

Mobile Applications Assignment 1

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For this assignment we were tasked to create a location finder app with a database of 50 predetermined locations, including their longitude and latitude. We were to use Geocoder to find addresses for those locations.

Instructions:

Create a LocationFinder app for the following instructions:

1. Find latitude and longitude of 50 locations by either searching online or using Location-Manager.GPS_PROVIDER on an android phone.
2. Use Geocoding to find 50 addresses of these 50 latitude and longitude pairs
3. Create a database and a location table with four columns (id, address, latitude, longitude) with these 50 locations
4. A query feature in the app to display latitude and longitude for a given address (if found in the database)
5. An add, delete, and update feature in the app to add, delete, or update entries into the location table

Database is used to allow the user to create entries that are saved even if the app is closed. The database and sql queries allow the user to perform simple commands like insert, update, and delete with the click of a button. Upon clicking the appropriate buttons, it calls the sql commands which access the database to perform the task.

Assuming the assignment asks how databases are used for THIS assignment, this is an adequate explanation, as the SQLite database does not do much else other than what was described above. It was used to store entries the user inserted, updated, and deleted, and could view the entries currently stored in the database. Other than this it would simply access values from the user's input, and from other parts of the code in order to perform these tasks.

The location services were used to find latitude and longitude values for different addresses. Geocode was used to find an address for said latitude and longitude values. These values and addresses were found by searching online.

Assuming the assignment asks how locations services are used in THIS assignment, this is an adequate explanation. Aside from populating the database with entries, location services are not really used. The app does not search for addresses given the latitude and longitude. However it can return latitude and longitude values given an address, but it searches the database, and doesn't use location services.

The challenges I faced was populating the database using a certain method and the search query function. The database could be populated manually using the app, and it would be saved and persist when the app is closed, however I could not do it in the code itself. The implementation I used did not work and was deleted. I tried to make an array and send it to the database to populate. The search query didn't work either, also the screen couldn't fit enough buttons regardless.