

PYTHON 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)
```

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        .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();
}

```

FEATURE: (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;
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";

    @Override

    public void onReceive(Context context, Intent intent) {
        // TODO: This method is called when the BroadcastReceiver is
receiving

        // 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
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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);

```

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    Log.d(TAG, "onReceive: Error receiving geofence event...");

```

```

return;

```

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    }

```

```

    List<Geofence> geofenceList =
geofencingEvent.getTriggeringGeofences();

```

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    for (Geofence geofence: geofenceList) {
        Log.d(TAG, "onReceive: " + geofence.getRequestId());
    }

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

```

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switch (transitionType) {
    case Geofence.GEOFENCE_TRANSITION_ENTER:

```

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

```

```
        case Geofence.GEOFENCE_TRANSITION_EXIT:
notificationHelper.sendHighPriorityNotification("Exited the Location ", "",
MapsActivity.class);
            break;

    }
}
}
```







