# UMP LOST AND FOUND MOBILE APPLICATION

# MUHAMMAD SYAFIQ BIN MUHAMMAD RAZMAN ROBERT

BACHELOR OF COMPUTER SCIENCE (COMPUTER SYSTEMS & NETWORKING)

UNIVERSITI MALAYSIA PAHANG



## **SUPERVISOR'S DECLARATION**

I hereby declare that I have checked this project and in my opinion, this project is adequate in terms of scope and quality for the award of the Bachelor of Computer Science (Computer Systems & Networking)

\_\_\_\_\_

(Supervisor's Signature)

Full Name : Dr. Mohd. Faizal Bin Ab Razak

Position : Senior Lecturer

Date : 27 May 2019



## STUDENT'S DECLARATION

I hereby declare that the work in this thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Malaysia Pahang or any other institutions.

\_\_\_\_\_

(Student's Signature)

Full Name : MUHAMMAD SYAFIQ BIN MUHAMMAD RAZMAN ROBERT

ID Number : CA16117

Date : 27 May 2019

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# MUHAMMAD SYAFIQ BIN MUHAMMAD RAZMAN ROBERT

Thesis submitted in fulfillment of the requirements

for the award of the degree of

Bachelor of Computer Science (Computer Systems & Networking)

Faculty of Computer Systems & Software Engineering
UNIVERSITI MALAYSIA PAHANG

MAY 2019

### **ACKNOWLEDGEMENTS**

Alhamdullilah, all praises to Allah, for giving me the patience, knowledge, guidance, and strength that I really needed in completing this project.

Firstly, I want to express special thanks to my beloved and respectful supervisor, Dr. Mohd Faizal Bin Ab Razak for all his guidance throughout completing the project. His continuous guidance and support have assisted me in conducting a valuable project that is reported in this thesis.

I would like to extend my gratitude to my family for their support during this bachelor study. Without their moral support, this project would not have completed on time. No words can express my feeling and gratitude towards them.

I would also like to express my appreciation to all my friend that always been with me during my study years. All of those precious memories will always be remembered. Thank you for every single motivation, support, and inspiration that helps me to complete my study life.

### **ABSTRAK**

Sejak turun temurun lagi, isu kehilangan barangan adalah perkara yang biasa berlaku kepada semua individu. Sesiapa sahaja boleh kehilangan barangan peribadi mereka. Di Universiti Malaysia Pahang sahaja, hampir setiap minggu akan mempunyai kes kehilangan dan menjumpai barangan peribadi seperti dompet,kad matriks, kunci bilik dan sebagainya di sekitar kawasan UMP. Maklumat kehilangan dan menjumpai barangan ini disebarkan oleh pelajar itu sendiri melalui portal UMP di ruangan pengumuman dan media Whatsapp. Cara ini tidak begitu efisyen kerana tidak semua pelajar di UMP akan menerima maklumat berkaitan barang yang hilang dan dijumpai tersebut. Justeru, UMP Lost and Found Mobile Application dibangunkan untuk mengumpulkan semua maklumat barangan yang hilang dan dijumpai di dalam satu aplikasi mudah alih. Aplikasi ini dapat membantu pelajar mendapatkan barang yang hilang atau mengesan pemilik bagi barang yang dijumpai. Setiap barangan yang hilang atau dijumpai di sekitar UMP akan dilaporkan dan direkodkan di dalam aplikasi mudah alih ini oleh para pelajar. Dengan ini semua rekod berkaitan barangan yang hilang atau dijumpai akan mudah dicari oleh para pelajar.

### **ABSTRACT**

Since generation, the issue of losing personal belongings is a common thing for all people. Anyone can lose their personal belongings. At Universiti Malaysia Pahang only, almost every week there will be a lot of cases of lost and found personal items such as wallets, matric cards, room keys and so on. Usually, the information regarding the lost and found item was spread by the student himself via the UMP portal in the announcement board and the WhatsApp media. This method is not very efficient because not all students at UMP will receive information about the lost and found items. Hence, UMP Lost and Found Mobile Application is developed to centralized the information regarding all the lost and found items in a mobile application. This app can help students find lost items or track owners for items they have found. Any lost or found items around UMP will be reported and recorded in this mobile app by the students, with all records relating to lost or found items will be easily searched by students to search for their missing items.

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## LIST OF ABBREVIATIONS

UNIP Universiti Malaysia Panang	UMP	Universiti Malaysia Pahang
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MIT Massachusetts Institute of Technology

IOS Iphone Operating System

GPS Global Positioning System

API Application Programming Interface

GIS Geographic Information System

UTM Universiti Teknologi Malaysia

## **CHAPTER 1**

## INTRODUCTION

### 1.0 Overview

This chapter introduces about the project background and the main idea of the project. This chapter is divided into 5 sections. Section 1.1 presents the introduction of the project. Section 1.2 explains the problem statement. Section 1.3 describes the aim and objectives of this project. Section 1.4 and Section 1.5 is the thesis organization.

### 1.1 Introduction

Year by year, the increasing number of smartphones is really tremendous. The usage of smartphones is becoming relevant to the people in daily life. The mobile applications or apps are the software that are designed to run on a smartphone. Whether it run on Android or IOS, there are many mobile applications that are really useful to help people in their daily life. By December 2018, a total of 2.6 million of mobile application are available in Google Play Store (Statista, 2019). These mobile applications provide wide range varieties of services that can fulfil people needs such as social media, online banking, booking and reservation, education and others.

In correlation of increasing usage of mobile phone, in Malaysia, some of the universities in Malaysia does provide mobile application for their students to help and ease their life. For example, in Universiti Teknologi Malaysia (UTM) they have provided their student with UTMFleet in App Store which is a real time application that tracks incampus shuttle buses. Universities outside Malaysia also have taken the advantages of the mobile application technology where they provide several mobile applications for their own students. For example, the Massachusetts Institute of Technology (MIT), they provide a variety of mobile apps to guide students with campus navigation, academic

calendar, and MIT's mobile app includes a real-time shuttle tracker for students to get push notifications about the bus arrivals and departures (Amin, 2017).

In Universiti Malaysia Pahang (UMP), there are many online system and application been developed to ease the students and staff. The example of the online application is E-Community, Open Course Registration, Student Profile System and others. However, there is a problem that always occurs among the students in UMP that is losing personal items and belongings.

UMP have many students either in Gambang campus or Pekan campus. In UMP Gambang campus alone, there are 6 faculties with many different courses that enrolled by students. With more students, there will be more problems. One of the problems is losing personal items and belongings such as keys, wallet, matric card, and others. This issue can happen everywhere on the campus even though they really alert on their personal items and belongings. When this type of problem happens, most of the students will find a way or solution to get back their missing items and belonging. The most popular way to find their missing items is by using the WhatsApp to spread the information about their missing items. Some of the students also use the UMP Official Portal to make an announcement in the announcement board and Facebook as a medium to spread information on the missing items. In this way, the chances for the person that lost their items to get their item back is low because their information is not spread throughout the students.

Therefore, UMP Lost and Found Mobile Application is created. This system will be a mobile application. Students can upload their lost or found items in this mobile application. What makes this mobile application really useful are, it helps to ease student finding their missing items because it will display all the missing items and found items around the campus by providing the detail of the items that been posted. Example of the details are the picture of the missing items, contact number, last seen location of the missing item and notification will appear if there are any new reported missing items in the application. Students can also search the lost and found items in the mobile application.

## 1.2 Problem Statement

Firstly, the problem is the announcement that been done in the E-community UMP Official Portal. Most of the students make announcement in the portal when lost and found item occurs. There are 2 types of announcement that is official and unofficial. The announcement that been done may cause the student to miss the information about the lost and found item because new announcements will be posted on a daily basis such as class cancelation, program / activities and others. So students will take time to find the announcement regarding the lost and found items because the latest posting announcement will be in the top list, so the announcement that been made earlier will be in the bottom. Another thing that should be alerted with the E-Community announcement board is that the announcement has a maximum of 5 days which means the announcement will disappear after that.

Next, the problem is not all students can receive the information on the lost and found items. Besides E-Community, students use the social application such that is WhatsApp and Facebook as the medium to spread the information. Most of the information is spread by the WhatsApp and Facebook that been shared by friends and groups. The problem with this is that not all students will receive the information because not all students are in that particular WhatsApp group.

Lastly, UMP does not have a proper online system or application to inform students about lost and found items. For almost every week, there will be 2 or 3 cases regarding lost and found items. There are no centralized lost and found data that helps students to search their lost items. With no this specific type of application or system, the student needs a longer time to get their missing items. Also, there will be repeated announcement about lost and found, even though the items have already been claimed by the owner.

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