

CODING:

```
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.getLocalizedMessage();
}

```

7.2 Feature 2 (Alert Notification)

- Once geofence is added , when the child enters the geofence a notification will be sent
- When the child leaves the geofence a notification will be sent .

```

package com.example.geofence;

import android.content.BroadcastReceiver;

```

```

import android.content.Context;

import android.content.Intent;

import android.location.Location

; import android.os.CountDownTimer; i

mport android.util.Log;

import android.widget.Toast;

import com.google.android.gms.location.Geofence

;import com.google.android.gms.location.GeofencingEvent import java.util.List;

import android.os.Handler;

public class GeofenceBroadcastReceiver extends BroadcastReceiver {private static final String TAG =
"GeofenceBroadcastReceiv";

```

receiving

@Override

```
public void onReceive(Context context, Intent intent) {
```

```
// TODO: This method is called when the BroadcastReceiver is
```

```
// an Intent broadcast
```

```
//.
```

```
/*Toast.makeText(context, "GEOFENCE_ENTERED", Toast.LENGTH_SHORT)..show();
```

```

final Toast mToastToShow;

int toastDurationInMilliseconds = 1200000; mToastToShow
= Toast.makeText(context, "GEOFENCE_EXITED", Toast.LENGTH_LONG);
// Set the countdown to display the toast CountdownTimer toastCountDown; toastCountDown = new
CountDownTimer(toastDurationInMilliseconds, 100000) {public void onTick(long
millisUntilFinished) { mToastToShow.show();
}

public void onFinish() { mToastToShow.cancel();
}
};

// Show the toast and starts the countdown mToastToShow.show(); toastCountDown.start();*/
NotificationHelper notificationHelper = new NotificationHelper(context);
notificationHelper.sendHighPriorityNotification("GEOFENCE_TRANSITION_ENT ER",
"", MapsActivity.class); GeofencingEvent geofencingEvent =

GeofencingEvent.fromIntent(intent);

if (geofencingEvent.hasError())
Log.d(TAG, "onReceive: Error receiving geofence event..."); return;
}
List<Geofence> geofenceList
=
geofencingEvent.getTriggeringGeofences(); for (Geofence geofence:
geofenceList) {

```

```
Log.d(TAG, "onReceive: " + geofence.getRequestId());

}

//          Location location = geofencingEvent.getTriggeringLocation();int transitionType =
geofencingEvent.getGeofenceTransition();

switch (transitionType) {

case Geofence.GEOFENCE_TRANSITION_ENTER:

notificationHelper.sendHighPriorityNotification("Entered the Location", "", MapsActivity.class);
break;

case    Geofence.GEOFENCE_TRANSITION_EXIT:

notificationHelper.sendHighPriorityNotification("Exited the Location ", "", MapsActivity.class);
break;

}

}

}
```