

Sprint 3

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Project Name	IoT Based Safety Gadget for Child Safety Monitoring and Notification

Sprint 3 is adding the geofence and changing the geofence when need

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();
}
}
```



Output : Adding Geofence page

