Mobile Application Development

SOFE 4640U

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Mobile Dev Application Assignment 2

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Introduction:

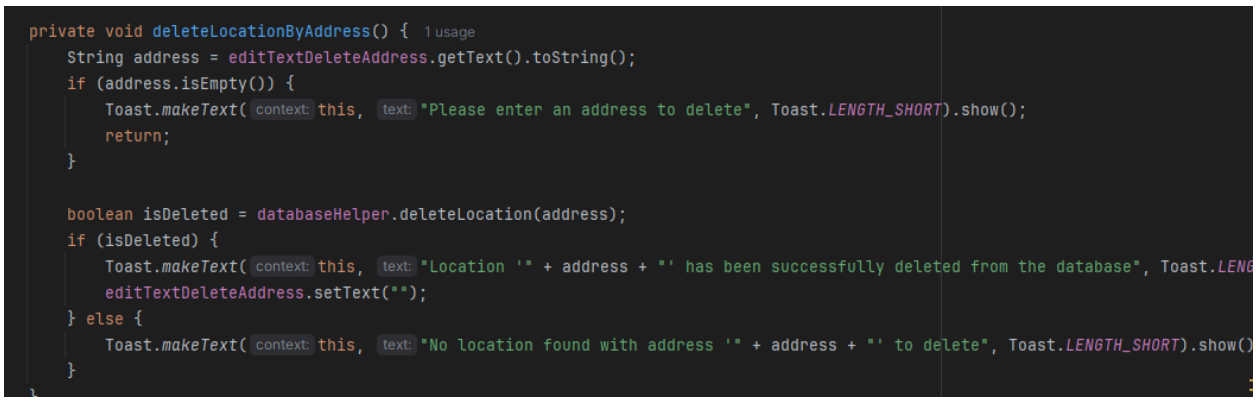
This report will review the second assignment, its code, and my findings. The goal of this assignment was to create an application that is a location finder app where the user is able to input pr delete a location of their choice into a local database that is already populated with a few locations from various cities across the GTA.

Tools and Findings:

To create the application, I first created a single empty views activities for the home page where the user would input their values for the address, latitude, and longitude. To do this, I first went into the resource file and created the home page. I added three buttons to allow a user input, and a few editViews to represent a user inputting values with textViews to showcase the values. I used the android:hint attribute to have it overlay the line without disrupting any inputs from the user.

Within the first activity java class files, I created code to take in the user's input by first referencing the buttons to a variable through the findViewById function. Once I had the buttons as well as the textViews ID within a variable, I created a few functions where each one was created for a specific cause of functionality. Functions were created to delete, add, and query the address inputted by the user which would then cross-check it with the initialized database. The user can add their addresses alongside the latitude and longitude while also searching for certain addresses that they look for. To make this assignment simpler, I chose to have all of the functionality on one page as having two views or more did not make sense when all the information could be stored and shared in a single location. As indicated by the sample screenshots, the app is in working condition where a user can add an address using a name such as “Ontario Tech University” and give its latitude and longitude. The user is then able to

search for it in the database and display it. Lastly, the user can delete it from the database using a method that involves cross-checking the given address and deleting it from the database

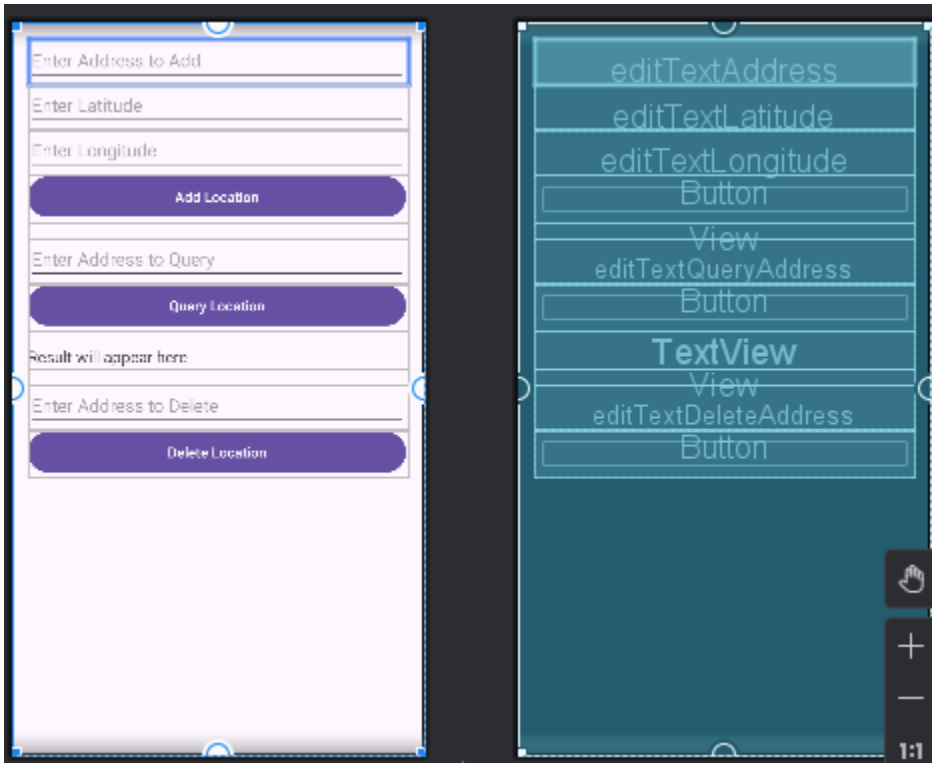


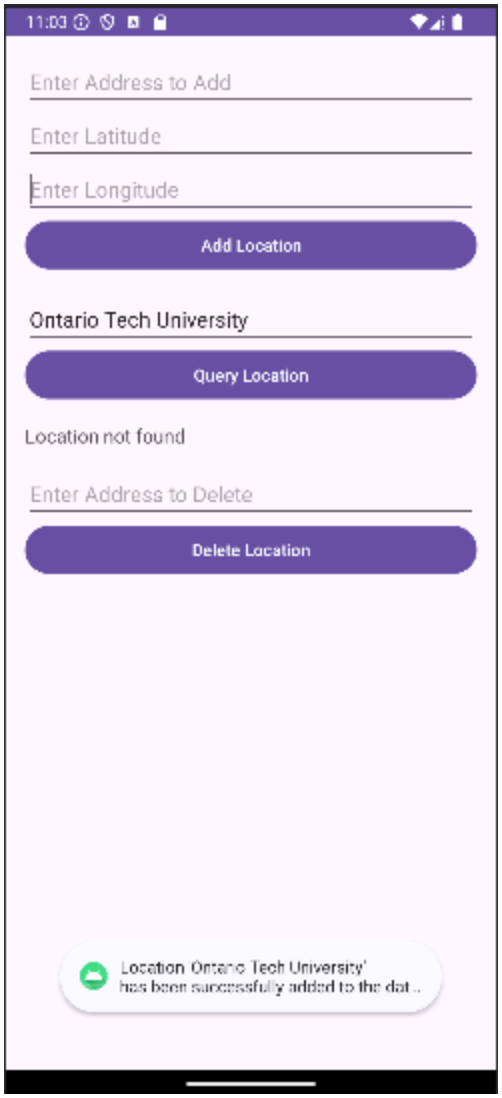
```
private void deleteLocationByAddress() {  1 usage
    String address = editTextDeleteAddress.getText().toString();
    if (address.isEmpty()) {
        Toast.makeText( context: this,  text: "Please enter an address to delete", Toast.LENGTH_SHORT).show();
        return;
    }

    boolean isDeleted = databaseHelper.deleteLocation(address);
    if (isDeleted) {
        Toast.makeText( context: this,  text: "Location '" + address + "' has been successfully deleted from the database", Toast.LENG
        editTextDeleteAddress.setText("");
    } else {
        Toast.makeText( context: this,  text: "No location found with address '" + address + "' to delete", Toast.LENGTH_SHORT).show()
    }
```

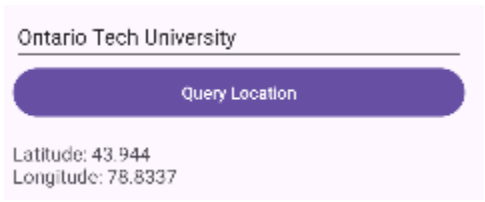
Conclusion:

In conclusion, the assignment was completed successfully where the user can complete three main functionalities. Those being; adding a location with its latitude and longitude, searching for a location and having it displayed on the app, and lastly deleting the location from the database.

Screenshots:







Github link:

https://github.com/MohammedHashmi/MobileDevelopmentAssignment2