

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  
import 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_ENTER",
"", 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;  
  
}  
}  
}
```