

## URBAN COMPUTING APPLICATION

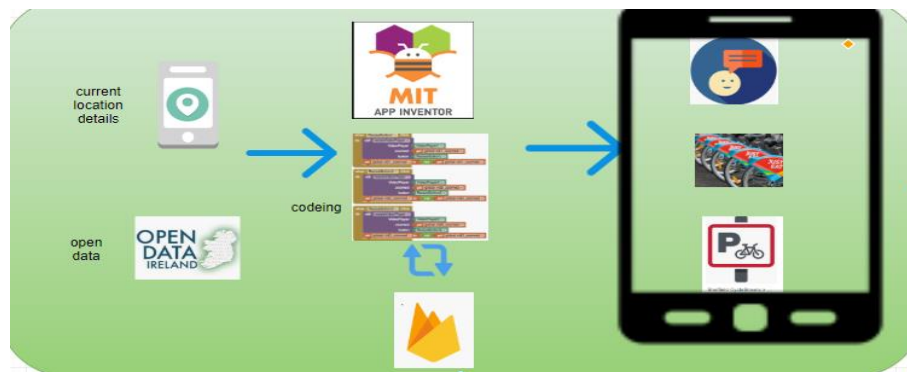
### Description:

We discussed on the urban data gathering where data collected from the location sensor and the open data from govt.ie is stored on the firebase server. With the present application, I can know about location information, bike stands and also information about just eat bikes.

### Part 1: Data fusion and analysis data:

Citizens find difficult to know about current location information (type of location :retail, commercial, residential ) ,Surrounding of location(Restaurants, Entertainment, Recreation) Transportation facilities, Security of the place.

By using the present application, we can know about this information and also it will give information about bike stands which are about 50 meters radius from the current location to place bikes  
It also provides just eat bike stand which in proximity of 50 meters from the current location.



### Data Fusion and Algorithm :

The system uses the current location details latitude and longitude and compare with the latitude and longitude provided by the open data set and provide the details of the location with in 20 meters proximity.

$$X,Y(\text{current location}) - 0.0032 \leq X,Y(\text{open dataset}) \leq X,Y(\text{current location}) + 0.0032$$

Note:0.0032=20-meter distance

### Task 2

#### Data Visualization Motivation –

To show real time status of current location

To show locations of Sheffield stand and just eat bike details

To show information about the surrounding and type of location



Step details, current location



location details



Visualization

### Technologies used:

- Mit inventor
- GPS sensor (gives location details)
- Pedometer (to know steps taken and distance)