



Assignment #2

Basic Android - LocationFinder App

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Mobile Application Development - SOFE 4640U

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Overview:

In this assignment I practiced Android application development, specifically on integrating the use of a local database with an android application. This "Location Finder" application allows you to create, delete, and update location cards that can be viewed and searched through from the main activity screen.

Usage of Local Database:

This application makes use of a SQLite database which stores the location data.

Database Name: LocationFinder

Table Name: Locations

Table Columns:

ID INTEGER,
ADDRESS TEXT,
LATITUDE TEXT,
LONGITUDE TEXT

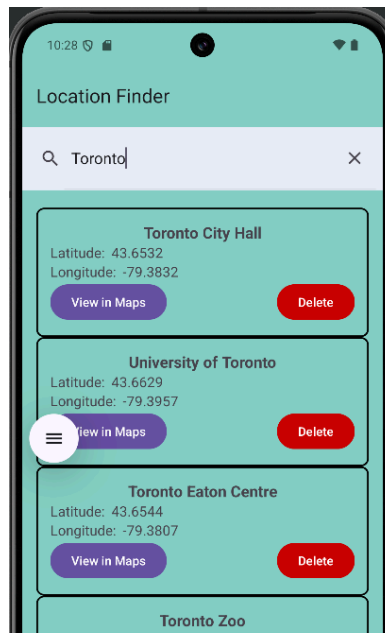
The database also generates 100 locations when the application is loaded for the first time. The strings.xml resource file is used to store all the initial locations and it is called upon using a method in the DatabaseHelper.

Screenshot of a portion of **string.xml**

```
<!-- Sample locations used to insert in the database -->
<string name="location_1">Toronto City Hall, 43.6532, -79.3832</string>
<string name="location_2">CN Tower, 43.6426, -79.3871</string>
<string name="location_3">University of Toronto, 43.6629, -79.3957</string>
<string name="location_4">Royal Ontario Museum, 43.6677, -79.3948</string>
<string name="location_5">Toronto Eaton Centre, 43.6544, -79.3807</string>
<string name="location_6">Ripley's Aquarium of Canada, 43.6415, -79.3830</string>
```

Query Feature / Cards View:

The application features a search bar at the top of the main activity screen to allow the user to filter through location cards. This feature filters through all locations in the database.

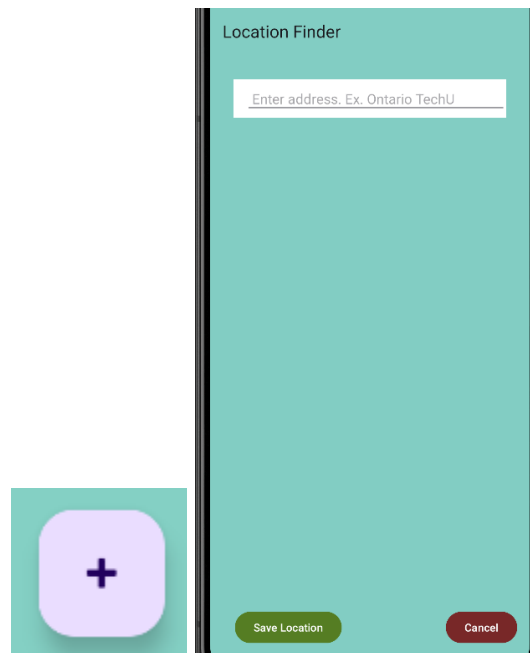


Application searching for all entries containing 'toronto' screenshot

Add/Delete/Update Entries:

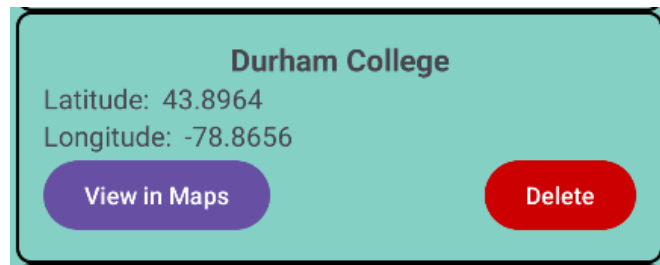
The application allows you to perform the following operations on the location table:

- Add



Use the '+' Button on the bottom right of the main screen to start adding a new location card

- Delete



Simply click the delete button that is within the location card on the main screen to delete a location from the database table

- Update



Click on a location card to open the menu to change the address and then save the location similar to how we create a new location card. This will update the location in the database table.

GitHub Link:

<https://github.com/Calizard/SOFE4640U-A2>