

Emergency Escaper Application with Arduino

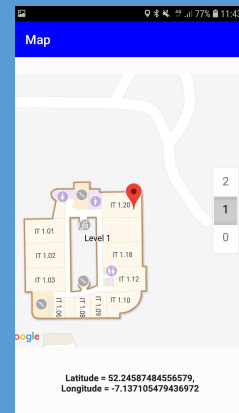
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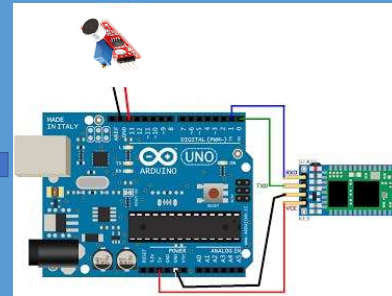
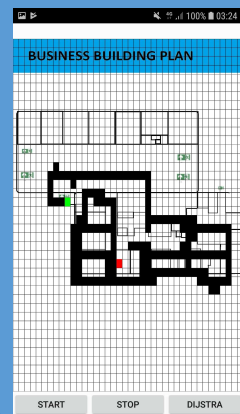
Introduction

- In the project I use an Arduino, the Arduino is connected to my mobile application and I programmed a buzzer and sound sensor in Arduino.
- The buzzer will sound, and an emergency exit route is displayed on the screen.
- The application is for android, it has a database of users, stored in Firebase, and an algorithm is used to find the quickest route out of the building.
- Dijkstra's algorithm is in the background.
- Google API is used to display a map.

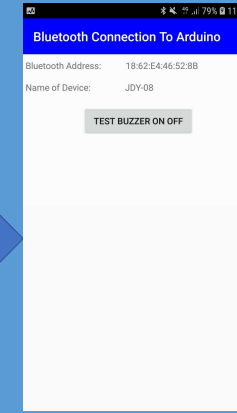
Overview



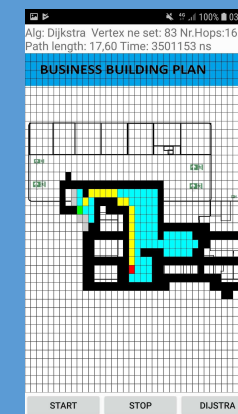
No Route



Alarm Is
Received
Through a
Bluetooth
Module and a
Sound Sensor



Route Drawn



Things I learned

- Dijkstra's Algorithm
- Java Coding
- XML Layouts
- Firebase
- Arduino -> Sound / Bluetooth
- Google Maps API

Use Cases

- Getting Routes in Colleges, app for new people around
- Routing Applications
- Arduino Mobile Applications
- Quickest way to a parking spot in a big Car Park

Technologies Used

