



Lebanese American University

School of Arts and Sciences

Department of Computer Science and Mathematics

CSC431 (Mobile Applications)

Assignment 01 (Android Development)

A Report Done By

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And presented to Mrs. Iman Khalil

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Table of Contents

I.	Assignment .zip File	3
II.	ProNotes.....	3
I.	Login Activity	3
II.	Main Activity	6
I.	Home Fragment	8
II.	All Notes Fragment.....	10
III.	Archive Fragment	11
IV.	Favorites Fragment	12
V.	About Us Fragment.....	13
VI.	Settings Fragment	14
VII.	Logging Out	16
III.	Supported Languages.....	17
IV.	References.....	17
	Navigation Drawer.....	17
	Material Design.....	17
	Android	18
	Debugging.....	18
	Themes.....	18
	Lists.....	18
	Different Languages.....	18
	Java	18
	Date And Time Objects.....	18
	File Output Stream.....	18

I. Assignment .zip File

The zipped source code of this assignment can be accessed via the following link:

<https://drive.google.com/file/d/1VVqYaTRBYKMJvIPBNueNtF4yP9IO9UTq/view?usp=sharing>

II. ProNotes

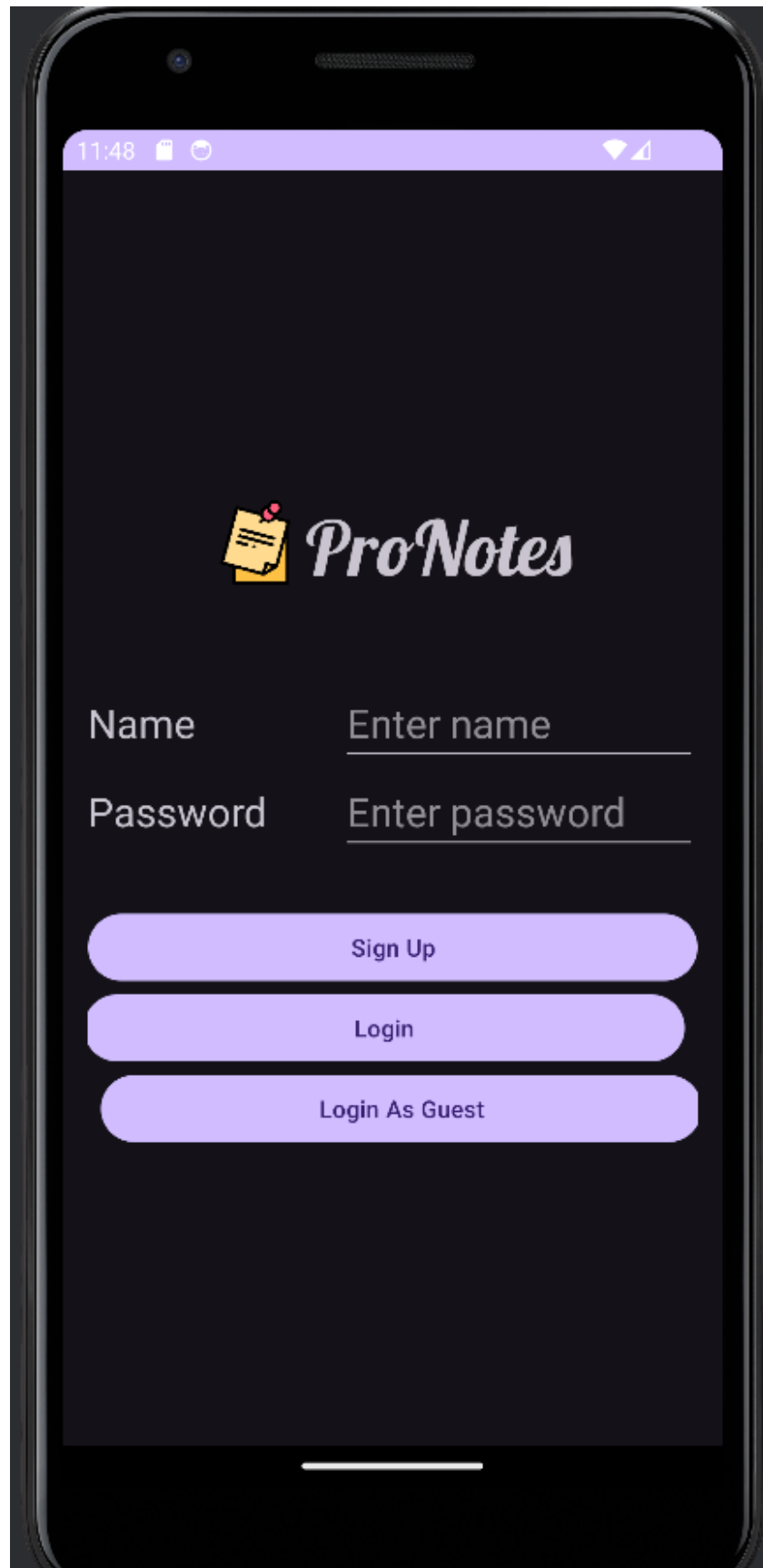
ProNotes is a simple, yet modern-looking, note-taking app that handles the basic features of adding notes, deleting notes, starring a user's favorites, archiving notes, setting an alarm to serve as a reminder of a note, and sharing notes.

The application consists of two main pages: the login page and the main page.

Following is an abstract functional description of each. Follow the above link to the .zip file to check the source code of this application.

I. Login Activity

The Login Activity is the default page a user lands on when initially starting the application. As its name indicates, this activity provides the user with the option to sign up with a new username and a password of the user's choice or login with an existing username (either one they have previously created or one of the two defaults that are hardcoded into the application: admin and guest users).

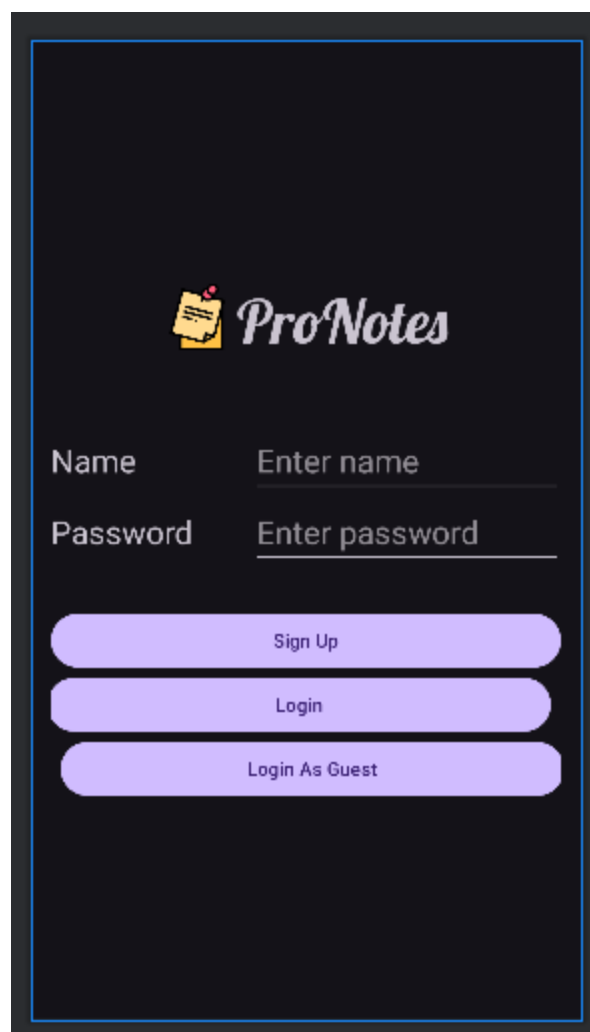


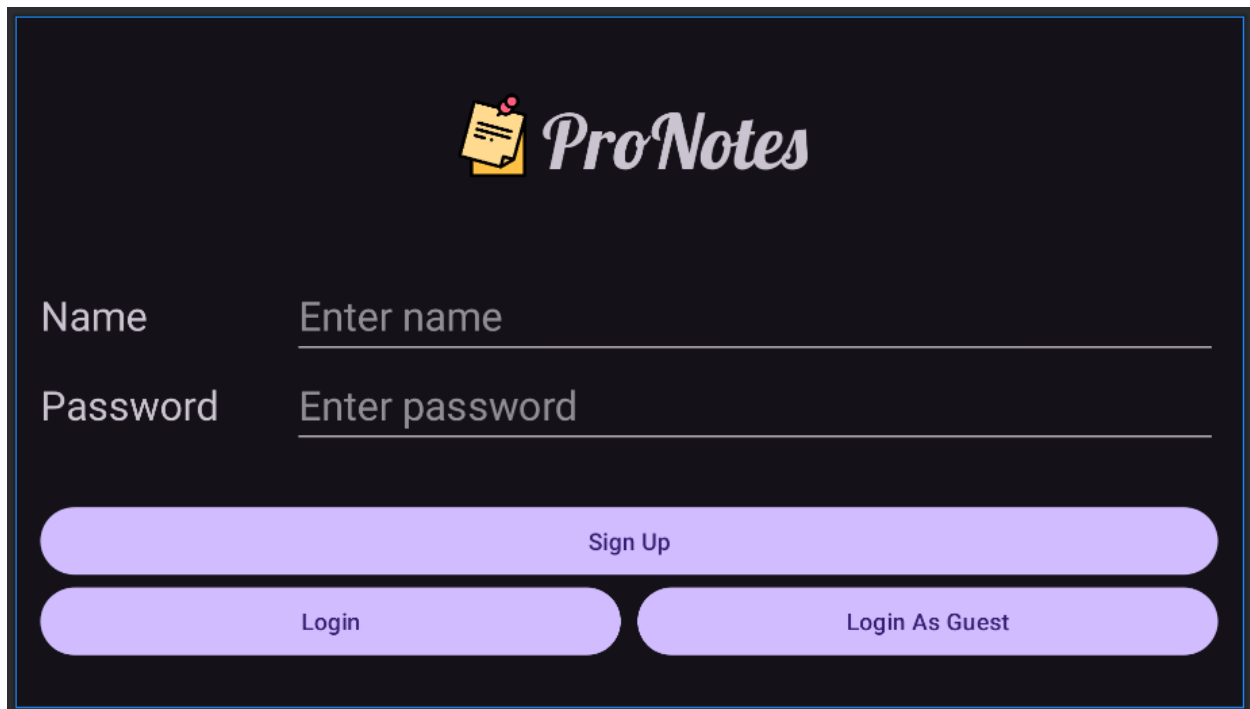
If a user enters illegal input, such as invalid credentials or attempt signing in with an already-existing user, the user would either be warned with toast messages or snackbar actions.

Once a user successfully logs in, the application automatically redirects them to the Home Page fragment in the Main Activity.

The Login Page is one of the two views that supports different layouts for portrait and landscape orientations. The only other view that also supports landscape view is the “About Us” section (discussed below). All other pages are neatly designed to fit both portrait and landscape orientations elegantly.

Following is a comparison of the portrait view and the landscape view of the Login Activity.



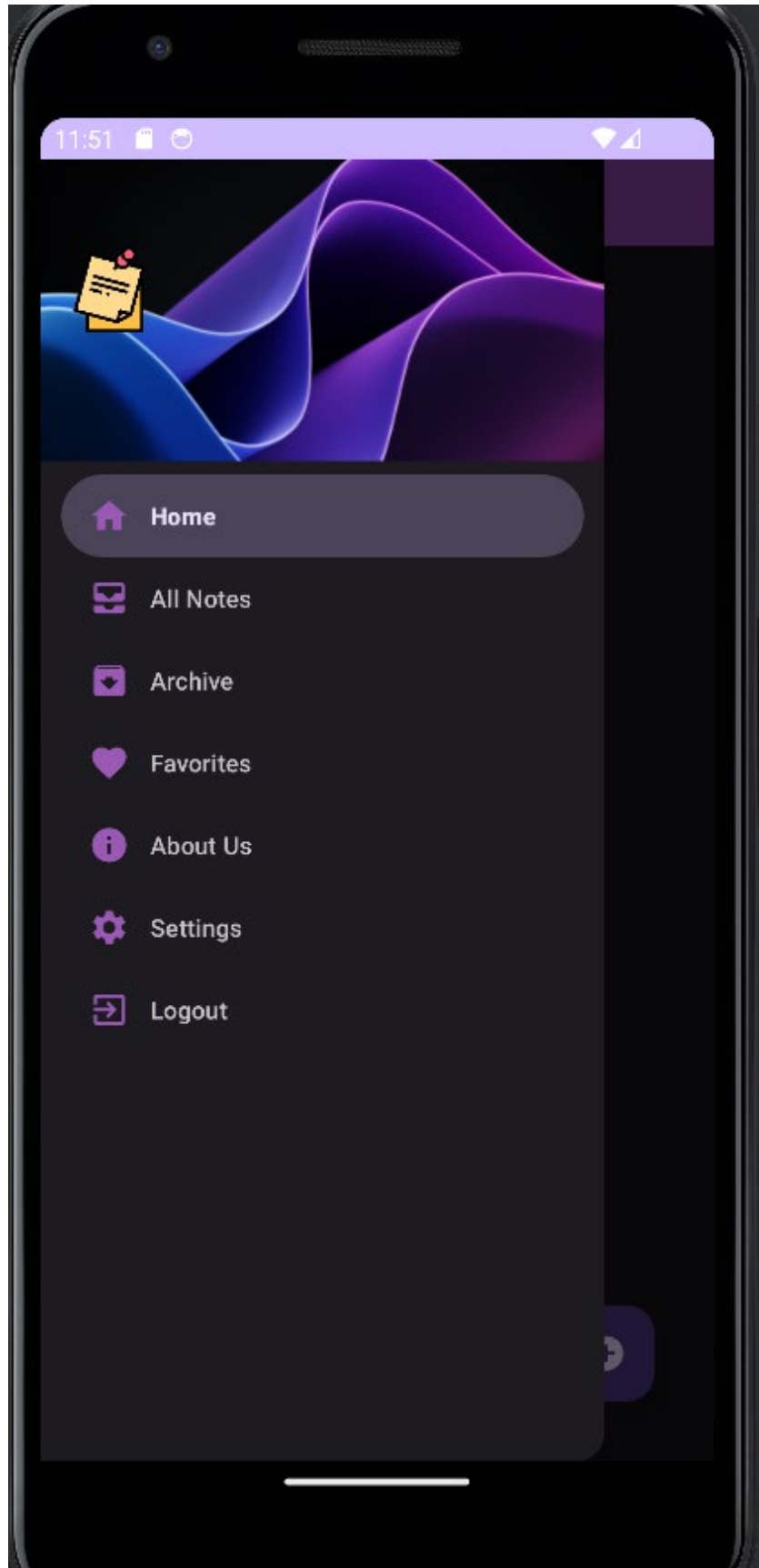


The screenshot shows the login and signup interface for the 'ProNotes' app. At the top center is the app's logo, which consists of a yellow notepad icon with a red pushpin and the text 'ProNotes' in a white, stylized script font. Below the logo are two input fields: the first is labeled 'Name' and contains the placeholder text 'Enter name'; the second is labeled 'Password' and contains the placeholder text 'Enter password'. Below these fields are three buttons: a large purple button labeled 'Sign Up' that spans the width of the input fields, and two smaller purple buttons at the bottom, 'Login' on the left and 'Login As Guest' on the right.

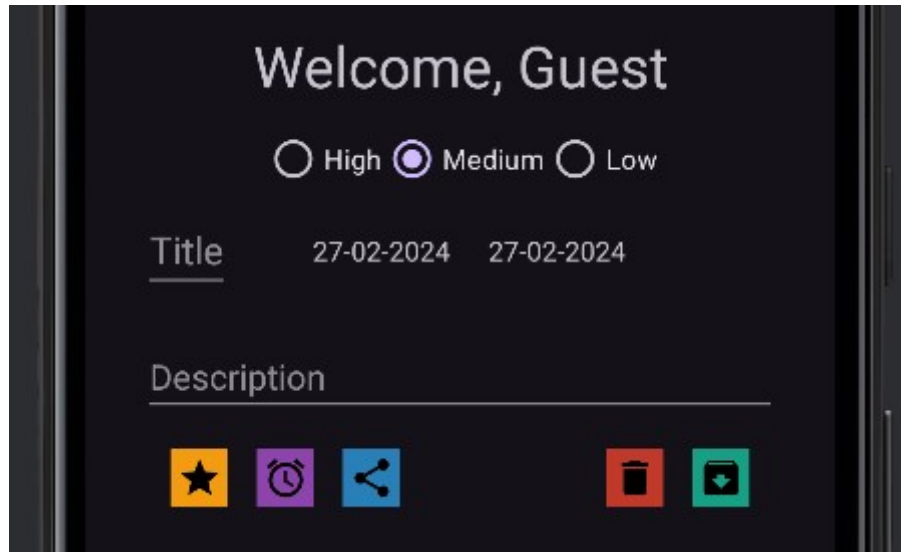
II. Main Activity

This activity is the central hub of all other pages.

It incorporates a navigation drawer to the start of the screen which includes all the pages discussed in this section as shown in the below screenshot:



This is where the user typically interacts with the notes in the form of curated cards.



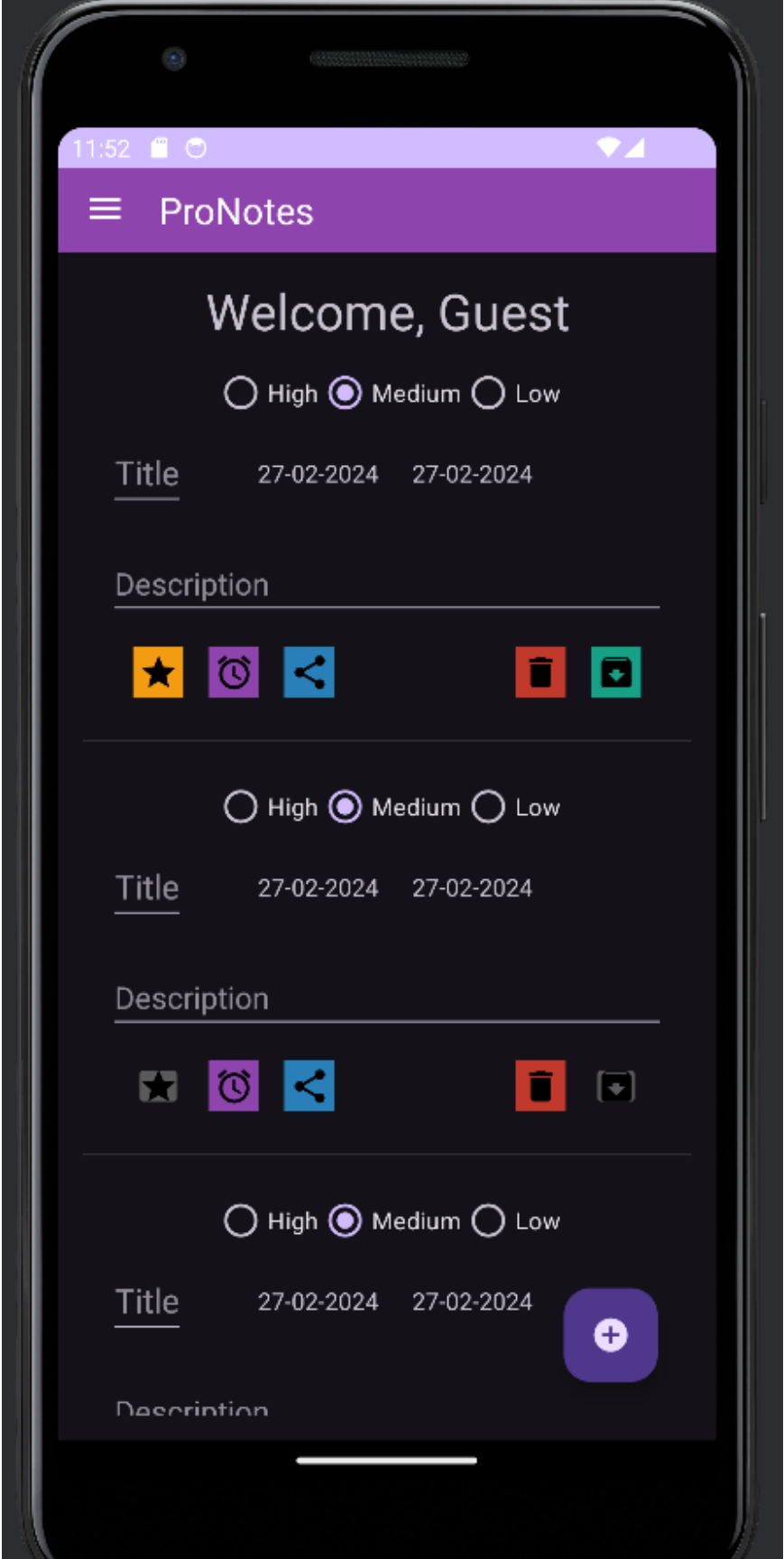
Each note has an accompanying toolbar in addition to its title, description, the date it was created, and the date it was last edited.

The top group of the note offers the user the option to choose the note's priority between high, medium, and low.

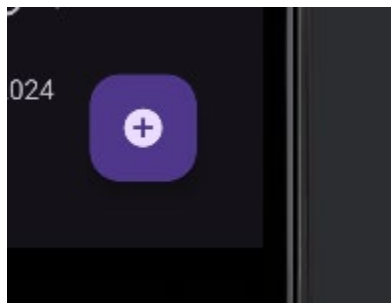
The alarm icon allows the user to set an alarm and the share icon allows the user to share the note.

I. Home Fragment

The Home Fragment is the default page the user lands on after successfully logging into the application. It contains all the unarchived notes of the logged in user.



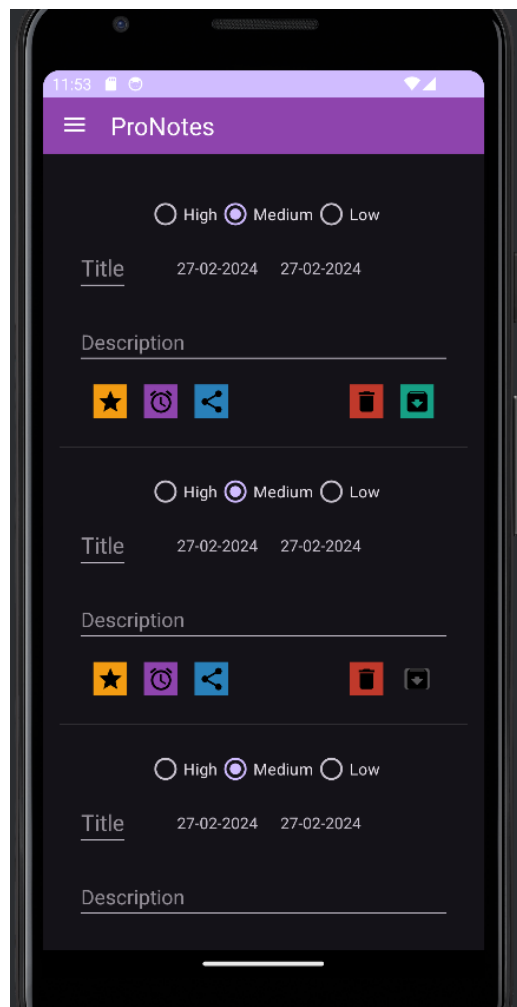
This page also has a unique feature in the form of a floating button which allows the user to add notes directly from the home page.



The following three fragments are a variation of the Home Fragment as they encompass a similar logic excluding the ability to add new notes (i.e. the user can only add notes from the home page).

II. All Notes Fragment

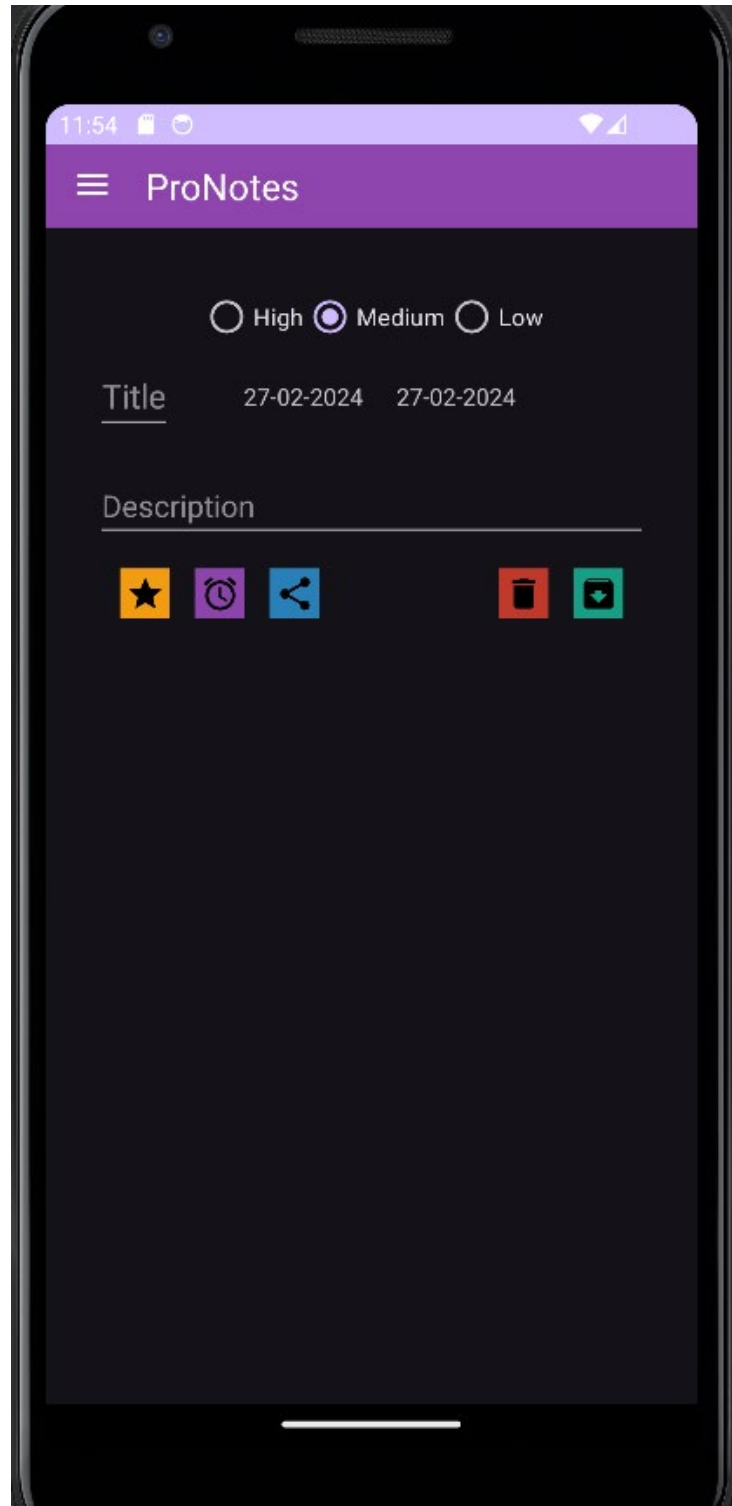
As the name suggests, this fragment shows the user all of the corresponding un-deleted notes.



As this screenshot shows, favorites, archived, and unarchived notes are shown in this view.

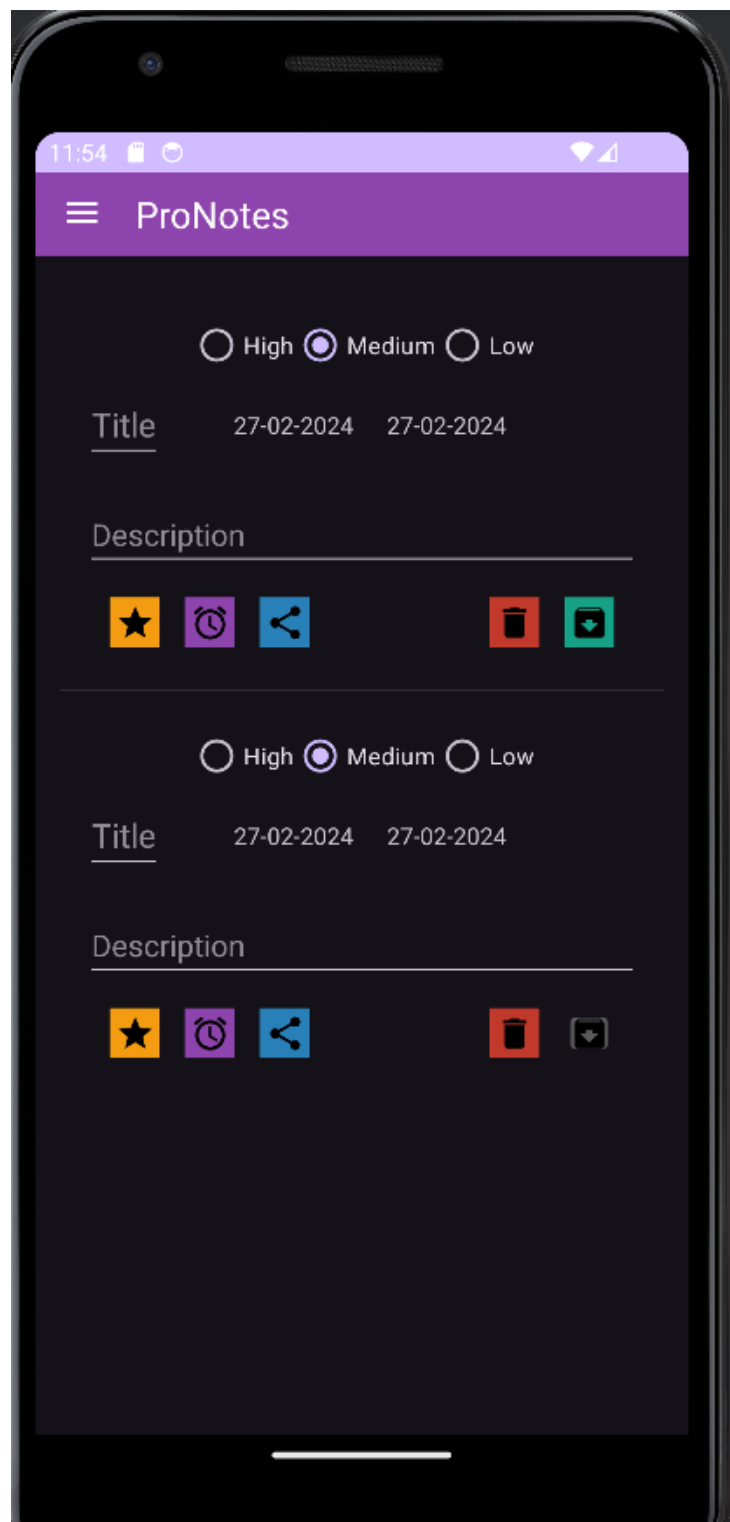
III. Archive Fragment

This fragment shows the user all of the corresponding archived notes.



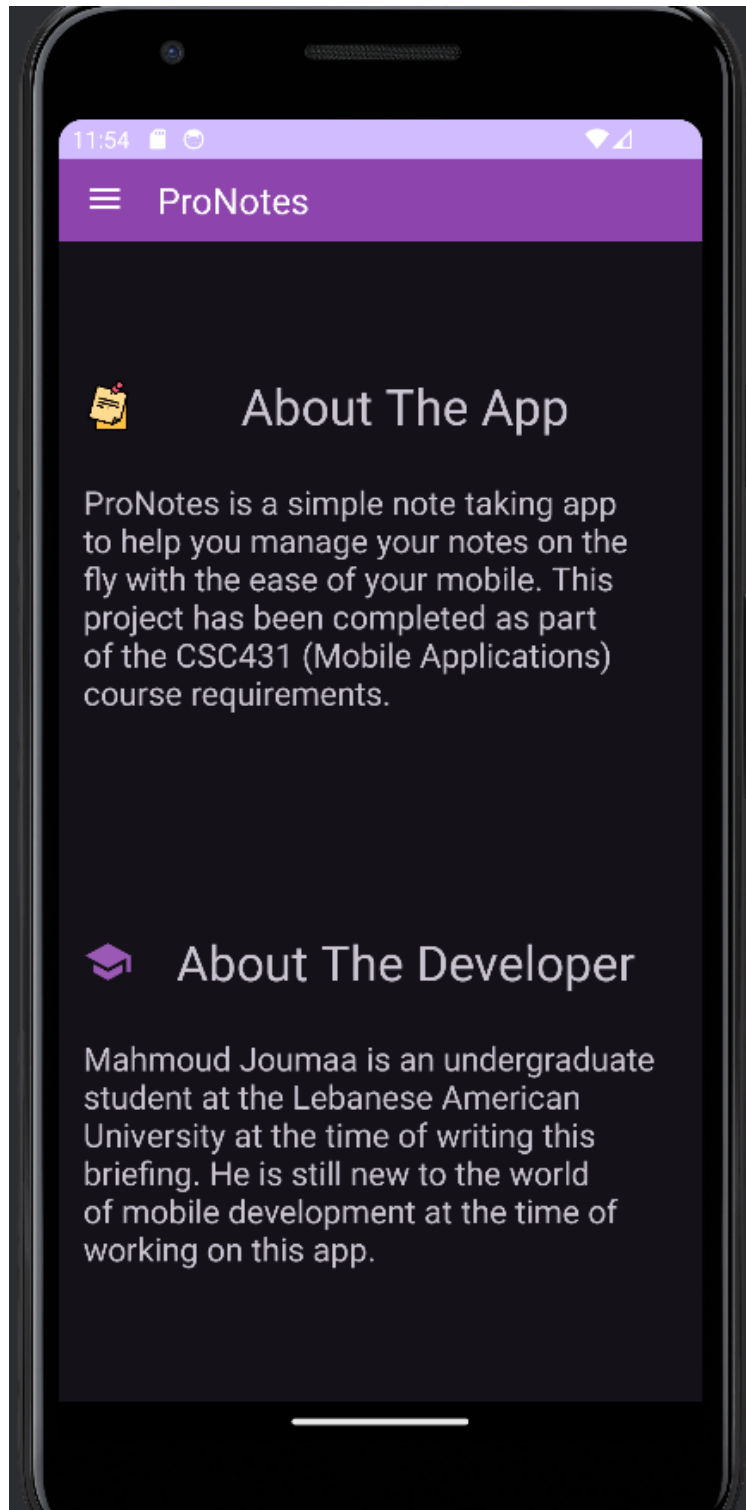
IV. Favorites Fragment

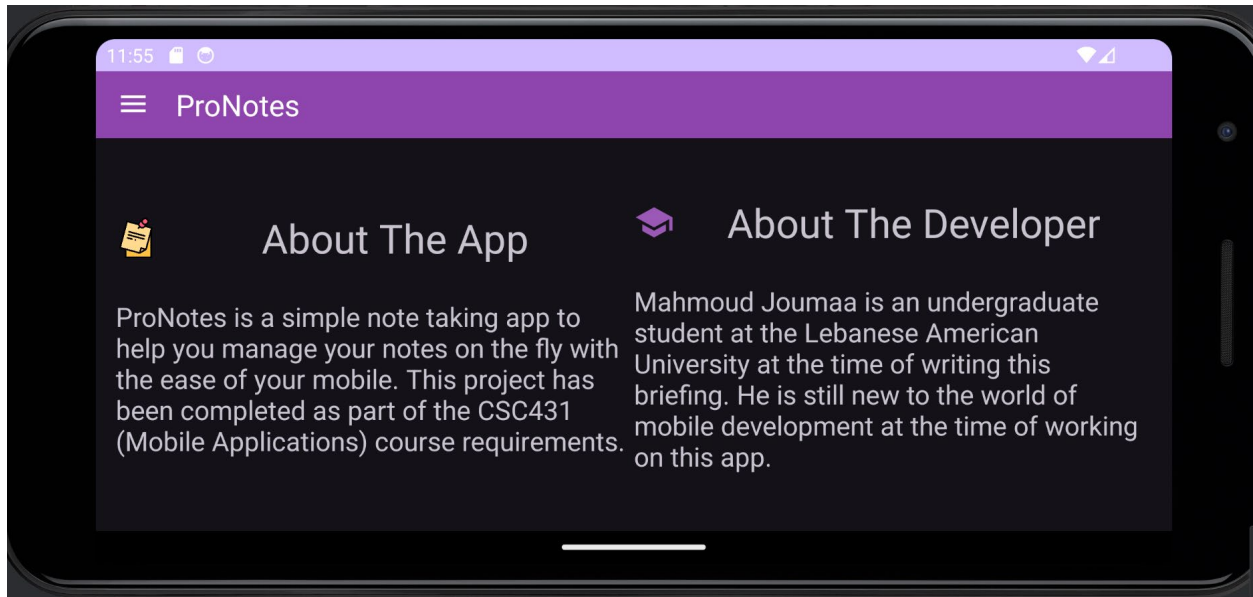
This fragment shows the user all of the corresponding favorited notes.



V. About Us Fragment

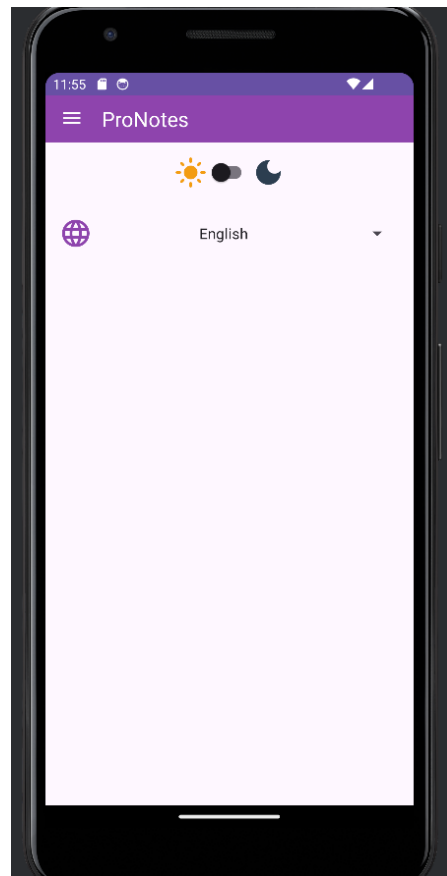
This fragment is a simple static page that shows the user a quick briefing about both the app and its developer. Following is a comparison of the portrait and landscape views of this app.

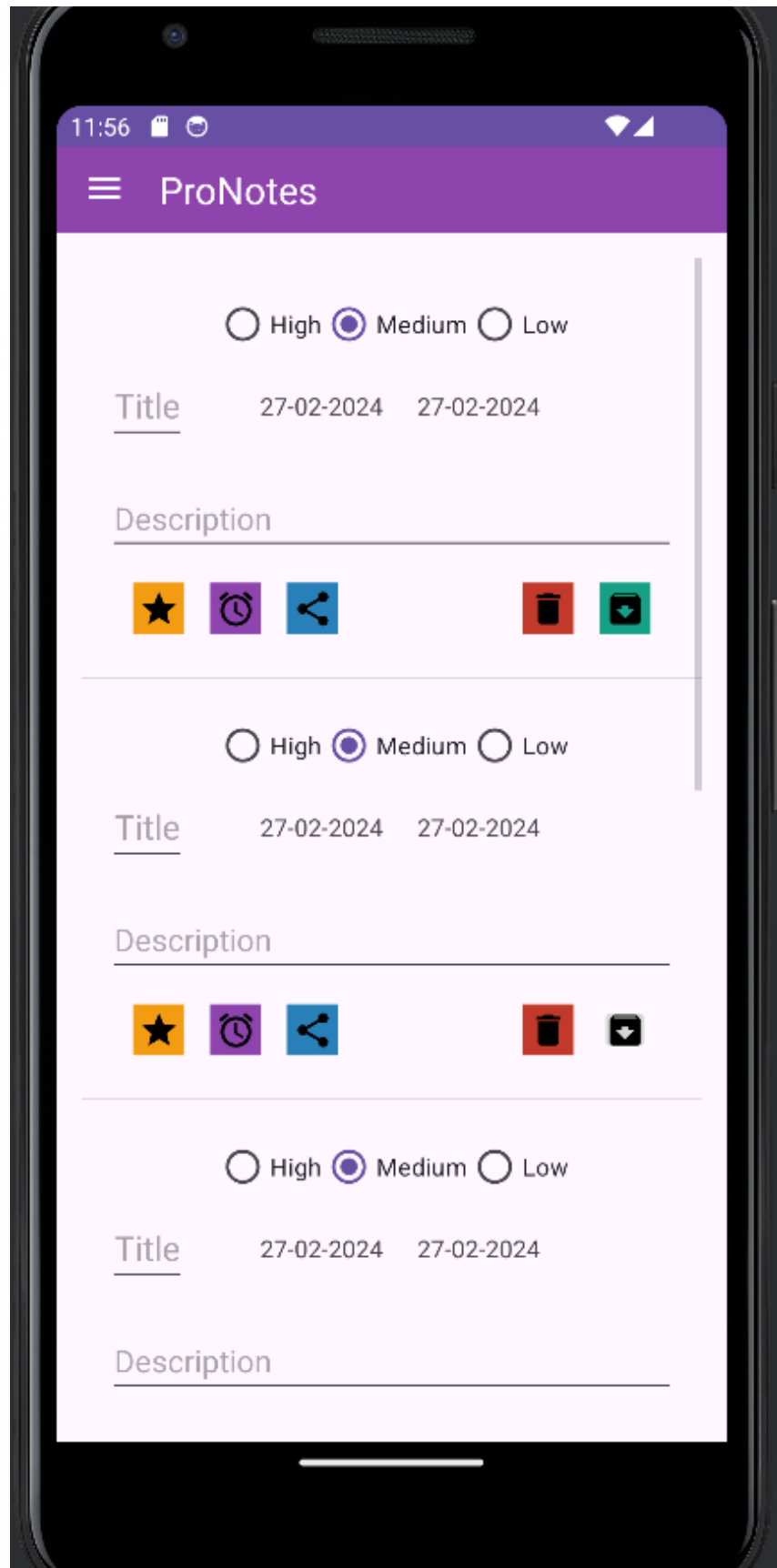




VI. Settings Fragment

This fragment provides the user with the option to toggle between light and night mode (as shown in the next set of screenshots) as well as choosing the application's language.

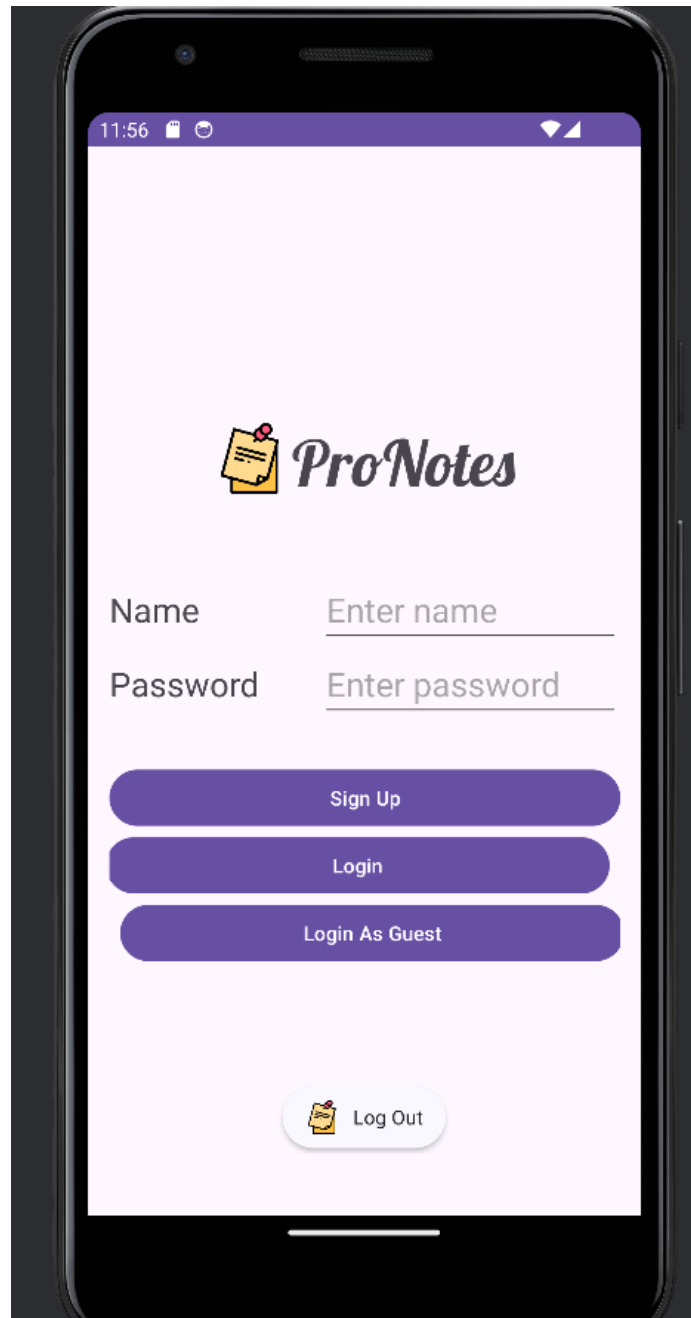




However, it is important to note that the application is bugged and, although the languages change when the language of the entire device changes, I was unable to allow the user to select the language from within the application itself.

VII. Logging Out

The user can also opt to log out of the application at any time by selecting the log out tab of the navigation menu.



Once the user logs out, the back key will exit from the application instead of going to previous activities or pages.

III. Supported Languages

ProNotes includes support for the English, French, and Arabic languages. Most text in this application, excluding texts like the app name, are translated and available in any of the three languages.



IV. References

(It is important to note that most of the implemented code is based on the slides provided throughout the course and A LOT of StackOverflow searches)

Navigation Drawer

Course Slides & This video https://www.youtube.com/watch?v=6mgTJdy_di4

Material Design

The M3Design official website <https://m3.material.io/develop/android/mdc-android>

Color System <https://m3.material.io/styles/color/system/overview>

Floating Action Button <https://m3.material.io/components/floating-action-button/overview> &
<https://github.com/material-components/material-components-android/blob/master/docs/components/FloatingActionButton.md>

Android

Debugging

Fixing “Default Activity Not Found” Error <https://stackoverflow.com/questions/15825081/default-activity-not-found-on-android-studio-upgrade>

Saving EditText states <https://stackoverflow.com/questions/11134144/android-edittext-onchange-listener>

Sharing Intent <https://developer.android.com/training/sharing/send>

Themes

Android Developers website <https://developer.android.com/develop/ui/views/theming/themes>

Lists

Updating list views <https://stackoverflow.com/questions/18444671/remove-item-in-arrayadapterstring-in-listview>

Different Languages

<https://stackoverflow.com/questions/47087904/android-change-language-in-app-only-some-strings-not-translated-properly>

<https://stackoverflow.com/questions/12908289/how-to-change-language-of-app-when-user-selects-language>

Java

Date And Time Objects

W3Schools https://www.w3schools.com/java/java_date.asp

Date Formatters <https://www.java67.com/2016/04/how-to-convert-string-to-localdatetime-in-java8-example.html>

File Output Stream

GeeksForGeeks <https://www.geeksforgeeks.org/fileoutputstream-in-java/>