

COMP 3606 - Wireless and Mobile Technologies

Assignment 2

The objective of this assignment is to create **TWO** android applications that leverages IOT technologies. For both applications, the following MQTT configuration should be used

Broker Hostname: broker.sundaebtestt.com
Broker Port: 1883
Topic: assignment/location

Publisher Application

- The application should allow the user to enter the their own student ID into the first TextView that has a **hint** “Enter your student ID...”
- Upon pressing the “Start Publishing” button, the application should start receiving location updates which should be sent to the broker.
- Upon pressing the “Stop Publishing” button, the application should stop receiving updates and stop publishing content to the broker

Assignment Two - Publisher

Enter your student ID...

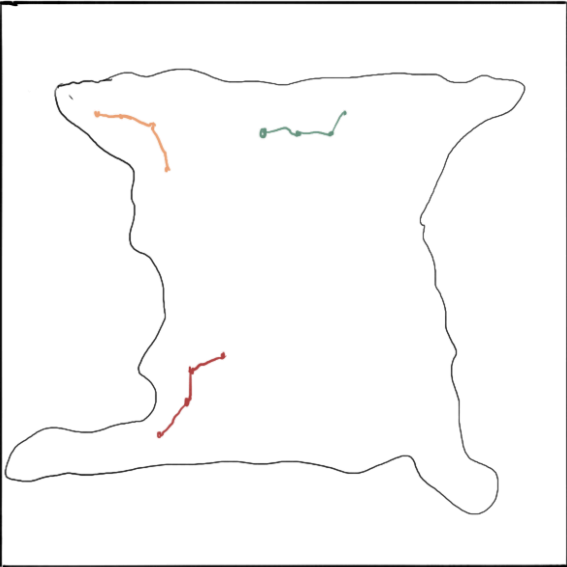
Start Publishing Stop Publishing

Subscriber Application

- This application should start to listen to the appropriate topic immediately upon starting.
- Content received should be stored in an SQLite database.
- While the phone is actively listening to a topic subscription, any data received should be graphed using the **Google Maps API** to render the map and *polylines* to render the device path. Additionally, for each device, the following information should be displayed
 - Minimum Speed
 - Maximum Speed
- Upon selecting the “View More” option in the list, the user should be directed to a new screen that allows a user to get reports on the device that was selected based on a starting and ending datetime. Additionally, for the time-period selected show the following information
 - Minimum Speed
 - Maximum Speed
 - Average Speed

Assignment Two - Subscriber

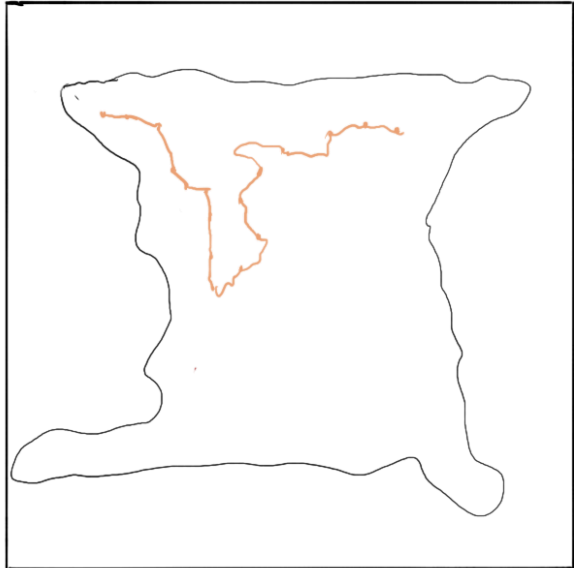
Live View (Last 5 minutes)



816123456	min speed: 20 km/h max speed: 97 km/h	view more
816123457	min speed: 25 km/h max speed: 92 km/h	view more
816123458	min speed: 40 km/h max speed: 107 km/h	view more

Summary of 813123456

Start Date: DD-mm-yyyy End Date: DD-mm-yyyy



Max Speed: 140 km/h
Min Speed: 70 km/h
Average Speed: 107 km/h