Universiti Teknologi MARA

Personal Safety Guide Application for Women Using Direct Combination Technique

Nor Atikah Binti Raimi
2015419068

Thesis submitted in fulfilment of the requirement for Bachelor of Computer Science (Hons.)
Computer Science Faculty of Computer and Mathematical Science

July 2018

ACKNOWLEDGEMENT

Alhamdulillah praises and thanks to Allah because of His Almighty and His utmost blessings. I was able to finish this research within the time duration given. Firstly, my special thanks goes to my supervisor, Miss Fadzlin binti Ahmadon for giving out lots of advice, support, encouragement and guidance in helping me to accomplish this project.

Special appreciation give to my beloved parents [redacted] and [redacted] who was always encourage me and bringing out the best in me.

I would like to thank Dr.Khyrina Airin Fariza binti Abdul Samah lecturer of this course for guiding me the requirement needed for this thesis. Besides, I would like to thanks to my dearest friends who had been there to support and helped me throughout this project.

ABSTRACT

There are many cases where unfavourable incidents fall upon women as a result of an increasingly violent world. Women walking to places such as going and coming back from work have been assaulted and subjected to physical harms. Because of these risks to safety, women fear going out alone not only at night, but also during day time. As a solution to this problem, many developers have developed smartphone applications to be used by women. However, most of these smartphone apps are reactive; users push panic button that contact the authorities or send alarms to emergency contacts when they feel in danger. A more proactive solution to personal safety for women is proposed, in which users are presented with a list of practical steps that they can quickly act in situations where they feel unsafe. The purpose of these guidelines is to allow users to avoid being in a highly dangerous situations at the first place or becoming a victim. In developing this application, a user interaction technique called direct combination is proposed. This technique which uses icons and its combinations may allow users to quickly access the information they need, at the time where they urgently need them.

Keywords: *personal safety, women safety, mobile app, icons, direct combination*

TABLE OF CONTENT

CONTENT			PAGE
SUPERVISOR APPROVAL			ii
STUDENT DECLARATION			iii
ACKNOWLEDGEMENT			iv
TABLE OF CONTENT			vi
LIST OF FIGURES			xii
LIST OF TABLES			xv
CHAPTER ONE: INTRODUCTION			
1.0	Background of Study		1
1.1	Problem Statement		2
1.2	Objective		3
1.3	Project Scope		3
	A. User		3
	B. Content		3
	C. Platform		4
1.4	Project Significance		4
CHAPTER TWO: LITERATURE REVIEW			
2.0	Personal Crime		5
2.1	Personal Crime against Women		6
	2.1.1	Rape	7
	2.1.2	Sexual Harassment	7
2.2	Personal Safety Actions		8

	2.2.1	Reactive Action	8
		A. Self Defense	9
		B. Panic Button	10
	2.2.2	Proactive Actions	11
2.3	Risky Situations and Suggested Actions		11
	2.3.1	Walking Alone	11
	2.3.2	In The Elevator	12
	2.3.3	Car Broke Down	13
	2.3.4	Being Followed	13
		A. Being Followed by Foot	13
		B. Being Followed by Car	13
	2.3.5	Sexual Harassment	14
	2.3.6	Parking Lot	14
	2.3.7	Kidnapping	15
	2.3.8	Snatch Theft	15
	2.3.9	Car Accident	16
	2.3.10	Molestation	16
2.4	Icons		16
	2.4.1	Types of Icons	17
		A. Resemblance Icons	17
		B. Arbitrary Icons	18
		C. Exemplar Icons	19
		D. Symbolic Icons	19
2.5	User Interaction Techniques		20
	2.5.1	Direct Manipulation	20
	2.5.2	Command Line Interface	21
	2.5.3	Direct Combination	21
	2.5.4	User Interaction Technique Comparison	22
2.6	Direct Combination		23