

Android Coding Challenge

Assignment: Develop a small application with two main screens:

- 1. A list of people read in from a JSON file
- 2. A detail-view of an individual person, drawing a box around their head.

Here are some details and suggestions:

You should use the Kotlin programming language and adhere to the MVVM software pattern. You should follow best practices for Android development whenever possible. It's okay to only support new versions of Android for this assignment.

When implementing your JSON file reader assume that you are building a prototype that will eventually be built out to fetch this data from a backend that does not yet exist but the structure of a "Person" is well defined and includes a name and image.

The application should read this JSON file and display a list of Persons to the user in a table.

Each Person element in the table view should include their name and a thumbnail

The list should be sorted by the size of the area occupied by a human face present in the associated image (largest on top). If multiple faces exist, use the largest (by area) for this calculation. You should use ML Kit on Android for this. This detection may be fast, but write your code assuming you may have many items or that processing may take some time.

Persons for which face information is not yet known or can not be determined should appear at the bottom of the list in alphabetical order (by name).

Tapping on a Person in the table should take you to another screen where the image associated with that person is displayed with a box drawn around the face. If no face is detected in this image you should show an error message instead.

