

GEOFENCE CODE

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Team ID	PNT2022TMID04739
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.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.getLocalizedMessage();
}
}
```