

# **Design Document for Calorie Counter**

3\_UG\_3

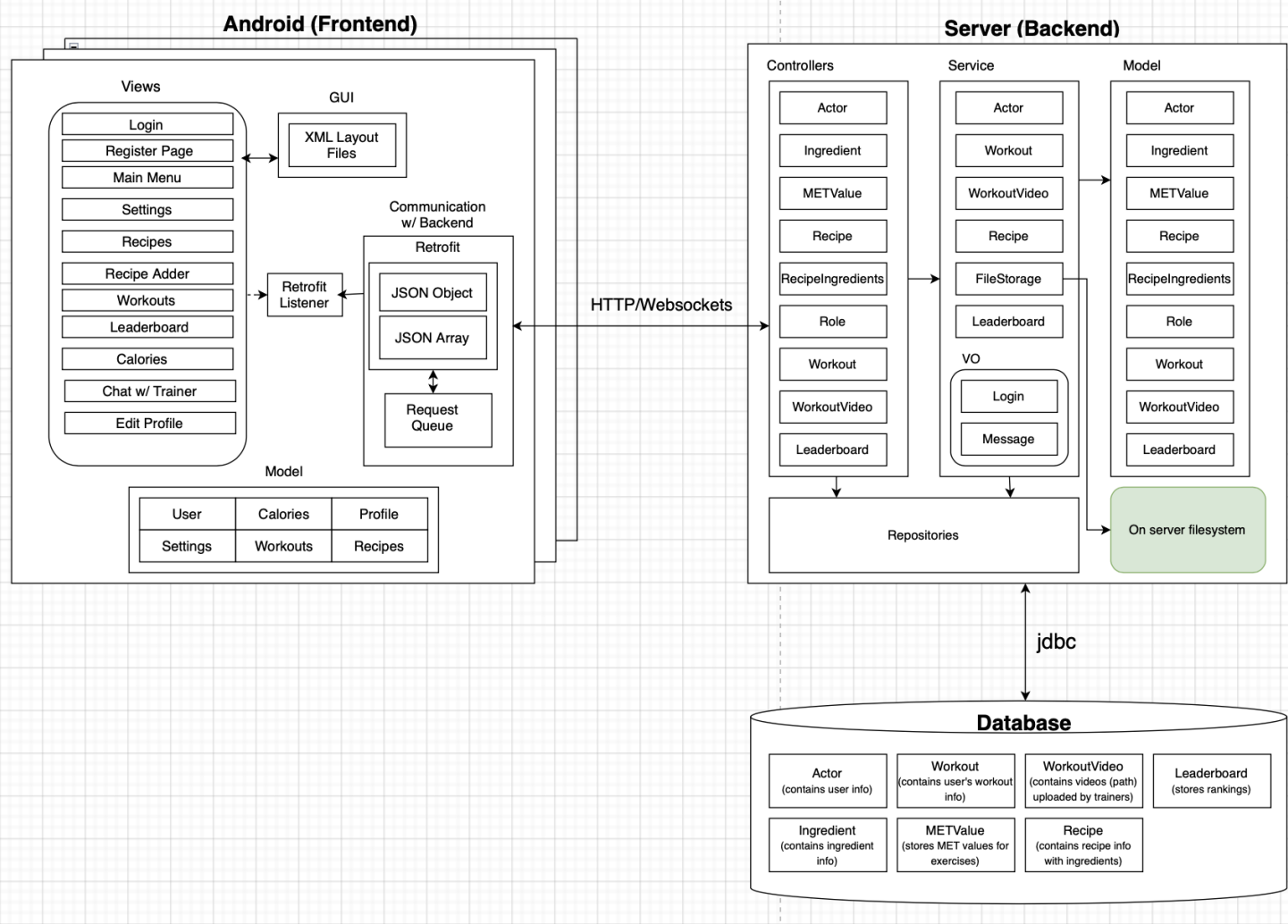
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# Block Diagram



# Description of Design

## **Android User GUI**

The Android application will have XML Layout files dedicated to the GUI called “Views.” This will exist within the Activity classes. Within our “HealthUp” application, we will have eleven different activity classes which are mentioned in the “Views.” Each activity will have its corresponding xml files that describe the styling of the page. These activities will contain most of the logic processing of user commands.

## **Android Models**

Our app will have *six* planned models. Listed under “Models,” these Java classes will contain all the data related to its subject. Having these models will help standardize how data will be transferred within the client while the reusable functions will help with unclear interaction of data.

## **Android Communication**

The frontend of our app will communicate with the backend by the use of Retrofit. Retrofit Listener will help us connect the views whereas JSON Object, JSON Array, and Request Queues will be used to communicate with the backend.

## **Backend Design**

The backend of our application consists of models and repositories to describe how all of the data and information for the users is stored in the database. The recipes and ingredients are broken up into three separate tables, with the third table containing a row for each ingredient in a recipe. We also store information about particular users as Actors, and handle videos by storing them on the remote server and storing the links to each video in the database. Information for communicating with the frontend is contained within the REST controllers.

