CS194A Assignment #2: My Maps

Project due: Sunday, October 31, 11:59pm (California time)
Partner feedback due: Wednesday, November 3 at 5:30pm (California time)

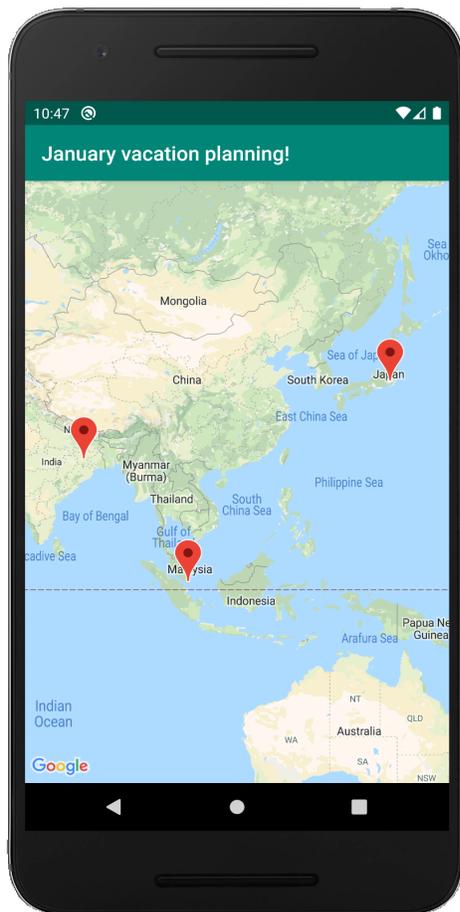There are three parts to this assignment:
1. Use the walkthrough video to complete a basic working version of the app.
2. Complete at least one extension. There are several ideas below.
3. Look over the submission from your assigned partner and provide feedback.

Description: We're going to build a "Google My Maps" clone! Your app will:
- Display a list of map titles
- Allow tapping on a map title to display the associated places in a map
- Allow the user to create a new map

Walkthrough video: Google Maps Tutorial (1.75 hours -- look at the pinned comment if you encounter an issue at the 12 minute mark in the video)

App screenshot:

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

- 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 [map type](#) (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 [guide](#).
- 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 [video](#).
  - Option 2 (advanced): Add a search menu option and implement the Filterable interface in your adapter. See this [video](#).
- (**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 [guide](#).
- 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 [README template](#).
- Submit the Github repository URL for the assignment on [Canvas](#).
- After the due date, give your partner feedback about their project in Canvas. Answer the following questions:
  - What extensions did your partner complete?
  - What did you like about this project? What improvements can you suggest?