<u>Firebase</u>

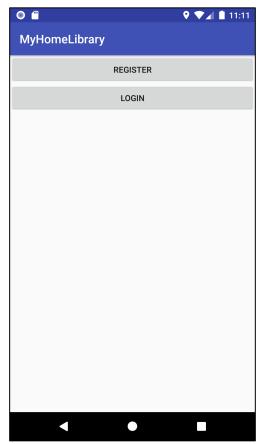
Objectives:

Familiarize yourself with Firebase Database. Create an application that uses Firebase Authorization and Database.

Once you've completed this lab you should have a better understanding of how Firebase works. You should know how to retrieve and post data from a Firebase Database, how to authenticate between a Firebase Database and how to use the data in an application.

Overview:

Using the app depicted below, the user will first click on register and register with an email and password (you don't necessarily need to use university email, any email or password will suffice). After this, click on register. This creates a new user inside the firebase console. Once done, you can now



login using the login button in Main Activity (use the same email and password to login). You can then add an author, select a country and add them to the firebase database (also to the list).

You can also click on an author present in the list, to select a title, and a rating to add it to the firebase database (which also adds it to the list).

Run the screencast video (Lab6 walkthrough.mp4) to see the app in operation.

Implementation Notes:

- 1) Checkout from the upstream repo, it contains the Lab6_Firebase. Make sure to push it to your origin right away before you start implementing any code.
- 2) Implement loginUserAccount in LoginActivity.kt.
- 3) Implement updateAuthor, addAuthor and deleteAuthor. Set the button listeners for update and delete button and the functions in onStart for clearing the previous list and adding new authors. All the functions are present in DashboardActivity.kt
- 4) We have provided helpful comments in each of the functions, explaining what needs to be done.
- 5) There are no test cases for this app.

Submission:

To submit your implementation, save and commit your local changes and push to your origin. Make sure to log into your gitlab account and verify that your changes are there.

Note:

This was the structure of the database for the example shown in class on Tuesday.

```
myhomelibrary-838ac

- authors
- Lqo8aKUylKPhhiDhqgl
- authorCountry: "America"
- authorld: "-Lqo8aKUylKPhhiDhqgl"
- authorName: "helo"

- titles
- Lqo8aKUylKPhhiDhqgl
- - Lqo8f6i_CQwLqwP0reP
- id: "-Lqo8f6i_CQwLqwP0reP"
- rating: 3
- titleName: "hola"
```

This is the structure to be implemented by you

```
myhomelibrary-838ac

- authors
- hyW6l7G9bJYFevQlVbAaxRLLcng2
- LqoA8grZbxhnMaWCQjG
- authorCountry: "America"
- authorld: "-LqoA8grZbxhnMaWCQjG"
- authorName: "Temp"

- titles
- LqoA8grZbxhnMaWCQjG
- LqoAAgLxtAPariYmf6e
- id: "-LqoAAgLxtAPariYmf6e"
- rating: 4
- titleName: "Temp"
```