GEOFENCE CODE

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Team ID	PNT2022TMID45386
Project Name	Project - IoT based safety gadget for ChildSafety 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;
```

```java
 public GeofenceHelper(Context base) {
super(base);
}


 public GeofencingRequest getGeofencingRequest(Geofence geofence) {
return new GeofencingRequest.Builder()
 .addGeofence(geofence)

.setInitialTrigger(GeofencingRequest.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) {
```

```java
    ApiException apiException = (ApiException) e;
switch (apiException.getStatusCode()) {
 case GeofenceStatusCodes
                .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();
 }
 }
```