

## Set Up Mobile Application Environment

### Geofence in Android App

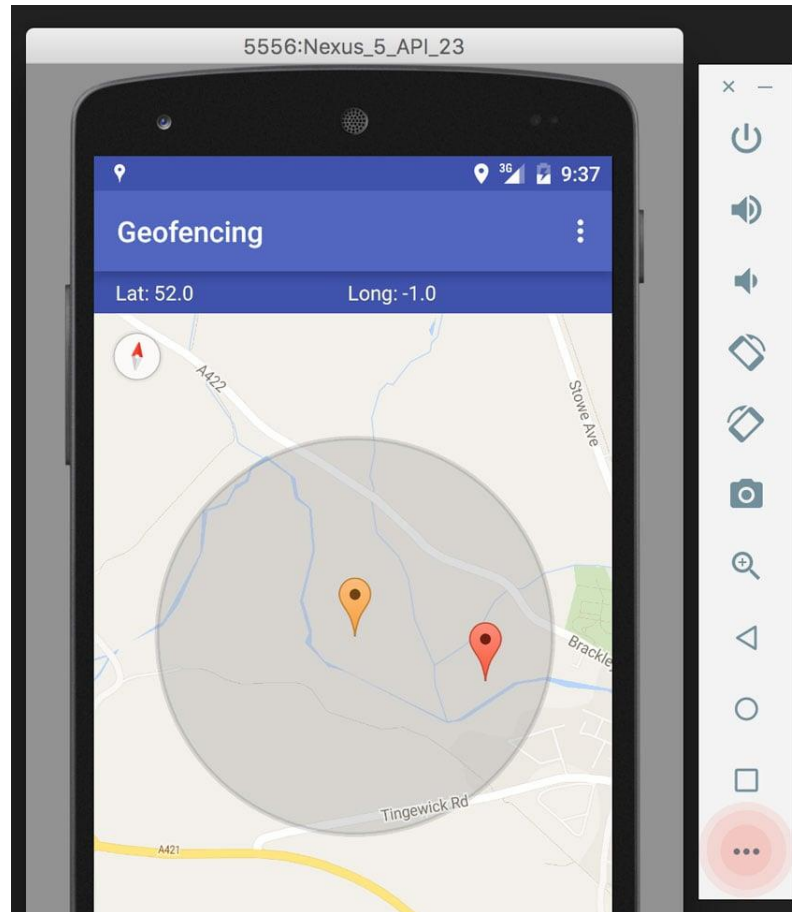
Team ID	PNT2022TMID31287
Project Name	Containment Zone Alerting Application

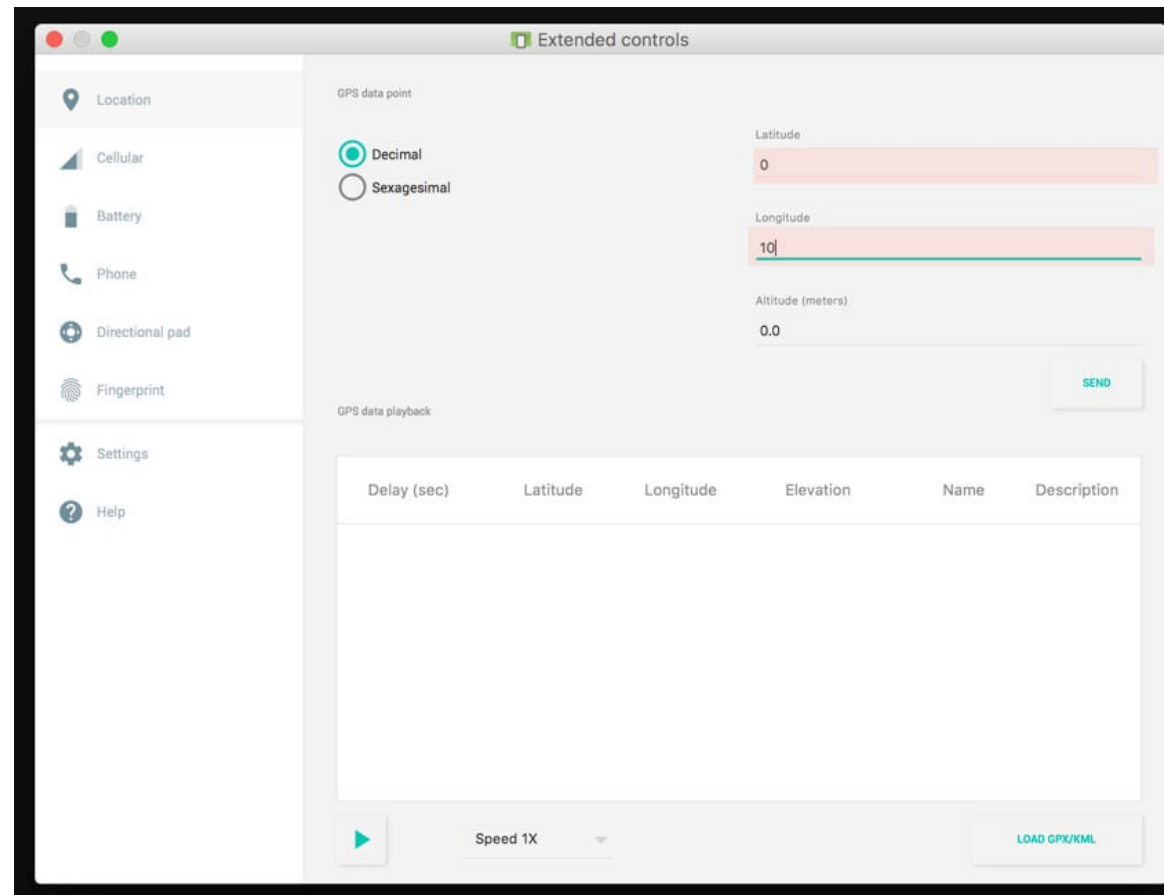
Geofencing is a feature in a smartphone or mobile device that uses GPS or RFID technology to trigger a pre-programmed action when the user enters or exits a virtual boundary set up around a geographic location. Geofencing allows you to set up a virtual perimeter around a real-world location. When someone enters or leaves that area, you can trigger an event. Geofencing is commonly used to trigger an action on a mobile device, such as sending a push notification or opening a specific app.

#### Set up a geofence:

To set up a geofence, we need to create a Geofence object using the Geofence.Builder class. This class requires the following parameters:

- The geofence's circular region
- The geofence's expiration duration
- The geofence's transition types
- The geofence's notification responses





**To get the user's current location:**

To get the user's current location, we use the `FusedLocationProviderClient`. It is a location API that combines all the location providers such as GPS, Network, and WiFi to provide the user's current location.