Lab 9 – 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.

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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.