



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

SCHOOL OF COMPUTING
Faculty of Engineering

Project Proposal (Group)

SECV2113 HUMAN COMPUTER INTERACTION
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Problems

Daily life requires the usage of vision to determine the position and direction of an individual, object and the environment. The information obtained from vision allows the individual to make decisions and enables them to avoid dangers. Hence, the problems faced by a blind individual will be more severe and this is the reason why an application that is designed to help them is required.

Blind individuals will have problems with navigating the touch screen of their smartphones and the screen of their laptops or computer themselves when compared to normal individuals and this is one of the problems that they face.



Figure 1: Problems with Navigating the Touch Screen of Devices

The next problem is finding lost objects as normal individuals have a hard time trying to find something they lost even with their vision, imagine what it would be like for the blind individuals.

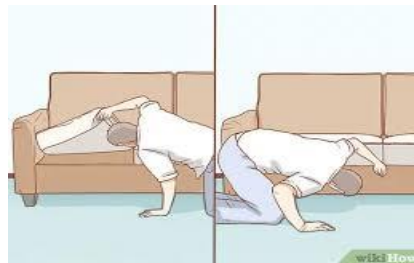


Figure 2: Problems of Having Hard Time Finding Lost Objects

The third problem for blind individuals is the difficulty of cooking as cooking involves high temperature and sharp kitchen tools which might burn or cut them.



Figure 3: Problems of Having Difficulty to Cook Food

Proposed Solution

An application that will run in the background and is specifically designed to help people who are blind. The application will utilize real time analysis and provide audio that will be played for actions they carry out on their laptop or phone and can be muted if the user desires to. The application will also be able to trigger and track the stickers which are custom made to be attached to personal belongings that are easily lost. The stickers will produce an alarm or sound when triggered and an audio will be played to inform the user of the location and direction to help the user find it easily. The application provides cooking guidance and it will describe the cooking process and automatically set a timer according to the recipe given in the application and the guidance will be in the form of audio.

Target User

Individuals that are blind or have some form of visual impairment.