Tech Stack: Kotlin, Firebase Realtime Database, Storage & Authentication

## **EMPLOYEES WEEKLY SCHEDULE DOCUMENTATION**

Completed this project by following the process:

- 1. Created a new application using "Basic Views Activity" on Android Studio.
- 2. I added and synced the following dependencies:
  - a. Project Dependencies:
    - id("com.google.gms.google-services") version "4.4.2" apply false
    - id("androidx.navigation.safeargs") version "2.8.3" apply false
  - b. App Dependencies:
    - id("com.google.gms.google-services")
    - id("androidx.navigation.safeargs")
    - implementation(libs.firebase.storage.ktx)
    - implementation(libs.firebase.auth.ktx)
    - implementation(platform("com.google.firebase:firebase-bom:33.5.0"))
    - implementation("com.google.firebase:firebase-database-ktx")
    - implementation("com.google.firebase:firebase-analytics")
    - implementation ("com.squareup.picasso:picasso:2.8")
- 3. Implemented my Project on <u>Firestore</u>, downloaded the JSON file and uploaded it to my local project, that is, within Android Studio. In Firestore, I created:
  - a. Real Time Database
  - b. Authentication
  - c. Storage
- 4. I created / modified the:
  - a. Contacts.kt file:
    - This file defines the data model for contacts, including properties such as name, phone number, work schedule and image URI, allowing for structured data representation.
  - b. RvContactsAdapter.kt file:
    - This adapter facilitates the binding of contact data to the RecyclerView, managing the display and interaction of contact items in the user interface.
  - c. MainActivity.kt & activity\_main.xml files:
    - I integrated navigation components and set up the main layout structure to support seamless transitions between fragments within the application.
  - d. LoginFragment & fragment\_login.xml file:

• I implemented the user authentication interface, allowing users to log in by entering their credentials and navigating to the appropriate screens upon successful login.

### e. SignupFragment & fragment\_signup.xml files:

• This fragment enables new users to register by providing their details, with validation to ensure all fields are completed before submission.

# f. ForgotPasswordFragment & fragment\_forgot\_password.xml files:

• I created a user-friendly interface for password recovery, guiding users through the process of resetting their passwords via email.

#### g. UpdatePasswordFragment & fragment update password files:

 This fragment provides functionality for users to update their passwords, ensuring a secure and straightforward process for maintaining account security.

#### h. HomeFragment & fragment home files:

• I developed the main interface for displaying contacts, integrating functionality to fetch, display, and manage contact information effectively.

# i. AddFragment & fragment\_add files:

• This fragment allows users to add new contacts, providing a simple form for entering contact details and saving them to the database.

#### j. UpdateFragment & fragment\_update files:

 I implemented functionality for users to edit existing contacts, allowing for updates to information like name, phone number, work schedule, and image URI.

# k. nav-graph file:

• I configured the navigation graph to manage the transitions between various fragments, ensuring a logical flow within the application.

## I. <u>drawable fo</u>lder:

Here, I added my images used within this project.

#### m. strings.xml:

• This file contains all static text elements used within the project, centralizing string management for easier localization and maintenance.

# **Project Demo:**

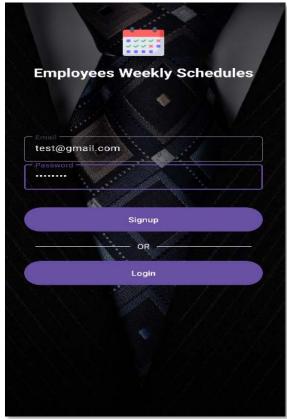
Current Username: test@gmail.com

Current Password: 12345678

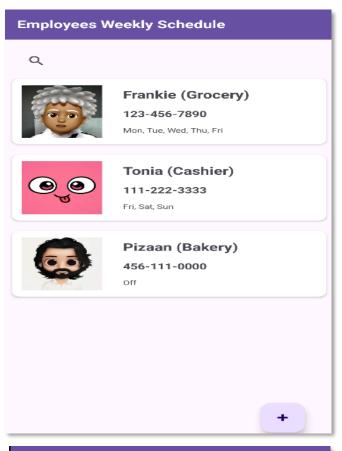
1) Open Application (if you don't have a login credential, click on 'Signup' button to create one else use the credential provided above)



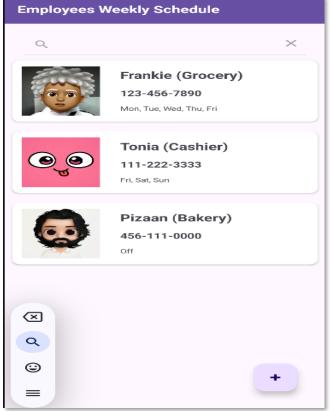
2) Enter your VALID email address and a password, then click on 'Login' (or 'Signup' button if you're on the signup page)



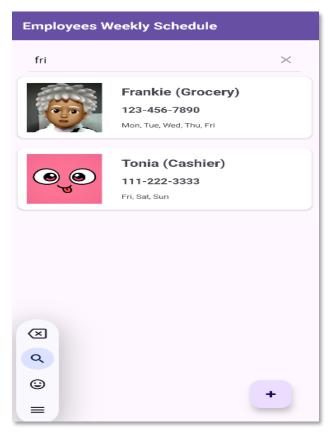
3) Verify that contacts are displayed on the Home Page



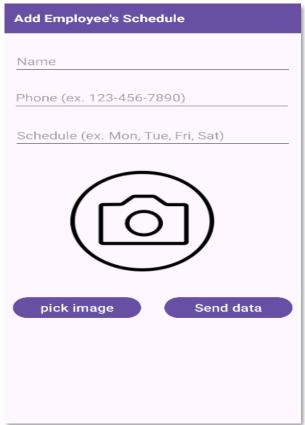
4) Click on the search icon to display a search bar



5) Enter a 3-letter day of the week or an employee's name to bring up related items.



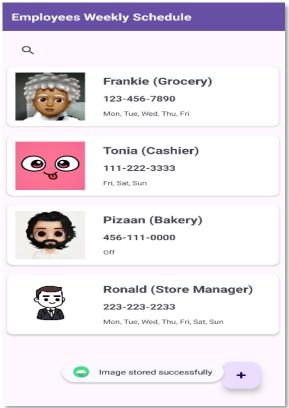
6) Click on the '+' button and verify that an Add Page is displayed



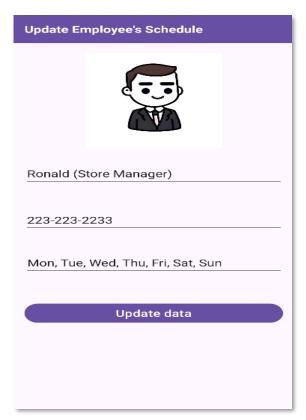
7) Enter a Name, Phone Number, Work Schedule and an Image, then click on 'Send data' button



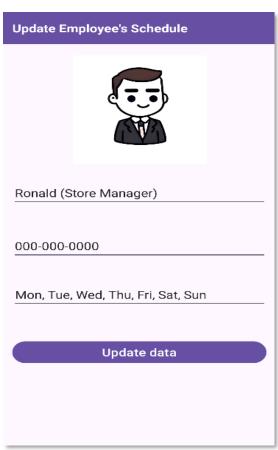
8) Verify that you're returned to the Home Page and the new contact is visible



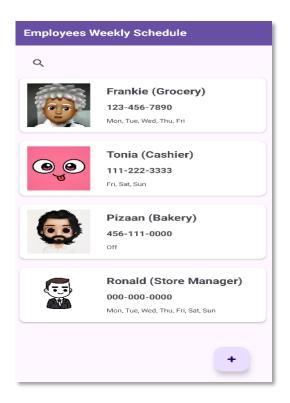
9) Click on the created contact and verify that the Update Page opens



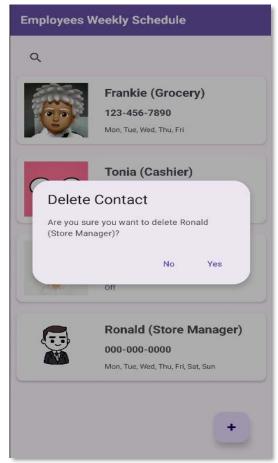
10) Change phone to "000-000-0000" and click 'Update data' button



11) Verify that you're returned to the Home Page and the new contact is updated



12) Long-click on the created contact and verify a 'Delete' dialog box is shown



13) Click on 'Yes' and verify that the contact is no longer on the Home page.

