

Firestore

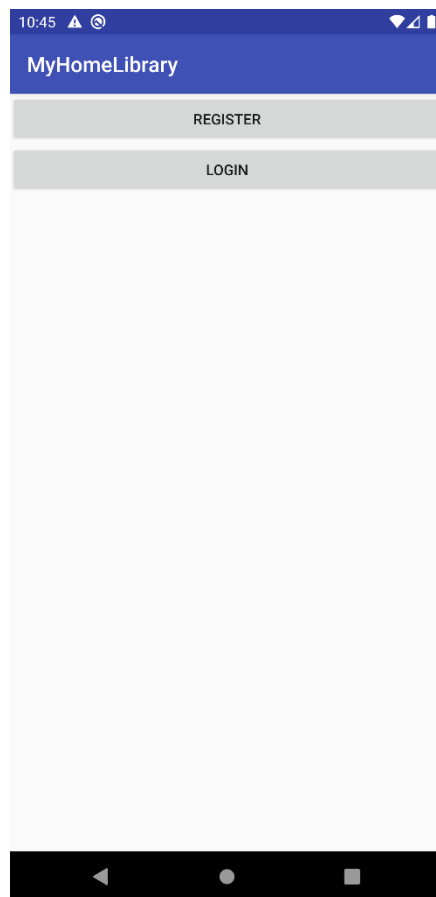
Objectives:

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

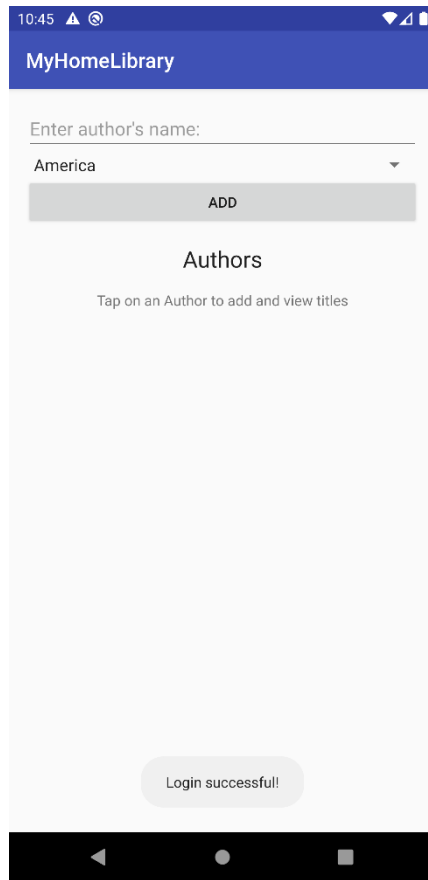
Once you've completed this lab you should have a better understanding of how Firestore works. You should know how to retrieve and post data from a Firestore Database, how to authenticate between a Firestore Database, and how to test/use the data in an application.

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 login. This creates a new user inside the firestore console.



Once done, you can now login using the login button in MainActivity (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). You can remove them by long pressing them.

Implementation Notes:

- 1) Checkout from the upstream repo, it contains the Lab7_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 in DashboardActivity.kt. Set the button listeners for update and delete button and the functions in showUpdateDeleteDialog for clearing the previous list and adding new authors.
- 4) Implement validPassword in Validators.kt. Only passwords with 4-8 characters should be allowed.
- 5) Implement testPasswords in TestValidation.kt. Add two tests for valid passwords and two for invalid passwords.
- 6) For grading, we will be testing if you can login to the database and add authors manually. We will also be checking your password validation methods.

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.



This is the structure to be implemented by you

