CS194A Assignment #2: My Maps

Project due: Sunday, May 10, 11:59pm (California time)

Partner feedback due: Wednesday, May 13 at 4:30pm (California time)

There are three parts to this assignment:

- 1. Use the walkthrough video to complete a basic working version of the app.
- 2. Complete at least one extension. There are several ideas below.
- 3. Look over the submission from your assigned partner and provide feedback.

Description: We're going to build a "Google My Maps" clone! Your app will:

- Display a list of map titles
- After tapping on a map title, display the associated places in a map
- Allow the user to create a new map

Walkthrough video: Google Maps Tutorial (~1.75 hours of content)

App screenshot:



Extension ideas: You should complete at least one extension beyond the walkthrough video. Here are some ideas:

- Change the color scheme of the app, e.g. the background/primary/secondary color.
 - Modify the colors defined in app/src/main/res/values/colors.xml
 - Play around with the background color or text color.
- In the initial screen, show the number of places in each map along with the title.
 - Modify the item_user_map.xml file to include another TextView and update the adapter.
- Instead of the default marker, use a custom marker drawable.
- Add a falling pin animation when a new map marker is created.
 - Follow this guide to interpolate the bounce of the marker.
- Add a menu option in the map activity to change the <u>map type</u> (e.g. normal vs terrain)
- In the creation flow, add a button where the map will move to the user's current location.
 - Use the getLastLocation() method from the FusedLocationProviderClient.
 - You'll need to request permissions to get the location. Follow this <u>guide</u>.
- Add the ability to search for maps which contain a string in the title.
 - Option 1 (easier): add an EditText above the RecyclerView and listen for changes. See this <u>video</u>.
 - Option 2 (advanced): Add a search menu option and implement the Filterable interface in your adapter. See this <u>video</u>.
- (Advanced) Instead of storing the maps in a file, store them in a Room database
 - You'll have to add annotations to the model classes to describe each entity and column you want to store. See this <u>guide</u>.
- Ideas for further inspiration: here's the published Google My Maps app.

Submission instructions:

- Include a README.md file in your Github repo which contains a GIF walkthrough of your app. Use this <u>README template</u>.
- Submit the Github repository URL for the assignment on Canvas.
- The feedback part of the assignment will also happen through Canvas- partners will be automatically assigned after the project due date.