

UNIVERSITI TEKNOLOGI MARA

SMART STICK FOR BLIND PEOPLE

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AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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TABLE OF CONTENT

	Page
AUTHOR'S DECLARATION	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENT	v
LIST OF FIGURES	v
LIST OF FIGURES	ix
CHAPTER ONE INTRODUCTION	1
1.1 Research Background	1
1.2 Problem Statement	1
1.3 Objectives	2
1.4 Scope	2
1.5 Significance of Study	2
CHAPTER TWO LITERATURE REVIEW	3
2.1 Introduction	3
2.2 Traditional Mobility Aids	3
2.2.1 Human guide	3
2.2.2 Long cane	4
2.2.3 Dog guide	4
2.3 Technology Canes	5
2.3.1 The Laser Cane:	5
2.3.2 Infrared cane (IR):	5
2.3.3 Arduino UNO:	6
2.3.4 Ultrasonic Sensor:	7
2.4 Related works	9

CHAPTER ONE

INTRODUCTION

Research Background

The Malaysian affiliation for the Blind (MAB) estimates that there are 63,000 people in the Malaysia, who are blind, and 53,000 people are having a terrible blurry of eye. Therefore, each the size of the marketplace and the scale of the need for the technology presenting are big. The virtual cane coupled with a normal cane will permit exceptional navigational strength to those who want it. Products developed for the visually impaired have commonly focused on conversation devices consisting of reading machines and embossing printers for braille. The number one impediment to produce a marketable version of the proposed generation is the shape issue. The product has to be easy to use and lightweight. The potentially small length makes it a completely appealing choice for this product. As extra markets are advanced for this generation, the sensor might be capable to be manufactured in excessive extent at very low value. That is a brought gain for the ones in need of less costly assistive navigational equipment. As each technology mature, the digital cane will be able to be mass produced and delicate. The device proposes is simple and should be no more difficult to use than an ordinary cane.

Problem Statement

Nowadays, the visually-impaired humans have a tendency to have a trouble where they cannot navigate freely in surroundings either known or unknown to them. the present of smart Stick should aim to help each visually-impaired people to navigate via their daily movement. Using Smart Stick need to be optimized for usable and affordable enough that can be easily use through all the visually-impaired. However, the contemporary trouble that we are facing nowadays is that the visually-impaired human beings have a tendency to have a trouble in which they cannot navigate freely in an environment both acknowledged or unknown to them. therefore, the visually-impaired people will now not have confidence and also misplaced their bodily integrity in themselves. We can also see that because the visually-impaired humans cannot