## **GEOFENCE CODE**

Date	18 November 2022
Team ID	PNT2022TMID03720
Project Name	IOT based safety gadget for Child Safety Monitoring and Notification
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## **CODE:**

```
Package com.example.geofence; import android.app.PendingIntent; import android.content.Context; import android.content.ContextWrapper; import android.content.Intent; import android.widget.Toast;
```

import com.google.android.gms.common.api.ApiException; import com.google.android.gms.location.Geofence; import com.google.android.gms.location.GeofenceStatusCodes; import com.google.android.gms.location.GeofencingRequest; import com.google.android.gms.maps.model.LatLng;

```
public class GeofenceHelper extends ContextWrapper { private
    static final String TAG = "GeofenceHelper";
    PendingIntent pendingIntent;
    public GeofenceHelper(Context base) {
    super(base);
    }
```

```
public GeofencingRequest getGeofencingRequest(Geofence geofence) {
return new GeofencingRequest.Builder()
.addGeofence(geofence)
. set Initial Trigger (Geofencing Request. INITIAL\_TRIGGER\_ENTE
R) .build();
}
public Geofence getGeofence(String ID, LatLng latLng, float radius, int
transitionTypes) {
return new Geofence.Builder()
.setCircularRegion(latLng.latitude, latLng.longitude, radius)
.setRequestId(ID)
        .setTransitionTypes(transitionTypes)
.setLoiteringDelay(5000)
.setExpirationDuration(Geofence.NEVER_EXPIRE)
.build();
}
 public PendingIntent getPendingIntent() {
if (pendingIntent != null) {
return pendingIntent;
Intent intent = new Intent(this, GeofenceBroadcastReceiver.class);
pendingIntent = PendingIntent.getBroadcast(this, 2607, intent,
PendingIntent.FLAG_IMMUTABLE);
return pendingIntent;
} public String getErrorString(Exception e) {
if (e instanceof ApiException) {
ApiException apiException =
(ApiException) e; switch
(apiException.getStatusCode()) { case
Geofence Status Codes \\
              .GEOFENCE_NOT_AVAILABLE:
return "GEOFENCE_NOT_AVAILABLE"; case
GeofenceStatusCodes
.GEOFENCE_TOO_MANY_GEOFENCES: return
```

```
"GEOFENCE_TOO_MANY_GEOFENCES"; case
GeofenceStatusCodes
.GEOFENCE_TOO_MANY_PENDING_INTENTS: return
"GEOFENCE_TOO_MANY_PENDING_INTENTS"; }
} return
e.getLocalizedMessage();
}
}
```