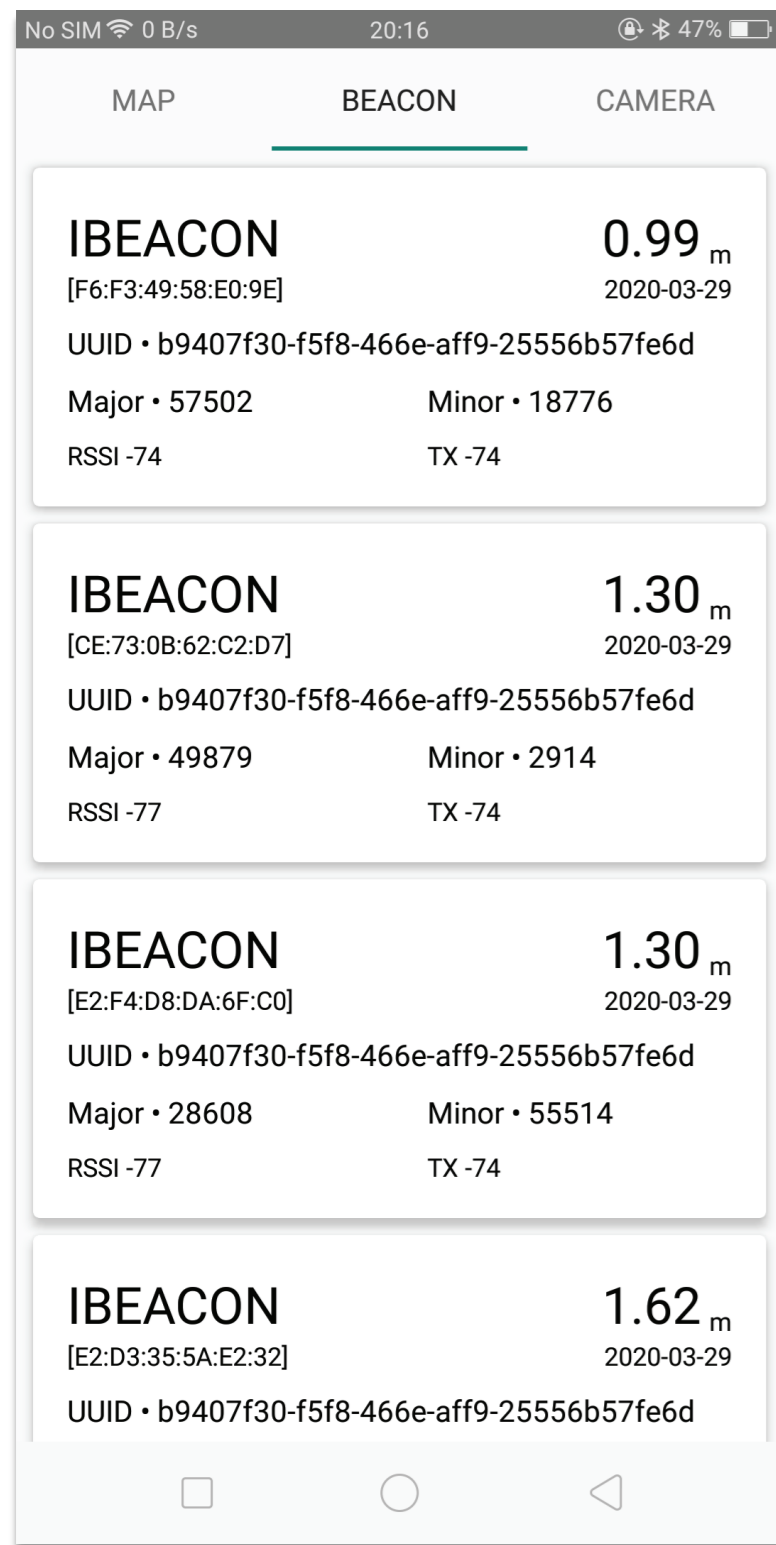# Helping the Visually Impaired Map the Real World
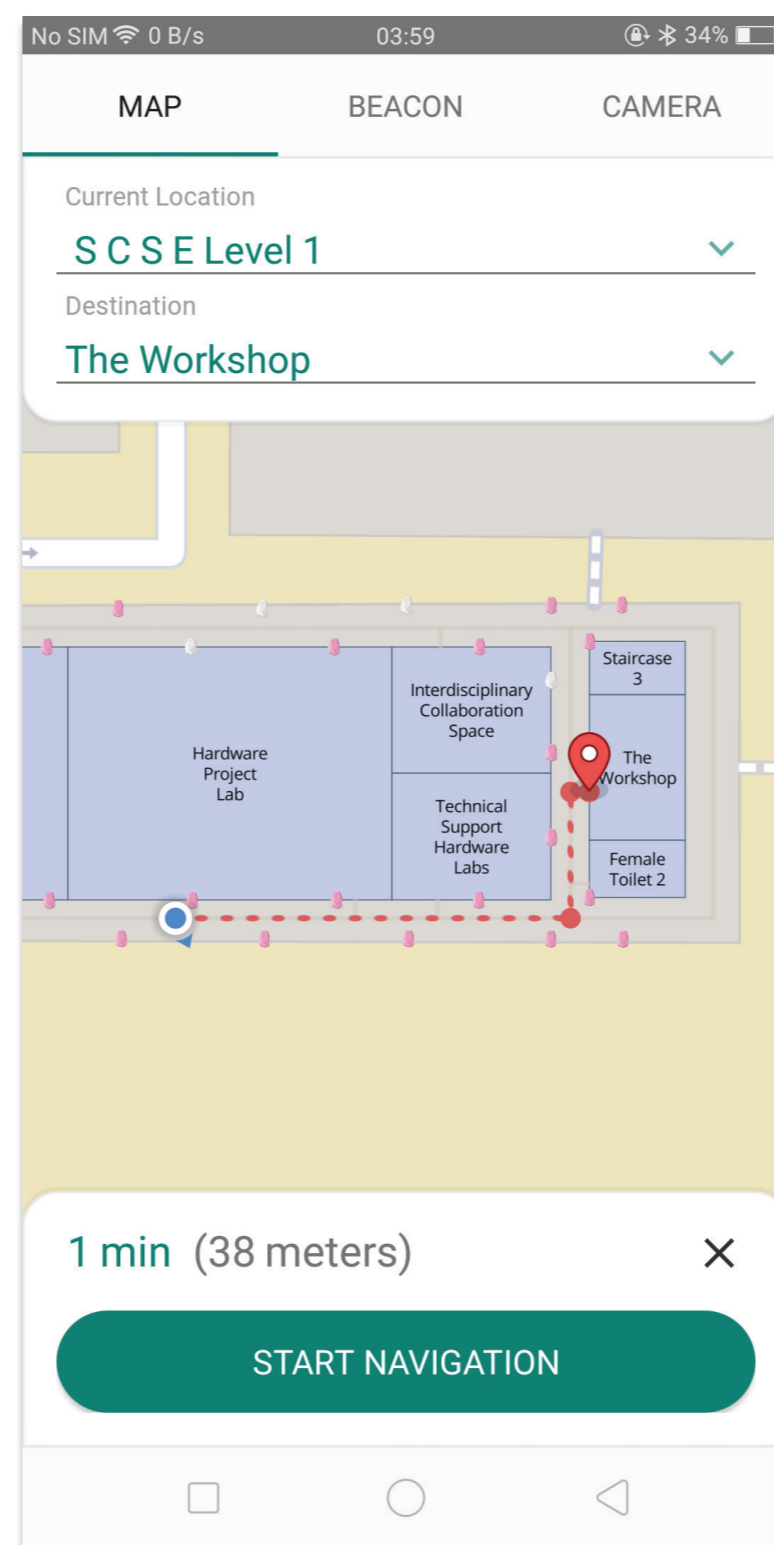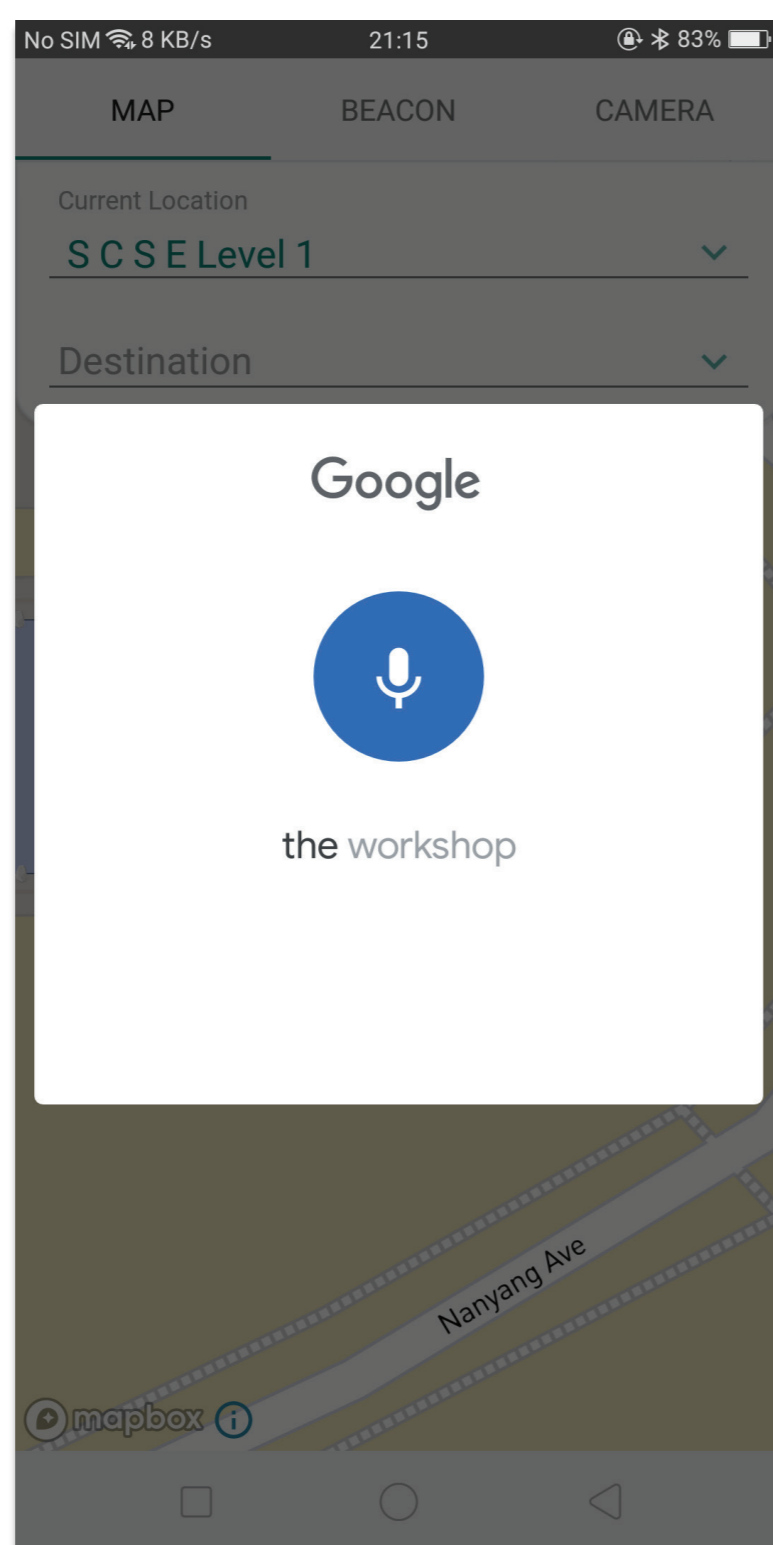
A Visually Impaired friendly indoor navigation application

✓ Full interaction with application through voice.

✓ Audio feedback from application.

✓ Detect Estimote beacon to perform trilateration for locating user indoor.

✓ Find the shortest path to destination through Shortest Path Algorithm

✓ Real-time navigation update

✓ Voice Guided Navigation
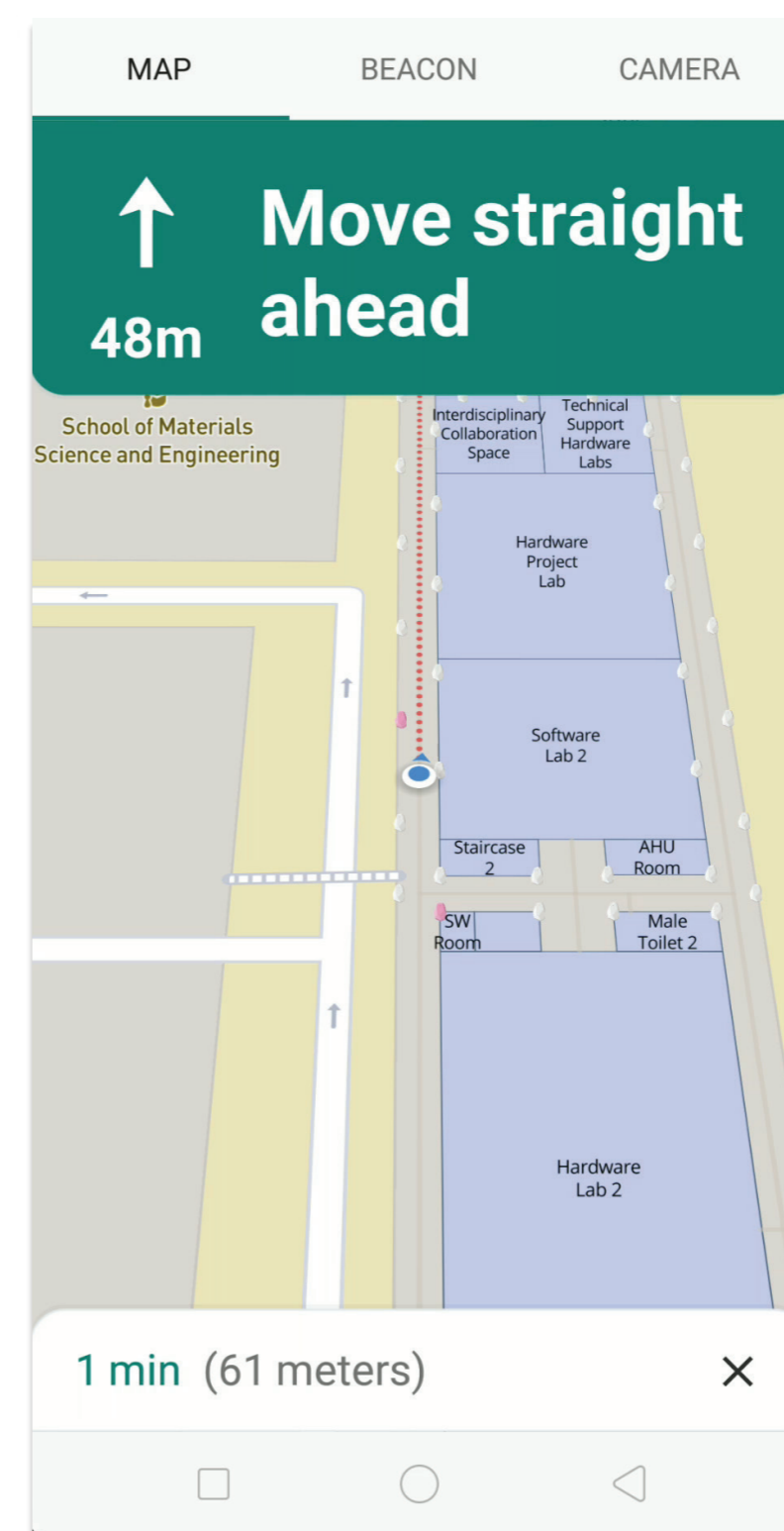
✓ Obstacle detection to ensure safety of Visually Impaired

Project Objectives

Design and implement a Visually Impaired friendly Indoor Navigation System by utilizing multiple Estimote Beacon. Additionally, implement Object Detection Algorithm to make travelling indoor safer for the Visually Impaired by alerting them of the obstacle. Lastly, implement vocal interaction so that Visually impaired can fully interact with the system without much physical touch.

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