GEOFENCE CODE

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Team ID	PNT2022TMID30855
Project Name	IoT based safety gadget for ChildSafetyMonitoring and Notification
TEAM LEADER	ATHITIYA KA
TEAM MEMBERS	DHARANI S ARUN KUMAR K DINESH KUMAR CS

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 {
```

```java
    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;
    }
```

```java
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.getLocalizedMessage();
}
```