Android App

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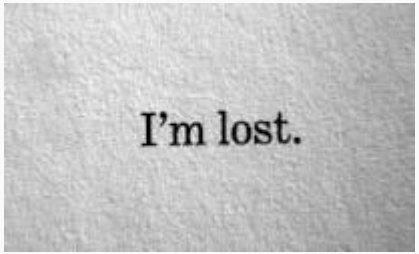
Motivation

- Collect data from motion, environment and location Sensor
- Store them in Elastic Search No SQL database
- In future use Tensor flow to conduct supervised learning
- Android provides access to Location, environment and accelerometer

Idea & Challenges

- Divide & Conquer Strategy -- Collect Data from sensor
- Store them in the database (NOSQL)
- Information Source- Sensor
- Lot of information



Idea

- Collect Data from the app as values change
- Store them in local storage
- Send the Data every 1 hour to NOSQL database
- Use Android Retrofit

Technology Stack

- Elastic Search
- Kibana
- Docker
- Android
- Django- Information Viewer

Architecture

- Link- https://github.com/SriramSrinivas/CYBR8480Project/blob/master/Context%20Diagram.png

Demo

- Elastic Search:- 13.48.184.208:9200 (Connects to HCC UNL anvil cloud)
- Android EMulator:- Localhost

Challenges

- Setting up Elastic Search (ES), and connecting to Django Web application
- Docker set up for ES
- Andorid Location values using EMulator (Found a fix to use Android phone via ADB)