

Block Diagram

Group:

2_DO_8

Group Members:

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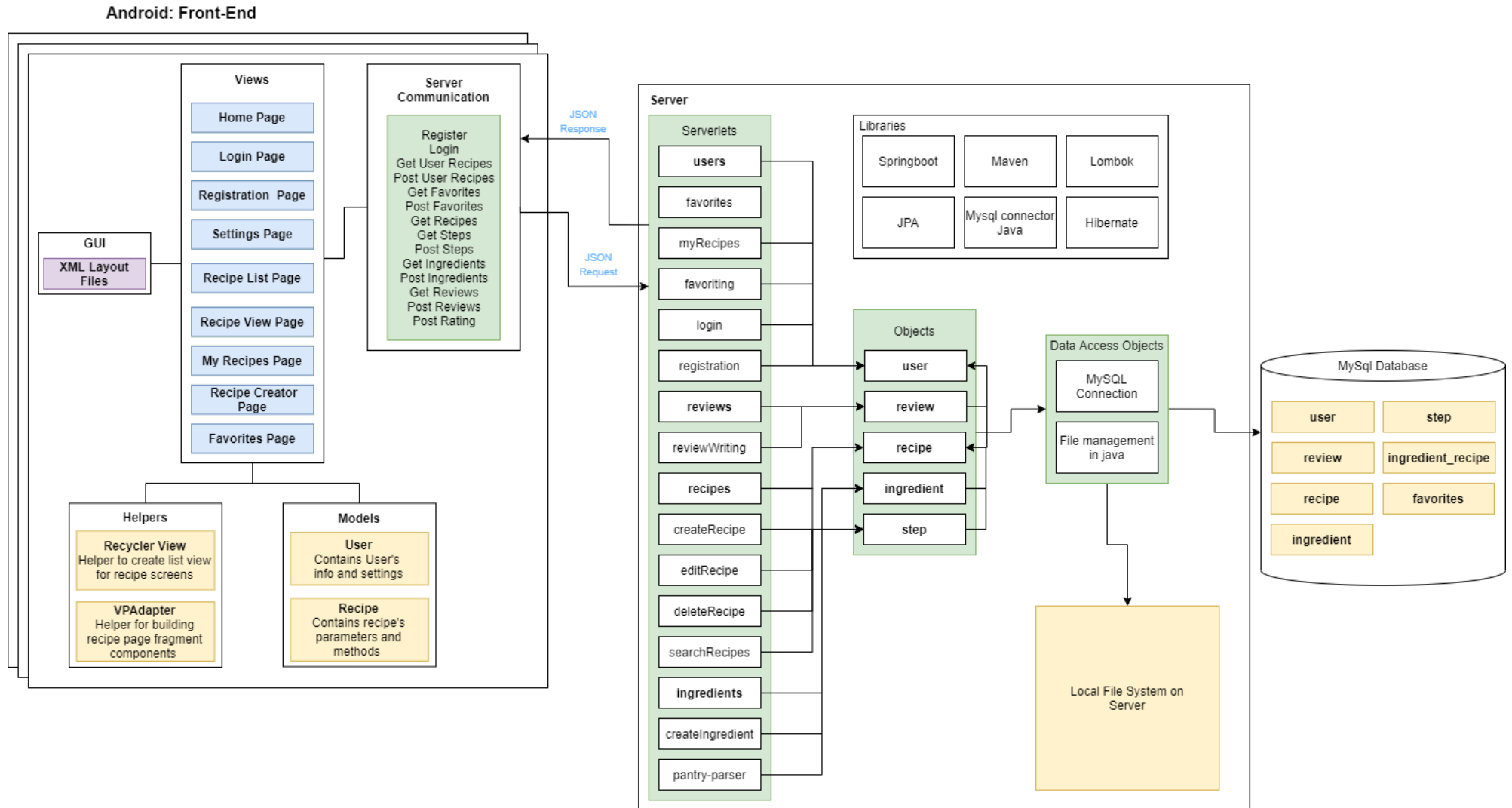
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Project:

Pantry Parser

Block Diagram



Design Description

Front-end Helpers: The front-end of our project utilizes an infinitely scrolling recycler view to display groups of recipes. This recycler view is adapted to display all recipes, user made recipes, and user favorited recipes. From the home page, a user can select one of these three options. On button click, a new intent is created and with it a string that defines the type of recipe group to display. In doing this, we were able to reuse a large portion of our code to display similar pages. In order to limit the strain on the connection to the database, an initial set of 10 recipes is populated in the listview and more are generated once the user scrolls through the current list of recipes.

Front-end Model: Our project utilized two model classes, user and recipe. Each is central to the functionality of our application as they act as a base to store necessary data like name, id, ingredients, and steps. The model classes we created roughly map to the records created in our backend database tables.

Backend Spring Controller: Our project makes heavy use of Spring Boot for routing our data from the SQL database to the front-end application. We have multiple controllers that take in JSON objects from the front-end and then perform certain tasks on those objects to verify that the data we received is valid, process the data, and update the database. The controller also sends back useful request information when errors are thrown. We make use of Hibernate and JPA to create and manage our MySQL database and easily interface this data into our java code.

Backend Database: We make use of Hibernate and JPA to create our database tables. The database has multiple tables with a lot of interconnected data to store the app's information. For instance, the recipe table is the most central table in our database and is connected to all other tables. It contains all of the information that a user will need to create and view recipes.

Table Relationship Diagram

