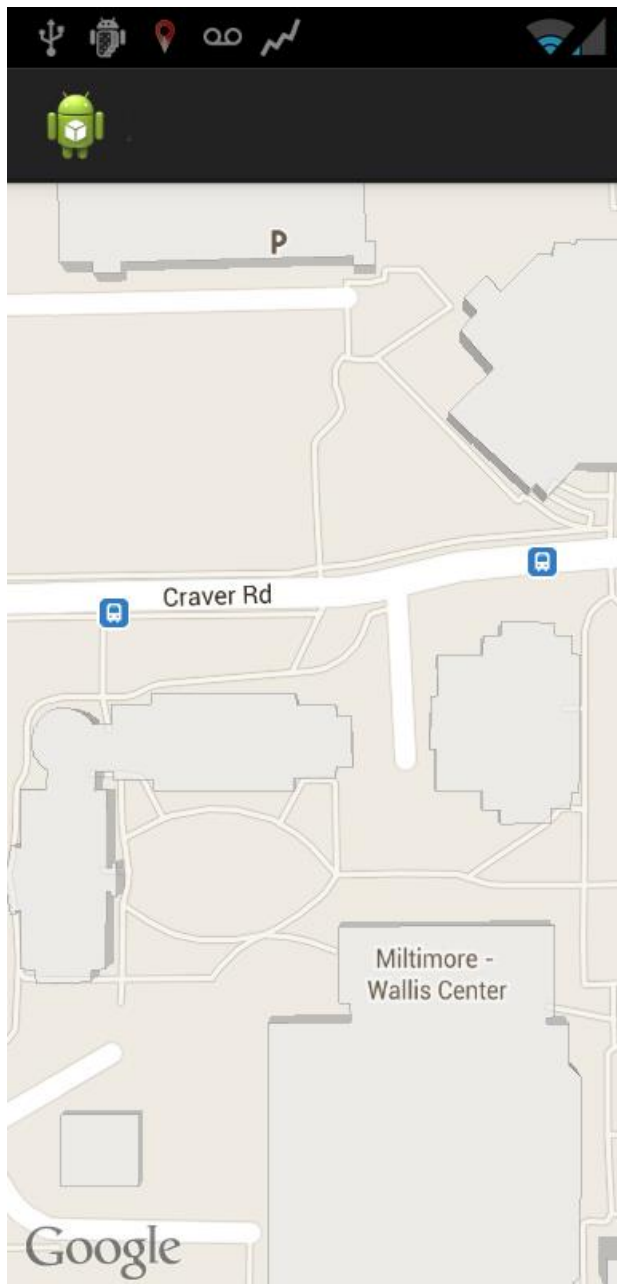
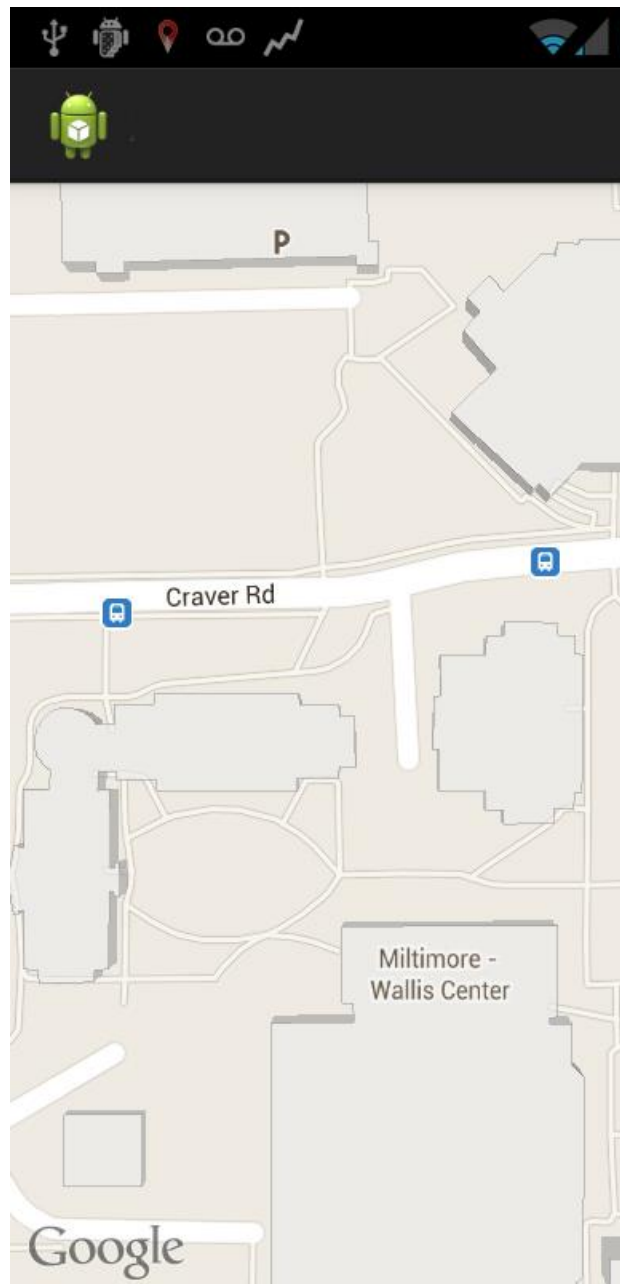


# Location Tracking Mobile Application

**Breif Description:** In this application I have implemented a simple location tracking application. The application tracks the user's current location using the device's GPS and draws the tracked user's path on a Google map using PolyLines.



(a) Displaying empty map



(b) Location tracking started using long touch

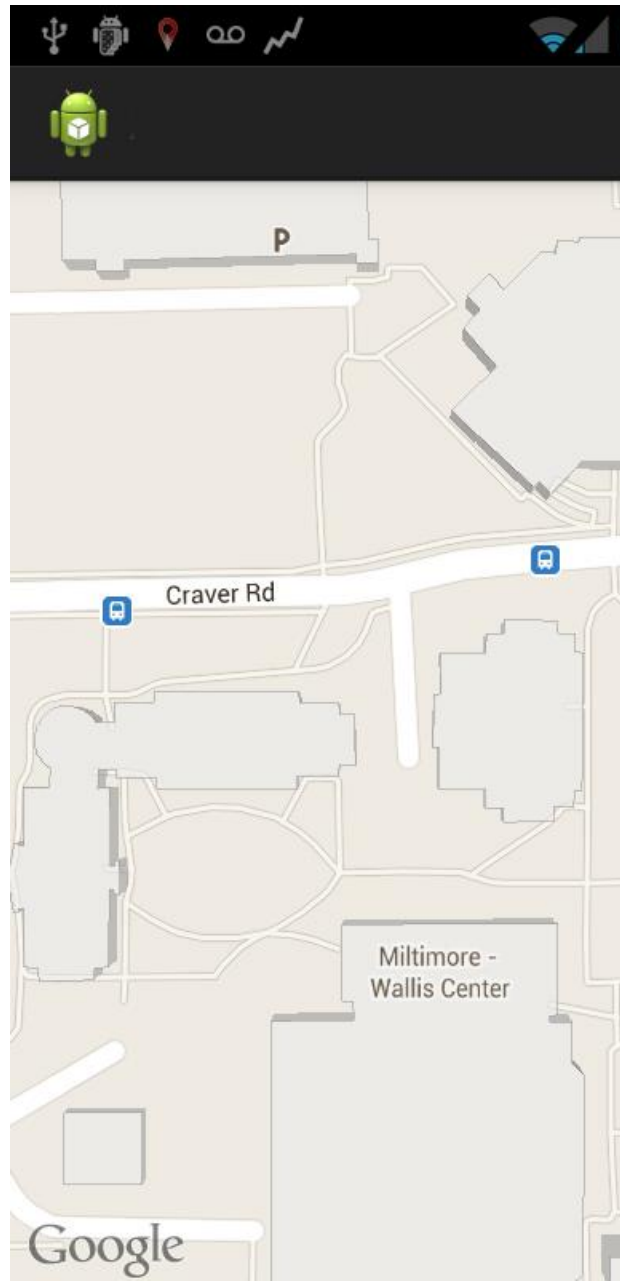
## MapsActivity:

This app is composed of a single activity. This activity should display a Google Map Fragment. The implementation requirements include:

- A location manager was used to retrieve your current location, through activating the location provider (GPS) and time appropriately.
- OnMapLongclick() the origin and destination are captured.



(a) Start marker and PolyLine tracking location



(b) Location tracking stopped using long touch

**#My Favourite Part of coding starts from here**

### **FetchDataAsyncTask**

- OnLocationChanged() a call is hit to the Google REST API using the origin and destination location attributes as query parameters and the data is captured and parsed in Async thread allows us to perform long/background operations and show its result on the UI thread without having to manipulate threads. Here doInBackground task will be implemented in background and onPostExecute will be shown on GUI.
- Data returned from web will be in json format which user can get using HttpURLConnection. So this task will return json data returned from web.
- It internally invokes ParserAsyncTask thread for parsing JSON data which parses the data in non-ui thread
- Route is drawn using Google Maps polyline( google-map-utils library) for maps-related functions
- Finally in the above code points are fetched from result and drawn on Google Map. *Map.ArrayList points* is used to store position on Google Map. Route is drawn using google maps polyline `lineOptions.addAll(points)`.