## Final Exam - Notes I am making along the way

31 May 2022 16:24

- For my **CRUD** parts (*Create-Read-Update-Delete*)
  - Create User Registration
  - Read Reading weather info from the API, as well as reading if users exist or not on the server
  - Update Updating the users favourite cities
  - o <u>Delete</u> Removing from the users favourite cities/Users account deleting
- The database will be **Firebase**, for as far as I know its the easiest to use. So on the Firebase website I made a new project using my 02 Gmail account.

Called it Final Exam Mobile Apps SC, then went through the process of setting up the .JSON file to add to my android project.

From there, in the Tools part of Android studio I went into Firebase then User authentication and registration as well as the Realtime Database stuff:

```
implementation 'com.google.firebase:firebase-auth:21.0.5'
implementation 'com.google.firebase:firebase-database:20.0.5'
implementation platform('com.google.firebase:firebase-bom:28.2.1')
```

- I ended up only creating new Users as well as authenticating if the already exist. Didn't have the time nor patience to do user deletion nor user info updating.
- The two accounts I made are using my 02 Gmail as well as a test@gmail account, both of which have 123456 as their password.
- Before I started working on the project, I had to import a dependency for data that my app would get from an External API.

Two of them specifically, one for fetching the data from the API (<u>Volley Library</u> as a JSON parsing {I could also have used Retrofit Library but went with Volley this time}) and the other is Picasso (Picasso's link can be found <u>here</u>). Picasso is used for image loading.

- I also had to add a dependency for using the users current location, but that is a basic one that google offers anyway.
- Inside the res folder, values, colors.xml I added two new colours: One for the background of my app and the other
- In here as well, inside the themes folder I changed the parent part of the style tag from DarkActionBar to NoActionBar.
- While making the layout for the first page, I added inside of res/drawable I added a search vector symbol.

• The API's site is <a href="https://www.weatherapi.com">https://www.weatherapi.com</a>. Its free :D Sadly I have to make an account though.

Using singimail and Simba2002 as the pass.

The API key is (8896c64c7ca84df6a73151235223105)

The parameters that I'll be using/showing are: time, temperature, icon, windSpeed from the JSON file you get when the app puts in the GET request from the API.

- Inside of drawable, I made a new item called card\_background.
- Weather\_rv\_item.xml is the layout file for each card that will be generated and so on in the app itself.
- Inside the Weather RV Adapter class, using Picasso for image loading, I have to reformat the icons/images to a different style before they can be loaded.
- The links for the background images are:

	Day	https://w0.peakpx.com/wallpaper/520/819/HD-wallpaper-clouds-sky-day-bright.jpg
0	Night	
		https://i.pinimg.com/originals/f5/90/ec/f590ec2fbf447d79556205cb264
		<u>f43bc.jpg</u>

• I went on Flaticon.com and found an icon to use instead of the default one, <a href="https://cdn-icons-png.flaticon.com/512/648/648198.png">https://cdn-icons-png.flaticon.com/512/648/648198.png</a> this is the link