

# Flutter - Anywhere Mobile Engineer Candidate Code Exercise

## Overview

In order to best assess your fit with Anywhere Real Estate, we'd like to get an idea of how you approach application development. There is no time limit for this exercise, and the time you take to complete it does not affect our consideration.

Your goal is not simply to finish it -- we consider it a given that you can meet the requirements; rather, the goal is to complete the exercise with the highest possible quality so that we understand what you will bring to our team. Regardless of the complexity of the requirements, you should try to demonstrate your knowledge of large-scale production quality app-building, including robust architecture and infrastructure and correct usage of best-practice design patterns.

Finally, adherence to the requirements demonstrates your attention to detail. *Read carefully.*

## App Description

Your app should be written entirely using **Flutter** framework and support both **iOS** and **Android** platforms. Try to demonstrate your knowledge of both basic and advanced language semantics.

Write a sample app that fetches and displays data from a RESTful Web API. The app should be comprised of two parts, a **list** and a **detail**.

## App Requirements

1. Your app should support both portrait and landscape orientations on both phones and tablets.
2. On phones, the list and detail should be separate screens, on tablets, the list and detail should both appear on the same screen.
3. On all devices, the list view should be displayed as a text only, vertically scrollable list of character names.
4. The app should offer **search** functionality that allows users to filter the character list to entries whose titles or descriptions contain the query text
5. Clicking on an item should load the detail view of that character, including the character's **image**, **title**, and **description**. You choose the layout of the detail.
6. For the image in the detail view, use the URL path in the "Icon" field of the API JSON response. For items with blank or missing image URLs, use a placeholder image of your choice. The path must be appended to <https://duckduckgo.com/> in order to be resolved.
7. Two variants of the app should be created, using a single shared codebase. Each variant should have a different name, package-name, and url that it pulls data from. (We're interested in your methodology for creating multiple apps from a shared codebase)
8. Include unit tests for functionality that you deem critical and high-priority.
9. Upload your code to a **Github repository**, and provide the link

## Variant One

**Name:** Simpsons Character Viewer

**Data API:** <http://api.duckduckgo.com/?q=simpsons+characters&format=json>

**Package/Bundle name:** com.sample.simpsonsviewer

## Version Two

### **Name: The Wire Character Viewer**

**Data API:** <http://api.duckduckgo.com/?q=the+wire+characters&format=json>

**Package/Bundle name:** com.sample.wireviewer

## Miscellaneous

### **Using Libraries To Complete The Task**

Use open-source libraries as you see fit, but we must be able to build and run your project in the IDE. Before sending, consider building and running your project from a clean environment.

Aside from the libraries you use, please disclose any other sources from which you have taken code or used as a bootstrap, other than the templates provided by the IDE. This includes sample apps from other projects or your own pre-written bootstrap app code.

## Reaching Out For More Information

Please reach out with any questions you have, or if any part of the above is unclear or ambiguous.

### **Note**

This code is purely an exercise to assess your software engineering skill level. We will never use any of your code in any of our products, and you retain full ownership of anything you submit.