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Project Description:

This project is a simple Android App where you can explore the different cities based on continents. On the first page, you will see a list of Continent. Then when you select a continent, it displays cards of cities where there is a picture and name of city. When you click on the city, it displays a button you can then see the picture, name, Language, and Population

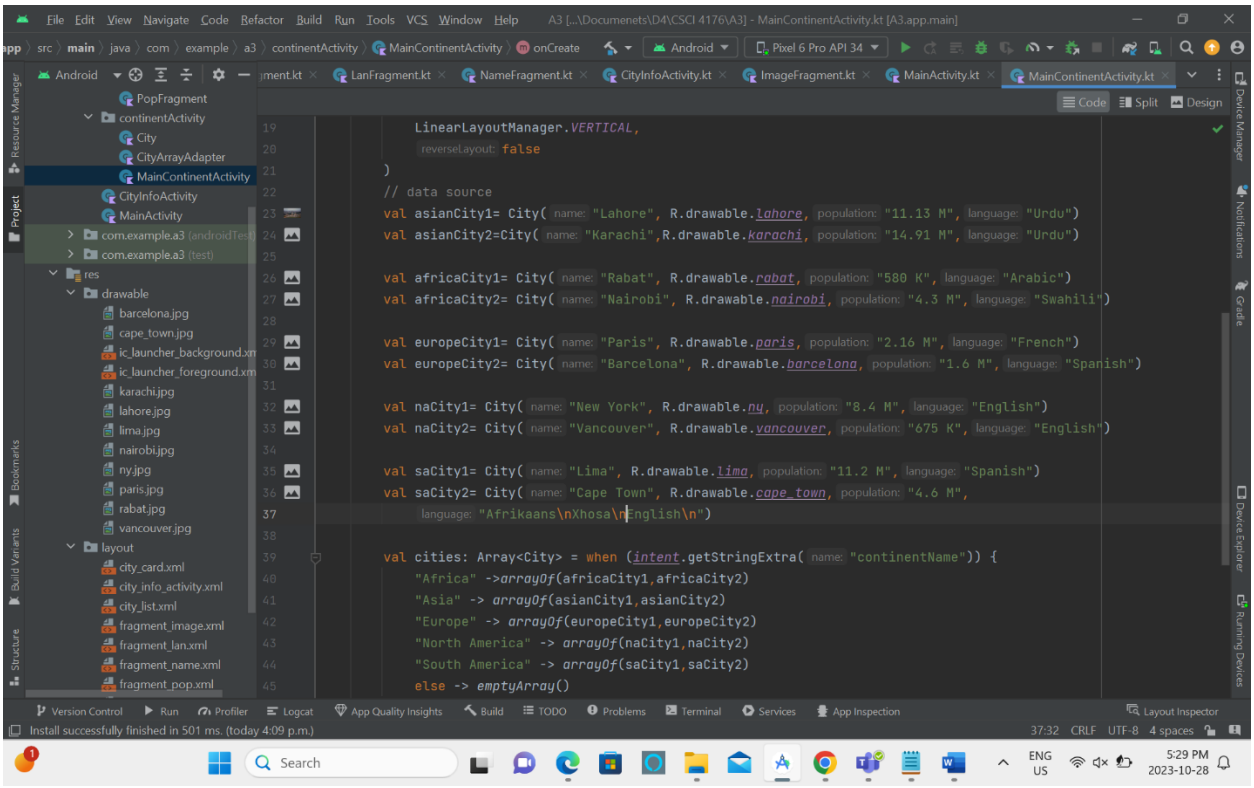
Technical Details:

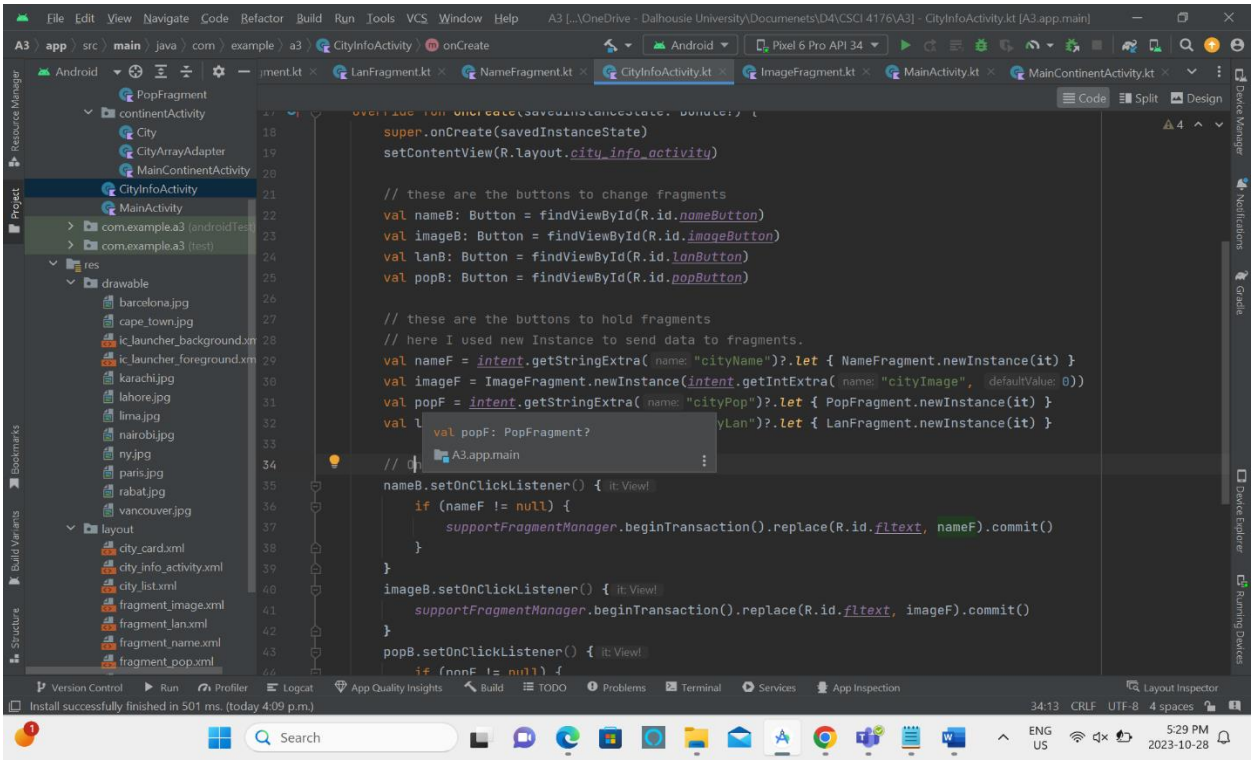
I have made four activities as you can see in the shots. In the main activity, it will host the **main_activity** layout. Here it will list all the continents using list view. After clicking on any of the continents, the intent will take you to the **mainContinetActivity**. Here it will use the **city_list** layout which further has **city_cards** inside. This class is where you put source data of cities and can be further transferred. This activity uses the data class of the **city** and for data inside the cards, it uses **cityAdapters.** In that class, it sends data to **cityInfoActivity** through Intents and takes it to the same class through intent if clicks on any of the cards. Now here it uses the **city_info_layout** which has 4 buttons for each detail and after that a frame Layout for fragments. Each button has a respective fragment attached which further has their layouts. To change to data inside of fragments, "new Instances ()" are used to send and manipulate data. That is the project structure.

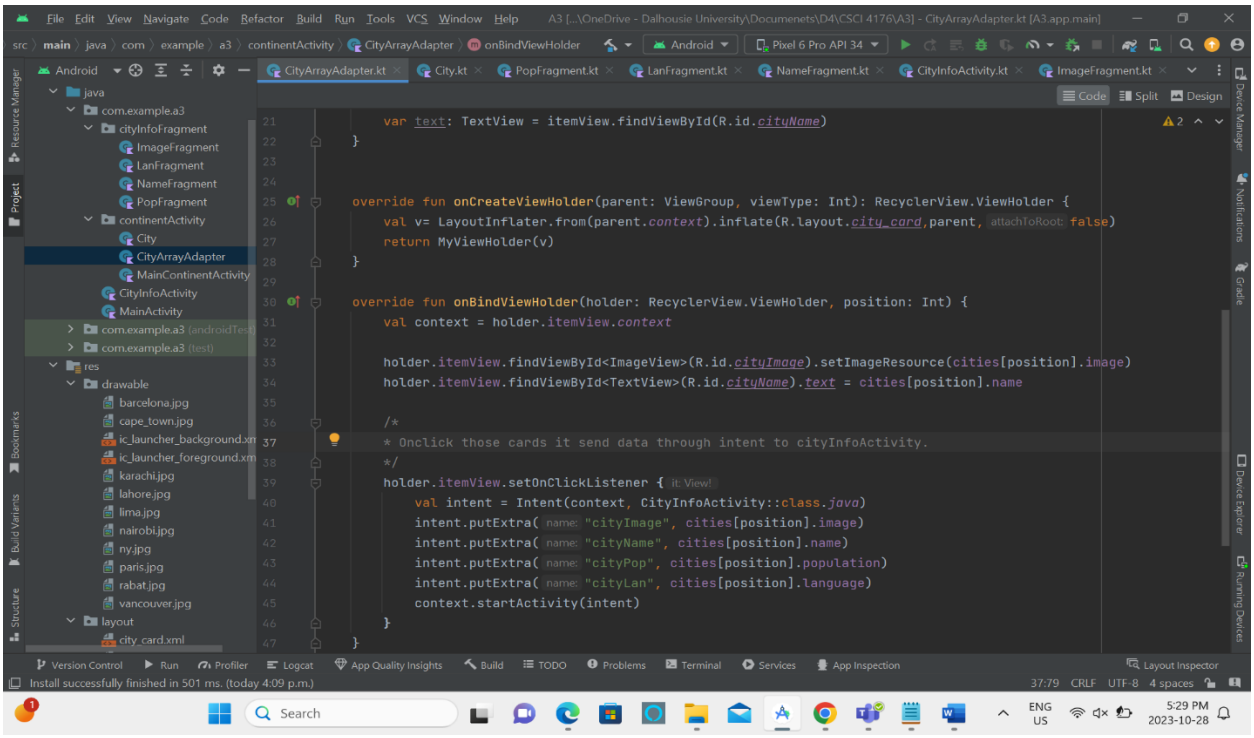
All the activities that are mentioned before were also declared in **AndroidManifest**. All the images are stored in "res/drawable".

Important Codes: -

Some of the important codes are: -







Challenges & Learning Points:

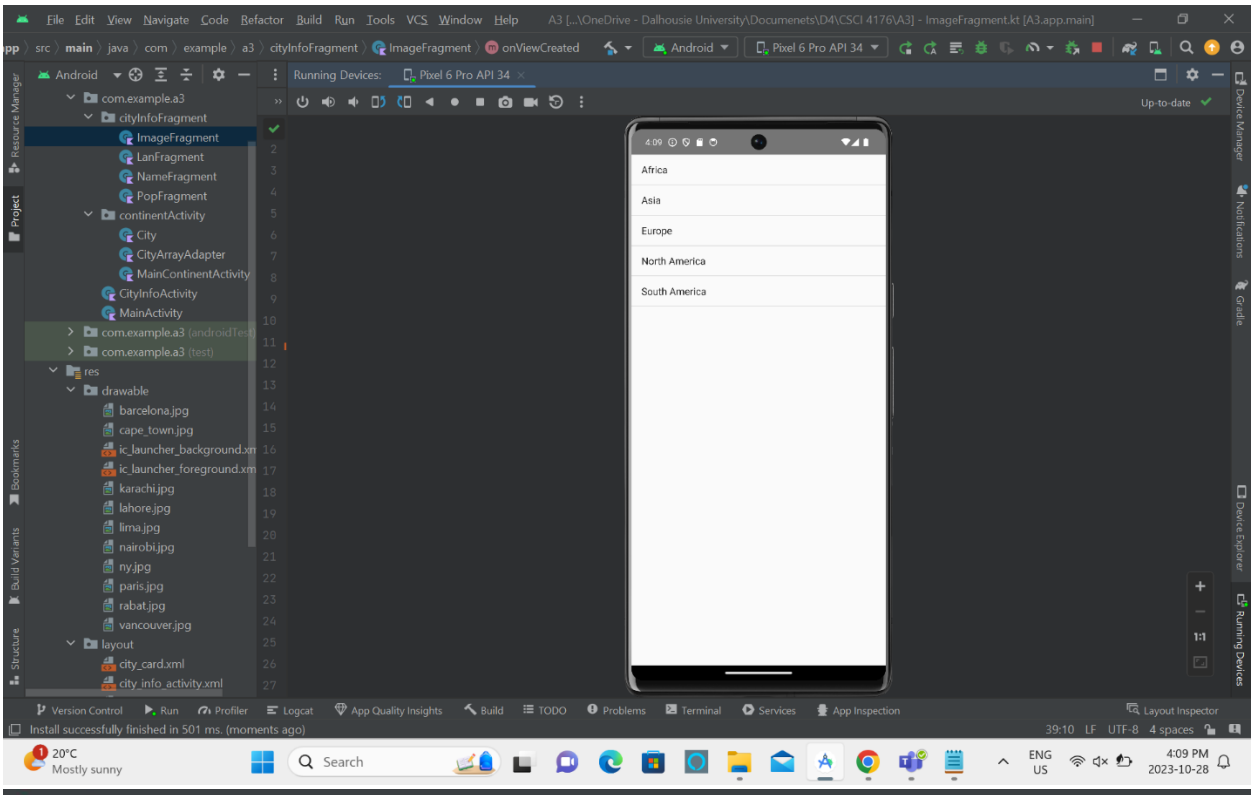
The main challenges were: -

- Using Adapters to host multiple views.
- Sending data through intents in the fragments.
- Hosting multiple fragments.

The learning points were: -

- How to use adapters
- How to implement multiple views
- How to use instances
- How to use drawable resources

Results & Screenshots: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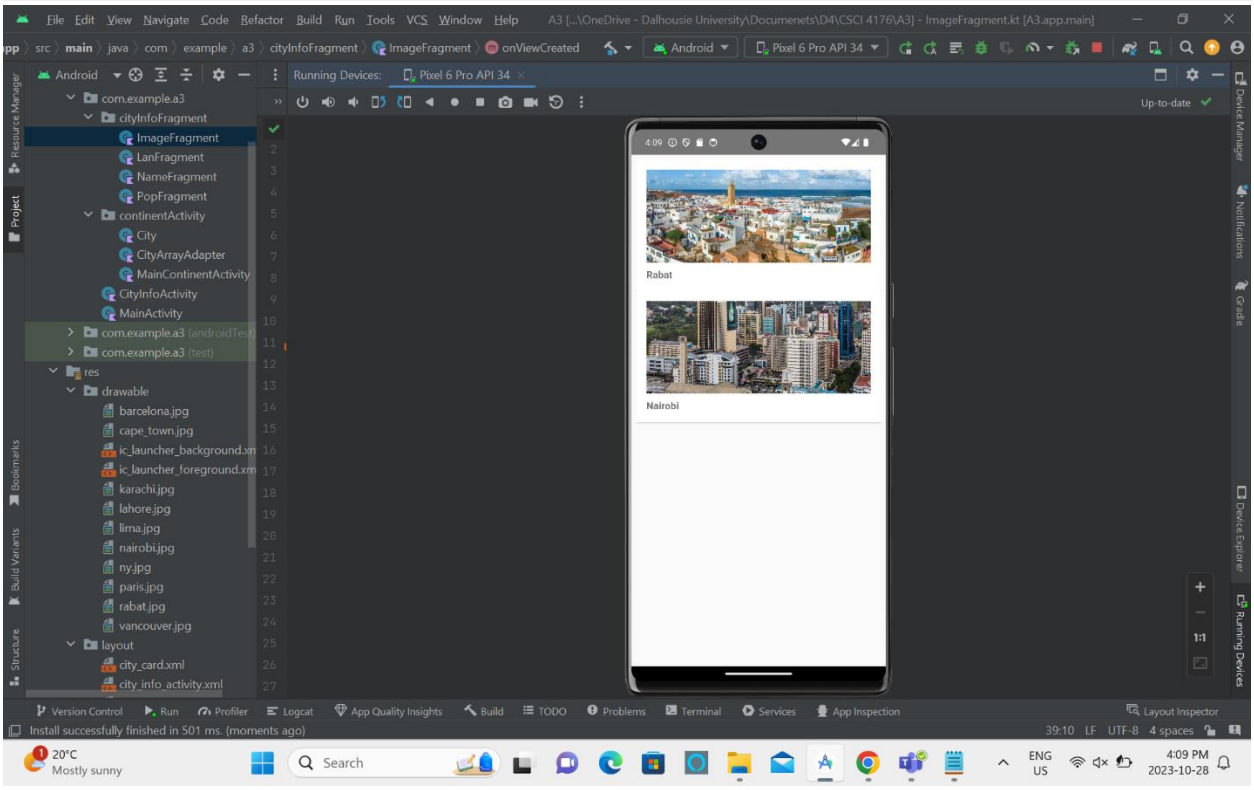
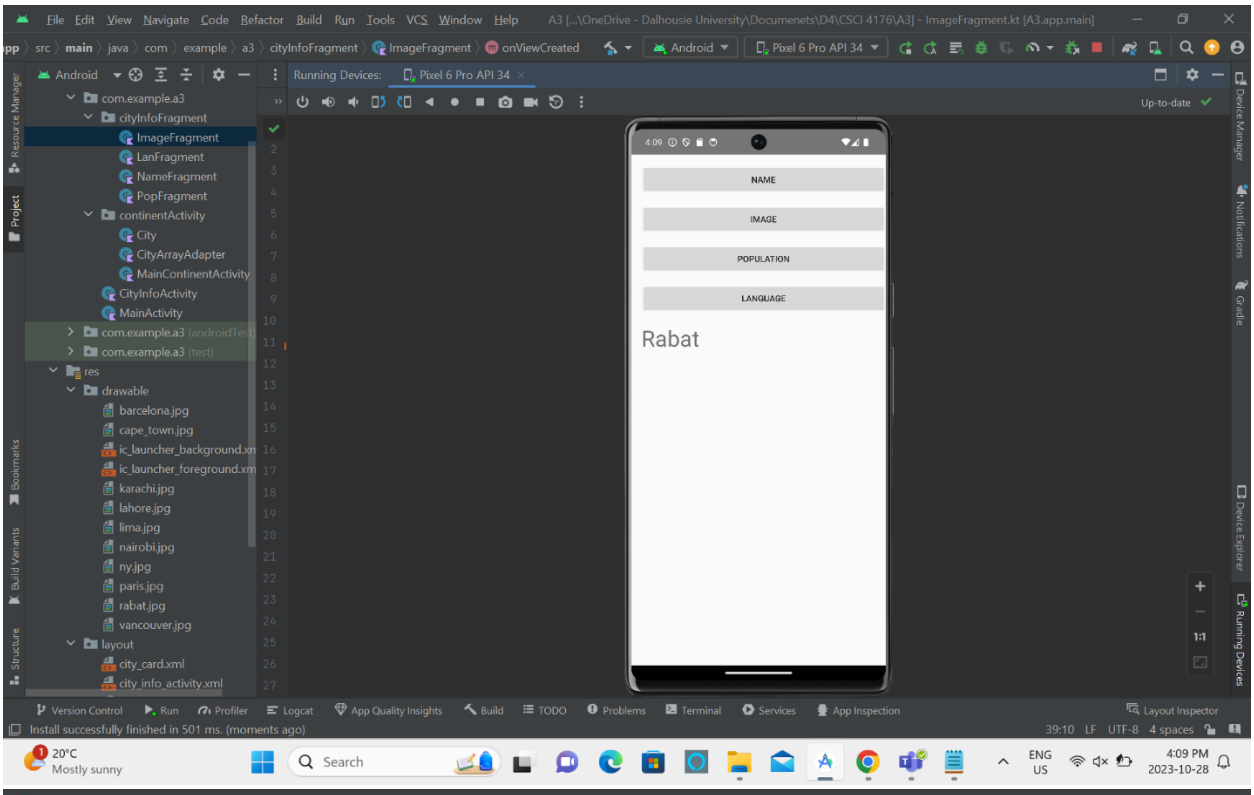
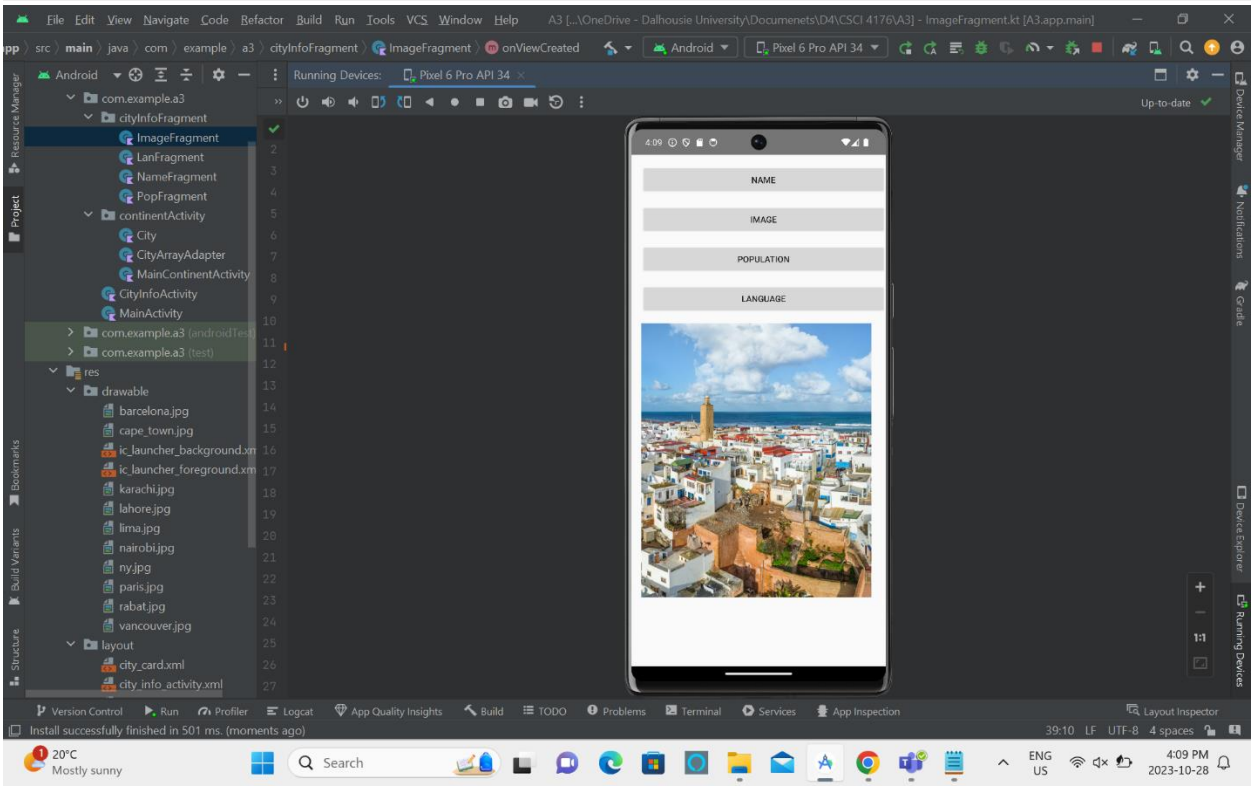
Europe
North America
South America


Rabat
Nairobi


NAME
IMAGE
POPULATION
LANGUAGE
Rabat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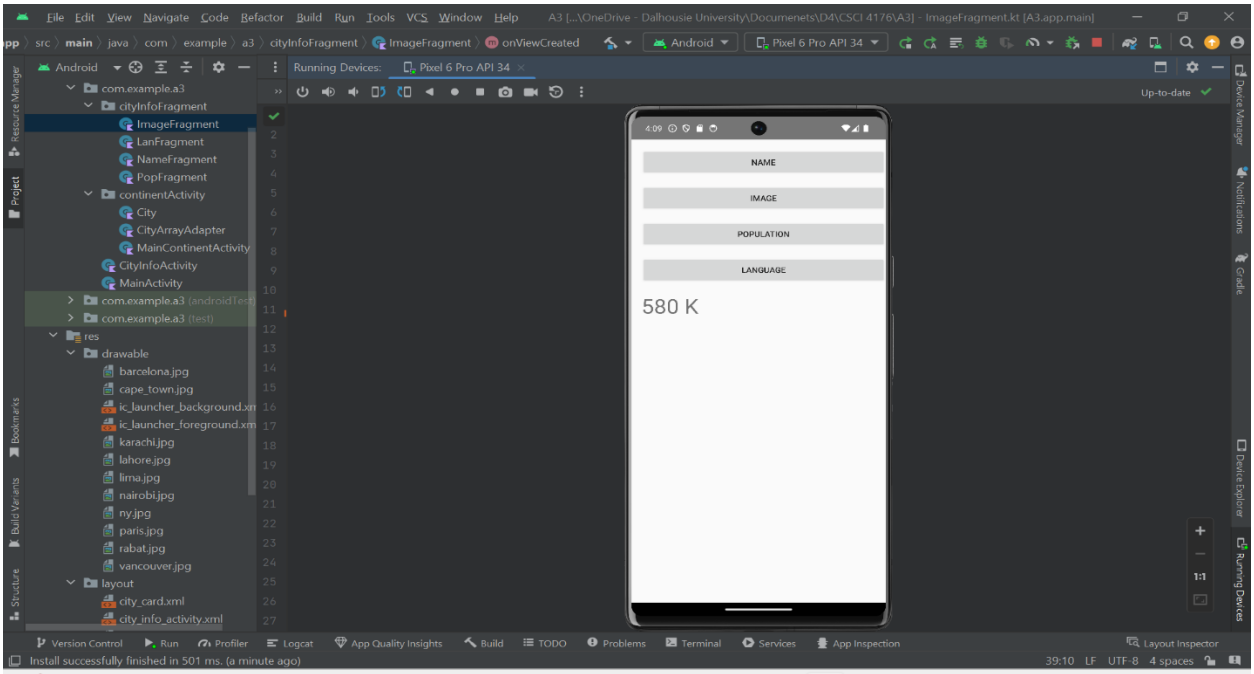

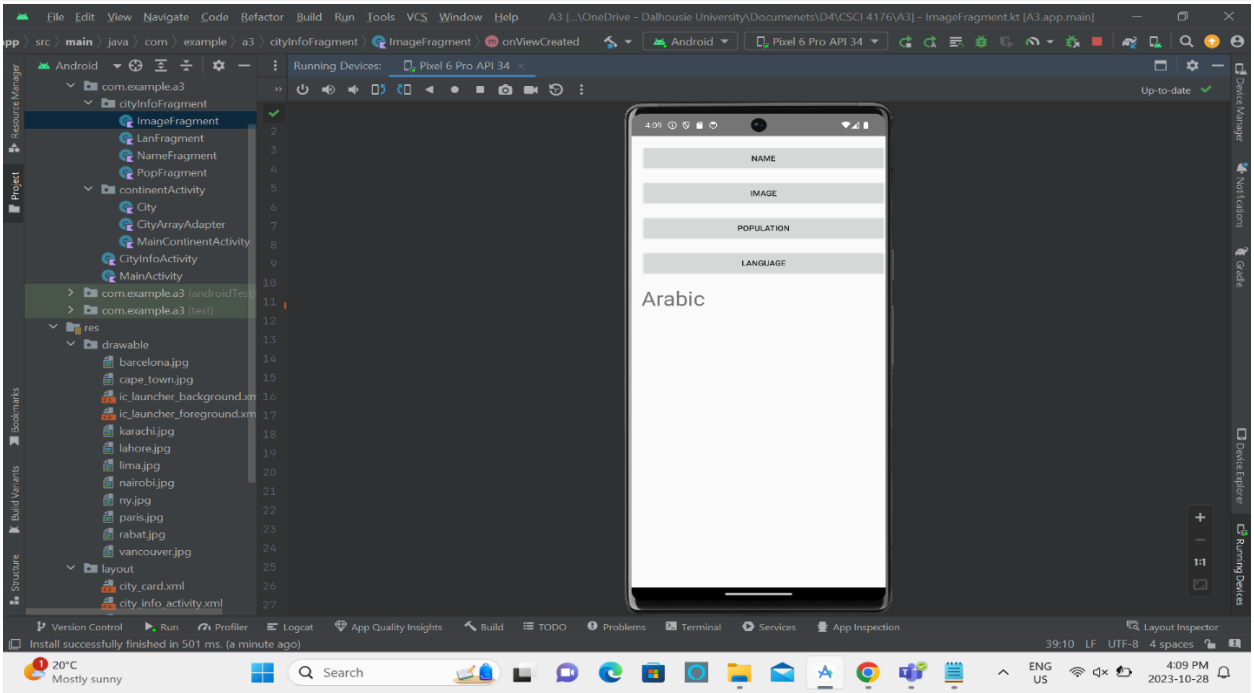

Conclusion: -

Overall, it was a great learning experience. One of the features that I would like to add is to go back to navigation. Also, I would like to use APIs to display to fetch data.

References of Images

Lahore: - https://pixabay.com/images/search/lahore/

Karachi: - https://en.wikipedia.org/wiki/File:Karachi_City.jpg

Rabat: - https://www.airpano.com/360article/rabat-morocco/

Nairobi: - https://en.m.wikipedia.org/wiki/File:Nairobi_City_centre_including_Basilica.jpg

Paris: - https://stock.adobe.com/ca/search?k=paris

Barcelona: - https://www.gettyimages.ca/photos/barcelona-spain

New York: - https://www.istockphoto.com/photos/new-york-city

Vancouver: - https://www.pexels.com/search/vancouver/

Lima: - https://www.istockphoto.com/photos/lima-peru

Cape Town: - https://www.istockphoto.com/photos/cape-town