

Block Diagram

Team: VB_1

Riley Spick, Max Solaro, Emily Kinne, Tary Todd

FÜD

The front-end application, constructed using Android Studio, is build using standard Java and Kotlin, and uses Volley to make HTTP requests (via a Controller) to the program running on our server (which then transmits the needed information back to the client). The front-end application consists of three groupings of object classes: Model, Fragment, and Activity. The Fragment classes live within the MainActivity (Activity class), and allow for easier data transmittion/fewer redundancies, and also allow for the creation of reusable user interfaces. The Model classes are responsible for observing the Fragments for when a user makes changes. Additionally, upon login of the a User, a session key gets generated within the program running on our server, ensuring that a user can remain logged in for the duration of the app running.

Our server operates as a mediator for the client-side Android application and the MySQL server/database. The server-side program, constructed using the Spring Boot framework, communicates (via a Controller) with a MySQL database using JavaX annotaitons and Spring Boot repositories constructed for each class object (GroceryList, Panty, User, Item, etc.). Assigning which values within each of our class objects are *entities*, *column values*, and also assigning them *unique ID's*, the program is able to construct MySQL tables for all of the information needing to be stored. Packaged into a JAR file, and configured to run as a service on our server, the server then hosts/runs the program and communicates with the client-side application via HTTP requests.

GET Method/ REST

HTTP Requests

Client

Server

