

Lab 8 – Tide Prediction App with Geolocation

CIS399, Android Application Development

Objectives: This lab is designed to give you practice:

- Add the Google Play Service (Google APIs) library to your project
- Use the Fused Location Provider to get your current location
- Use Geocoding to get the state name from latitude and longitude
- Do distance calculations based on latitude and longitude

Part 1: Do the textbook exercises shown below:

- Optional: 18-1, Test and modify the Run Tracker app
- Optional: 18-2, Refactor the Run Tracker app

Upload a text file to Canvas in which you will report, for each exercise above, whether you:

- A. Followed all the steps shown in the book and successfully compiled and ran the program (where applicable).
- B. Loaded the completed solution, experimented with the code, and ran the program (where applicable).
- C. Read through the steps and inspected the relevant code without writing or running a program.
- D. Didn't do any of the above.
- E.

Submission

Upload the exercise report to Canvas in a text file, or enter it directly in Canvas.

Part 2: Modify the previous Tide Table app so that it has these additional features:

- The app will use geolocation to find the user's current position. Using the position it will determine the state the user is in.
- Then it will calculate the distance to each of the tide stations in the current state, and automatically display today's tide predictions for that location.
- The user will still be able to select other locations and dates for which to view tides.
- All the previous features will still work.

Submission

Zip the project folder and upload it to Canvas.