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TECHNONOLOGY ENTREPRENEURSHIP (ENT 600)

STRIVEX SMART STICK



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COMPANY'S LOGO



CHAPTER 1

1.0 PRODUCT DESCRIPTION

1.1 Introduction

The product to be developed is a smart stick for the blind. The smart stick is fixed with Optical Character Recognition (OCR) software that provides face recognition functions and detects colour change of traffic light. This stick will also provide with Ultrasonic Sensor that detects any object or obstacle. The OCR and Ultrasonic Sensor provide the output of information through the audio via wireless bluetooth. The stick cover with luminescence colour that makes the stick glow in the dark.

1.2 Background study

- Blind people tend to be involved in accidents because they can only detect obstacle when the cane contact with the obstacle.
- The white cane has limitation which cannot detect the obstacle precisely and unable to detect the knee level obstacles.
- Lack intelligent technology to improve the living standard of blind people.
- Due to above limitation it is difficult for them to travel anywhere without their family members or friends.

1.3 Purpose of development

- To avoid blind people from losing their balance due to disproportion of the floor or stepping on an object.
- To reduce the danger by detecting any obstacles or objects in the path of the blind person.
- To recognize the human face by capture the image and save it in memory card.
- Improvement of technology and have multiple purposes, it is able to increase the quality of life of a blind person.
- Give confidence to blind person to travel everywhere they want.