

## CS194A Assignment #2: My Maps

**Project due:** Sunday, October 25, 11:59pm (California time)

**Partner feedback due:** Wednesday, October 28 at 4:30pm (California time)

There are three parts to this assignment:

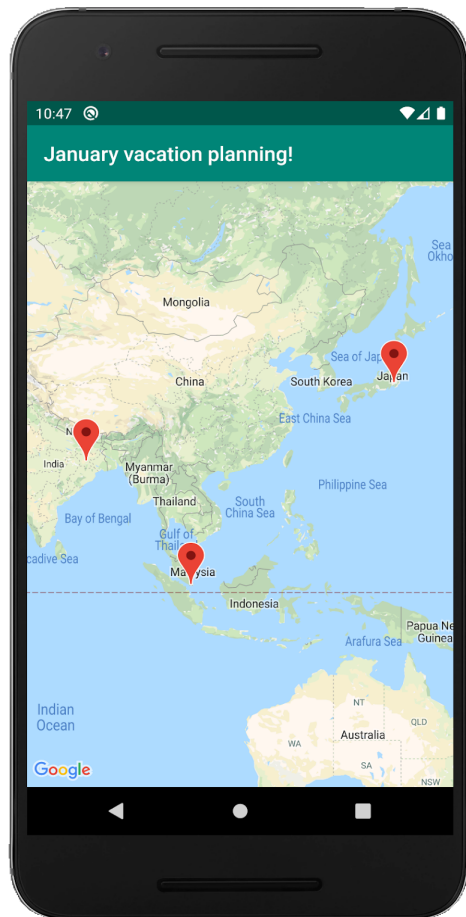
1. Use the walkthrough video to complete a basic working version of the app.
2. Complete at least one extension. There are several ideas below.
3. Look over the submission from your assigned partner and provide feedback.

**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 [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?