# Breaking Bad Demo Android App

## by Rafal Ozog

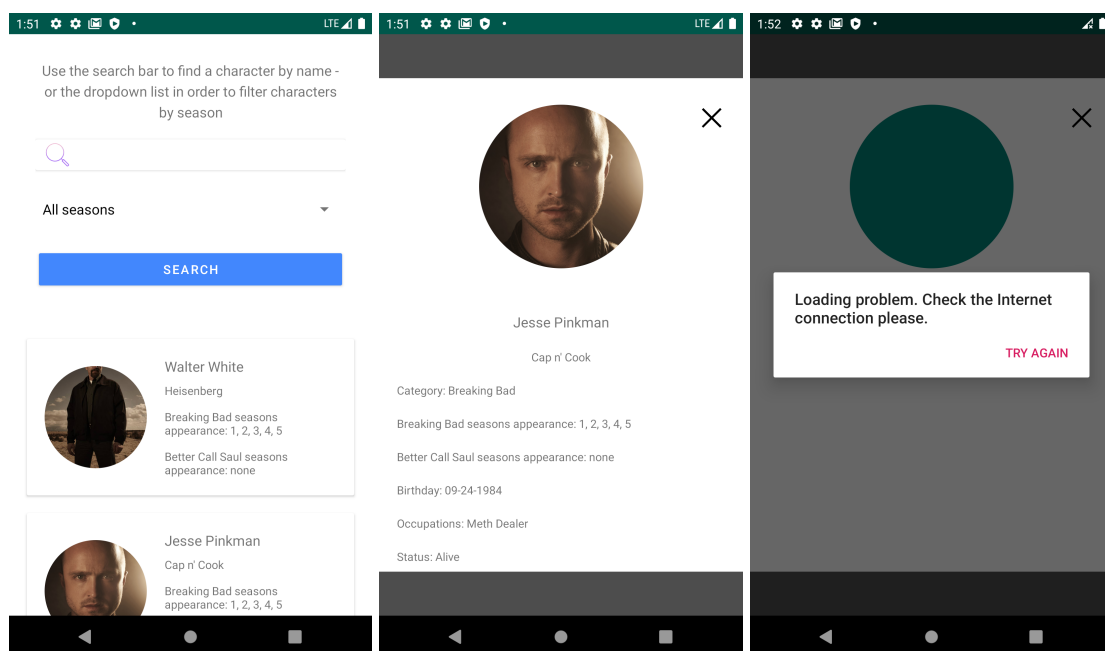*A demo app presenting architecture based on MVVM, including Unit Testing code.*

## Features

1. Main feed view (activity).

2. Detailed View (fragment).

3. Fetching data from the API.

4. Loading/ Error/ Success states handling.

5. Scrollable list view.

6. Filtering by character name and season appearance.

7. Unit Testing.

8. Dependency Injection (Dagger2).

## Architecture

1. Architecture of the app has been based on the MVVM design pattern.

2. The view layer consists of Feed View (activity) and Detailed View (fragment). The data is served to them throughout appropriate ViewModels.

3. Model layer (data) consists of models used for receiving data from the back-end.

4. Network layer has been implemented as the APIClient class that communicates with the back-end and provides access to particular endpoints through the REST architecture.

5.  To make the app maintainable and testable I have decided to persuade (as much as possible) architectural style that provides a one-way direction of injecting dependencies. In this situation we can be sure that Activity/Fragment contains ViewModel, but ViewModel doesn't know about them. Similarly ViewModel contains for example ApiClient. Dependency Injection has been implemented using Dagger2 library.

6.  Testing part of the app consists of Unit Tests. The classes that have been covered in this way are both ViewModels, FilteringTools, and StringFormatter.

## Screenshots



Please do not hesitate to ask in case of any further questions. I will be happy to clarify each uncertainty.

I hope you like my app.

*Rafal Ozog*