

# Mobile Engineer Candidate Code Exercise v2.1

## Purpose

In order to best assess your fit with Xfinity Mobile, we'd like to get an idea of how you approach application development. The purpose of this exercise is for you to demonstrate your best work, knowledge of application architecture and development best practices. There is no time limit for this exercise, and the time in which you 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.

## App Requirements

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. On Phones, the list and detail should be separate screens, on Tablets, list and detail should appear on the same screen. Your app should be written either in **Swift** for iOS, or **Kotlin** for Android.

- For the list view, data should be displayed as a *text only*, vertically scrollable list of **character names**
- The app should offer search functionality that filters the character list according to characters whose titles or descriptions contain the query text
- Clicking on an item should load the detail view of that character, including the character's image, title, and description. You choose the layout.
- For the image in the detail view, use the URL in the "Icon" field of the API JSON response. For items with blank or missing image URLs, use a placeholder image of your choice.

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)

### Version 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

## 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.

## 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.**