Sprint 3

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Team ID	PNT2022TMID17380
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 :

```java
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;
```

```java
        }
        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();
    }
}
```

My Location

Output :

Adding Geofence page

Geofence Location