al., 2020). Nuraina Hanis Abd. Halim, (2020) has reported that, since March 18, 2020, the Royal Malaysian Police (PDRM) has registered a total of 16,452 housebreaking cases throughout the implementation period of the Movement Control Order (MCO). Since fewer homes were left unsupervised, burglars had an easier time finding a target.

Furthermore, according to Putrik et al. (2019), living in dangerous neighborhoods has been found to be connected with poor mental and physical health, as well as poorer levels of well-being among the people on several