MEDICINE REMINDER (MEDICREMINDER) APPLICATION

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MEDICINE REMINDER (MEDICREMINDER) APPLICATION

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

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FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2016

DECLARATION

I hereby declare that this project report entitled

MedicReminder

is written by me and is my own effort and that no part has been plagiarized

without citations.

STUDENT : _____ Date : 25/08/2016

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I hereby declare that I have read this project report and found

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ABSTRACT

Medicine Reminder (MedicReminder) application is a very useful application for person who frequently taking medicine. It helps them remind patient the consumption medicine time in an effective way. In addition, this application has the function of tracking location. If patient is lost somewhere or anywhere, by pressing the button send location, patient's current location is captured and send to his family members. The family member will navigate to the location in google map. Furthermore, the family members will receive notification from server if the patient forgot or doesn't take the medicine. The purpose is to let family member able to remind his parents to take medicine.

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CHAPTER I

INTRODUCTION

1.1 Project Background

In the twentieth century, most of the people are taking medicine either to cure illness or to treat long term health problem. Especially in elderly people, daily consuming of medicine becomes a routine for them. As a human being, we might forget or missed out the time to take medicine. In the other word, we might forget either we taken medicine or not. The delaying of taking medicine eventually affects our health. Therefore an application named "MedicReminder" is created to solve all the constraints. MedicReminder provides function to remind patient the consumption of medicine at the right time. As children, we should take care and know the condition of our parents from time to time. By using this application, people such as us can know either parents taken medicine or not. If not, we should make a call or do something to remind them as this is the responsibility as a filial child. In addition, this application is able to track the exact location of our parents. This is to ensure family members can detect their parent's location in case they get lost.

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1.2 Problem Statement

1. Elderly people tend to forget or missed out right time to take medicine.
2. Family member sometimes unable to remind their parents to take medicine as they outstation for working.
3. Some kinds of people easily get lost especially kid and elderly people.

1.3 Objective

The objectives of this project are:

I. To avoid elderly people missed out suitable time to take medicine

As people age, they tend to forget things and more easily distracted. Especially in elderly people, they always forget what they did and what should they do. One of the things they likely to forget is missed out the time to take medicine. By using this MedicReminder apps, can reduce the probability of elderly people forget take medicine. Missed out the correct to time take medicine may cause their sickness become more serious.

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II. To provide a convenient and easy way for family member get to know their parents medicine consumption condition.

As a busy worker in the urban area, we unable to take care our parents 24 hours. Sometimes we might feel want to call them to ask whether they take medicine or not. But due to busyness, we don't always make it. By using MedicReminder apps, we as a child able to update and know our parent's medicine consumption condition from time to time.

Once they forget to take medicine, we can immediately call and remind them.

III. To track the location of elderly people especially our parents

Some elderly people suffer from Alzheimer's disease. They don't even know what they did and easily lost of direction. In this case, by using MedicReminder apps, we easily locate their location. Besides that we can ensure that they at the safety place.

1.4 Scope

The scope of this system is focus on how to effectively remind patient/parent on taking medicine on the right time. Moreover, this system is to ensure patient does not missed out the medicine taking time.

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1.4.1 Users

I. Patient/Parents

This apps is definitely created for elderly people such as our parent. Parent is the main user for this application.

II. Family member

Another user for this app is parent's child or family members. They are the one to remind their parent about medicine taking time and tracking of the location.

1.4.2 Modules

I. Patient module

This module is allow patient perform functions such as set reminder for specific date and time of medicine taking. In addition, user can set the appointment date with doctor.

II. Family member notification module

This module will allow family member receive notification from apps if his parent doesn't take medicine on the correct time

III. Global positioning System (GPS) module

Family member can view and track the location of their parent/patient that show in the aps using by children.

1.5 Project Significance

With the use of the android application, user such as parent able to take medicine in accurate time because sometime they tend to forget to take or may take twice in the same time. Besides that, children can express their concern by reminding their parent if their parent forgot to take medicine. Sometimes parent get lost at outside, this apps definitely can locate parent's location so that children can always keep track of their parent's location.

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1.6 Expected Output

At the end of this development, the result will be a mobile application which is MedicReminder mobile application with the main function as reminding patient of the medicine taking time and children would get notification if his parent forgot to take medicine within a specific time. MedicReminder come with function of tracking location too.

1.7 Conclusion

In conclusion this project definitely can bring ease to elderly people and patient who regularly taking medicine. The next chapter will describe the literature review about the existing system and methodology used in this system.

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CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

In this chapter will discuss about the literature review, facts finding and methodology used for this project. The purpose of literature review is to find relevant literature to support the project topic and conclude all the information that found in the literature. It also let your reader know what knowledge and idea have been established on a topic and what the strengths and weakness are. Basically MedicReminder is an android application that help user to remind them about right time to take medicine. Project schedule and milestones also will be defined in the project.

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2.2 Facts and Findings

In this section will discuss about the researches done before and how the researches related to this project. Furthermore, it can figure out what are the user requirements.

2.2.1 Domain

In this century, technology plays a very important role in our daily life. In many ways technology has enabled us to strengthen relationships by keeping in contact with old friends, colleagues, and co-workers. Example such as whatsApp applications is a good creation.

In this project, GPS tracking technology is used. Letham (1999) stated that GPS is an outdoor location based service that is capable of determining the location of a receiver within 15 to 100 meters accuracy.

2.2.2 Analysis of existing system

Compare with Research Projects

Author	Tool/Android Name	Strength	Weakness
JMSoft Brazil	Medicine Time	You may set a variety of different times for different days	Graphic User Interface is not self-understandable
Medisafe Project	Medisafe Meds & Pill Reminder	Track of blood pressure, glucose and other measurements	-
Baviux	Lady Pill Reminder	keep track of taking your birth control pills	There is no 21 day option

Table 1: Comparison with research projects

2.2.3 Existing System

Compare with existing system

	Medicine Time	Medisafe Meds & Pill Reminder	Lady Pill Reminder	MedicReminder

Pop out reminder notifications	√	√	√	√
Reminder is done through notifications			√	
Choose your medication reminder sound		√		
Compatible with all devices	√	√	√	√
Simpler menus upon clicking item in lists	√			√
Track other measurements - such as blood pressure, weight		√		
Children get notification if parent no taking medicine				√
GPS Tracking				√

Table 2: Comparion with existing system

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2.2.4 Technique

For this proposed system which is MedicReminder, there are total of 100 respondents answered the questionnaire and 10 interviewee had been interviewed.

Age category		
17 years and below	4	4%
18 - 24 years old	50	50%
25 - 31 years old	15	15%
32 - 40 years old	15	15%
41 -50 years old	11	11%
51 years and above	5	5%

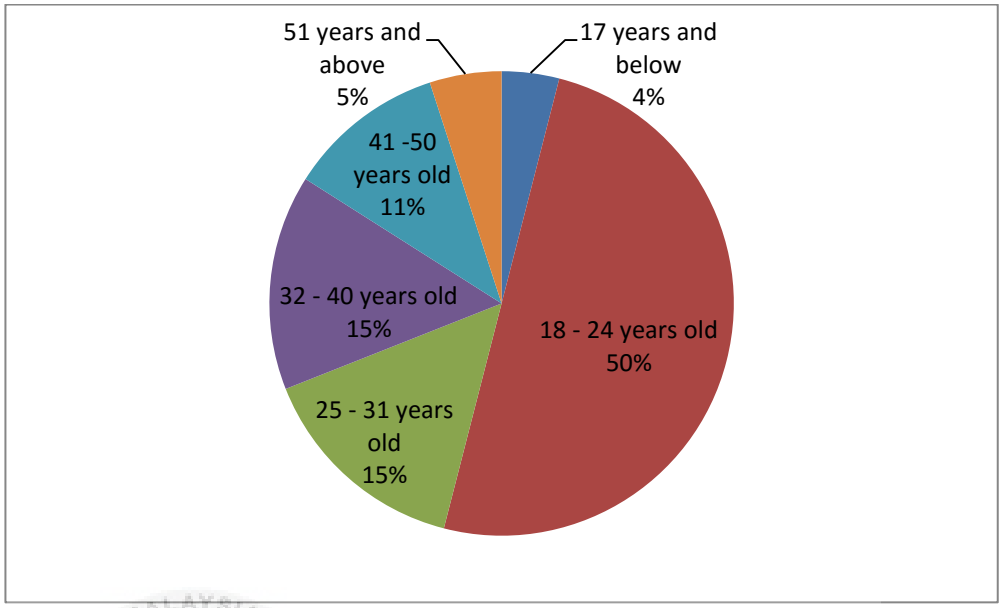

Figure 1: The percentage of age category from respondents

Level of education

Secondary School	13	13%
Pre-university	17	17%
Degree and Masters	67	67%
PhD	3	3%
Other	0	0%

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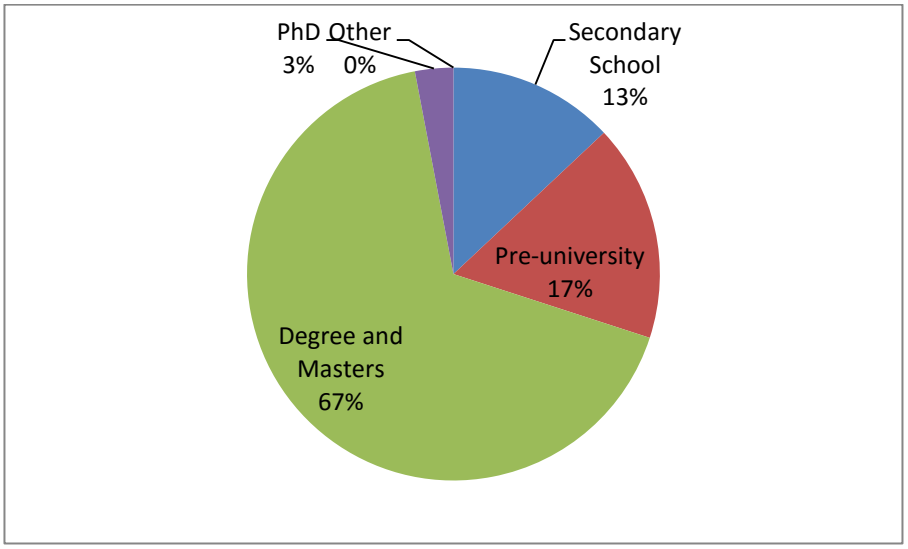

Figure 2: Percentage of level education from respondents

Race

Malay	45	45%
Chinese	49	49%
Indian	5	5%
Other	1	1%

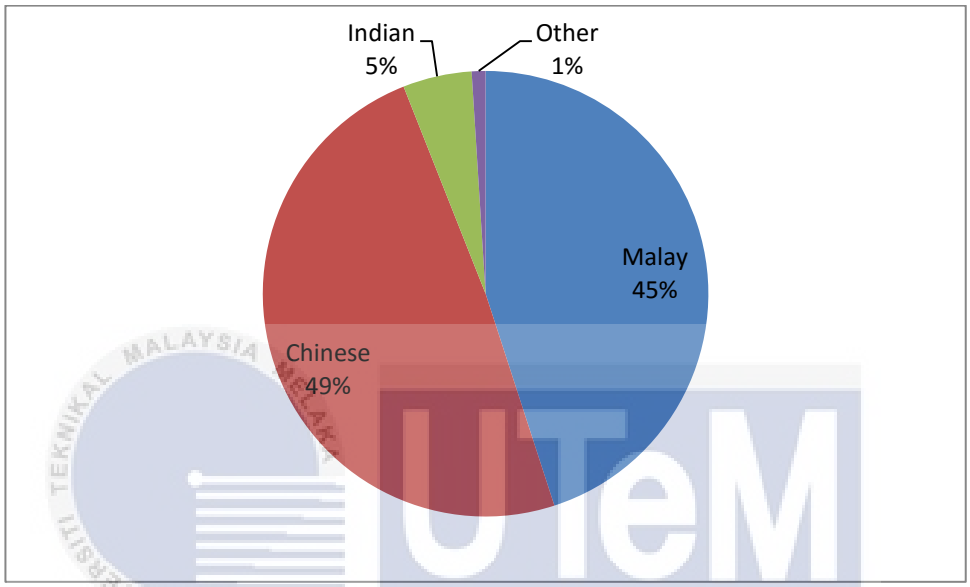

Figure 3: Percentage of race from respondents

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Occupation/studying field

Accounting/Finance	5	5%
Admin/Human Resources	2	2%
Arts/Media/Communications	2	2%
Building/Construction	5	5%
Computer/Information Technology	30	30%
Education/Training	2	2%
Engineering	22	22%
Heath Care	1	1%
Hotel/Restaurant	1	1%
Manufacturing	10	10%
Sales/Marketing	15	15%
Sciences	5	5%
Services	0	0%

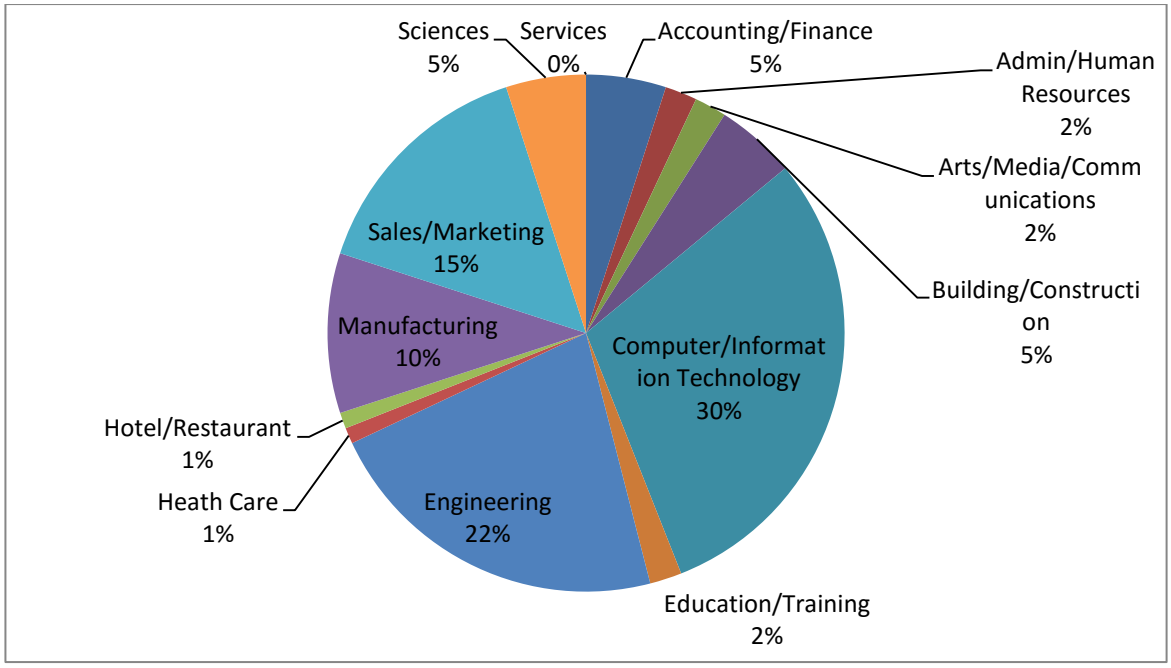

Figure 4: Percentage of occupation from respondents

From the result of survey, respondents are mostly in the range of 18 – 24 years old. There are 50 respondents in this age group. Their education level mostly at Degree and Masters too. There are 45 Malay, 49 Chinese, 5 Indian and 1 from other race. Respondents come from variety of field, but most of them are from Computer/Information Technology.

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How long have you been using smart phones?

Less than 5 months	3	3%
6-12 months	2	2%
1-2 years	3	3%
More than 2 years	92	92%