

GEOFENCE CODE

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Team ID	PNT2022TM ID17666
Project Name	Project - 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)

.setInitialTrigger(GeofencingRequest.INITIAL_TRIGGER_ENTER)
        .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 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.getMessage();
}

```