

# Technical Requirements – Profile Avatar Editor

Challenge is accessible on Memberspot: <https://pl-coding.mymemberspot.io/library/jx3b7Qik9ip5qpNI8IF2/BwAxp75QNXGaDGF2ZJEG/XXO1juamF4lo5Zs6Uzyg/details>

## Scenario

This mini-challenge simulates a profile avatar editing flow in an offline-first app. The user selects a photo, adjusts a cropping frame to choose the desired area, saves the avatar, and sees the updated profile picture persist across app restarts.

## Figma Mockups

<https://www.figma.com/design/XKuvJCxCybCUpKZP0LeIAs/New-Year-Fresh-Start?node-id=1-5>

## Font - [Plus Jakarta Sans](#)

## Feature Goal

Practice implementing gesture-based interactions, image cropping logic, and file-based persistence, focusing on pan/zoom handling, bitmap processing, and restoring saved data on app launch.

## Requirements

### Profile Screen

The main screen displays the user profile in the New Year Journal app. This screen simulates a typical profile section of a mobile app and serves as the entry point for editing the avatar.

### Top Bar

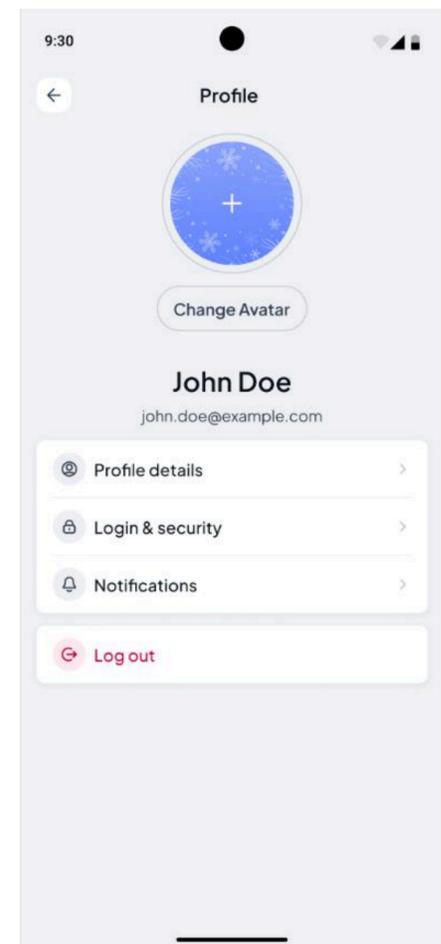
- Located at the top of the screen.
- Contains a Back button on the left.
- Displays the title “Profile”.
- The Back button is decorative and **does not navigate** to another screen within this challenge.

## Avatar Section

- Located below the Top Bar.
- Displays the user's avatar as a circular image.
- If no avatar is set, a winter-themed placeholder is shown.
- A "Change Avatar" button is displayed below the avatar.
- Tapping "Change Avatar" opens the system photo picker.
- After selecting an image, the user is navigated to the Edit Avatar screen.

## User Info Section

- Located below the avatar section.
- Displays the user's name and email address.
- A static demo profile is used:
  - John Doe
  - john.doe@example.com
- The user information is not editable within this challenge.



## Profile Menu

- Located below the user information.
- Implemented as a vertical list of menu items.
- The menu is fully decorative and simulates a real profile screen.
- Each menu item consists of:
  - an icon on the left;
  - a title;
  - a chevron icon on the right.
- All menu items are non-interactive and perform no actions.
- The "Log out" item:
  - does not display a chevron icon;
  - is styled with a different color;
  - is also decorative and performs no action.



## Edit Avatar Screen

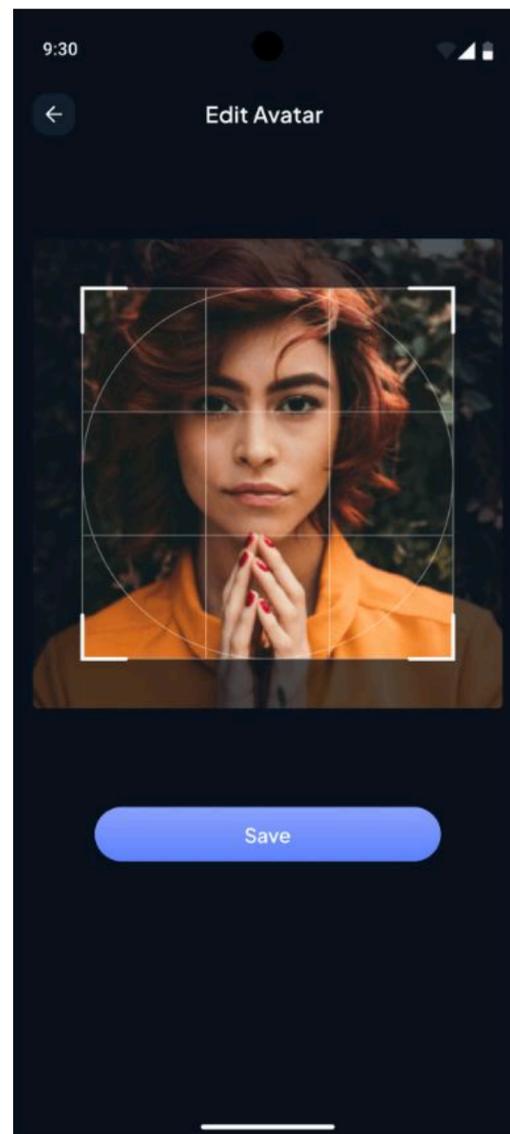
The Edit Avatar screen is used to select and crop a specific area of the chosen image before setting it as the user's profile avatar.

## Top Bar

- Located at the top of the screen.
- Contains a Back button on the left.
- Displays the title “Edit Avatar”.
- Tapping the Back button returns the user to the previous screen without saving changes.

## Image Preview Area

- The main part of the screen displays the selected image.
- The image itself is fixed and does not move.
- A cropping frame is displayed on top of the image, represented as a square with a visual circle inside.
- The circle indicates the visible area of the future avatar.
- The square frame defines the exact bounds of the image region that will be cropped and saved.
- The area of the image outside the cropping frame is dimmed, visually emphasizing which part of the image will be selected.



## Image Preview Area

- The user interacts with the cropping frame, not the image.
- The frame can be:
  - moved across the image using drag (pan) gestures;
  - resized using pinch-to-zoom gestures.
- While interacting:
  - the image remains static;
  - only the position and size of the frame change.
- The frame cannot be moved outside the image boundaries.
- This interaction allows the user to precisely select which part of the image will be used as the avatar.

## Save Button

- Located at the bottom of the screen.
- Displays the label “Save”.
- Tapping the button starts the avatar saving process.

## Saving Logic

- When Save is tapped:
  - the area of the image inside the cropping frame is determined;
  - this area is extracted from the original image;
  - the result is cropped into a square bitmap;
  - the circular overlay is visual only — the saved image remains square.
- The resulting bitmap is stored in the app's **internal file storage**.
- If a previous avatar exists, it is **replaced** with the new one.
- The saved image is then used as the avatar on the Profile screen.

## Persistence Behavior

- The saved avatar must persist after:
  - closing the app;
  - process termination;
  - reopening the app.
- On the next app launch, the Profile screen loads the avatar from internal storage and displays it instead of the placeholder.

## Feedback

- After a successful save:
  - the user is navigated back to the Profile screen;
  - a snackbar is displayed confirming the update.
- Snackbar text: *"Avatar updated successfully"*.

## What's Allowed?

- Standard Android/Jetpack libraries
- No 3rd party libraries are allowed or would be required to complete this challenge

## What's not important

- Responsiveness across every device size or orientation is not mandatory.
- Light/Dark mode support.
- Network access or cloud storage.
- Uploading the avatar to a backend.
- Advanced image editing features (filters, rotation, effects)
- Handling every possible edge case for image formats or sizes

## Useful Links for This Challenge

- [System Photo Picker](#)
- [Pointer input and gestures in Compose](#)
- [Working with Bitmaps](#)
- [Canvas and drawing in Compose](#)
- [Saving files to internal storage](#)
- [Reading files from internal storage](#)
- [Stateful vs. Stateless Composables](#)
- [State Hoisting in Compose](#)
- [Managing State in Jetpack Compose \(Codelab\)](#)

## Submission & Rewards

- Successfully submitting this challenge via the `/submit-challenge` command on Discord grants you **300 XP**.
- Your submission must include:
  - a. A **Gist link** with your implementation.
  - b. A **screen recording** (max 30 seconds) showing:
    - Opening the app and displaying the Profile screen with the default avatar placeholder.
    - Tapping Change Avatar and opening the system photo picker.
    - Selecting an image and navigating to the Edit Avatar screen.
    - Moving and resizing the cropping frame to select a specific area of the image.
    - Saving the avatar.
    - Returning to the Profile screen and showing the updated avatar.
    - Restarting the app and confirming that the saved avatar is still displayed.