Design Document for Pet Fin-der

Group 1_CW_8

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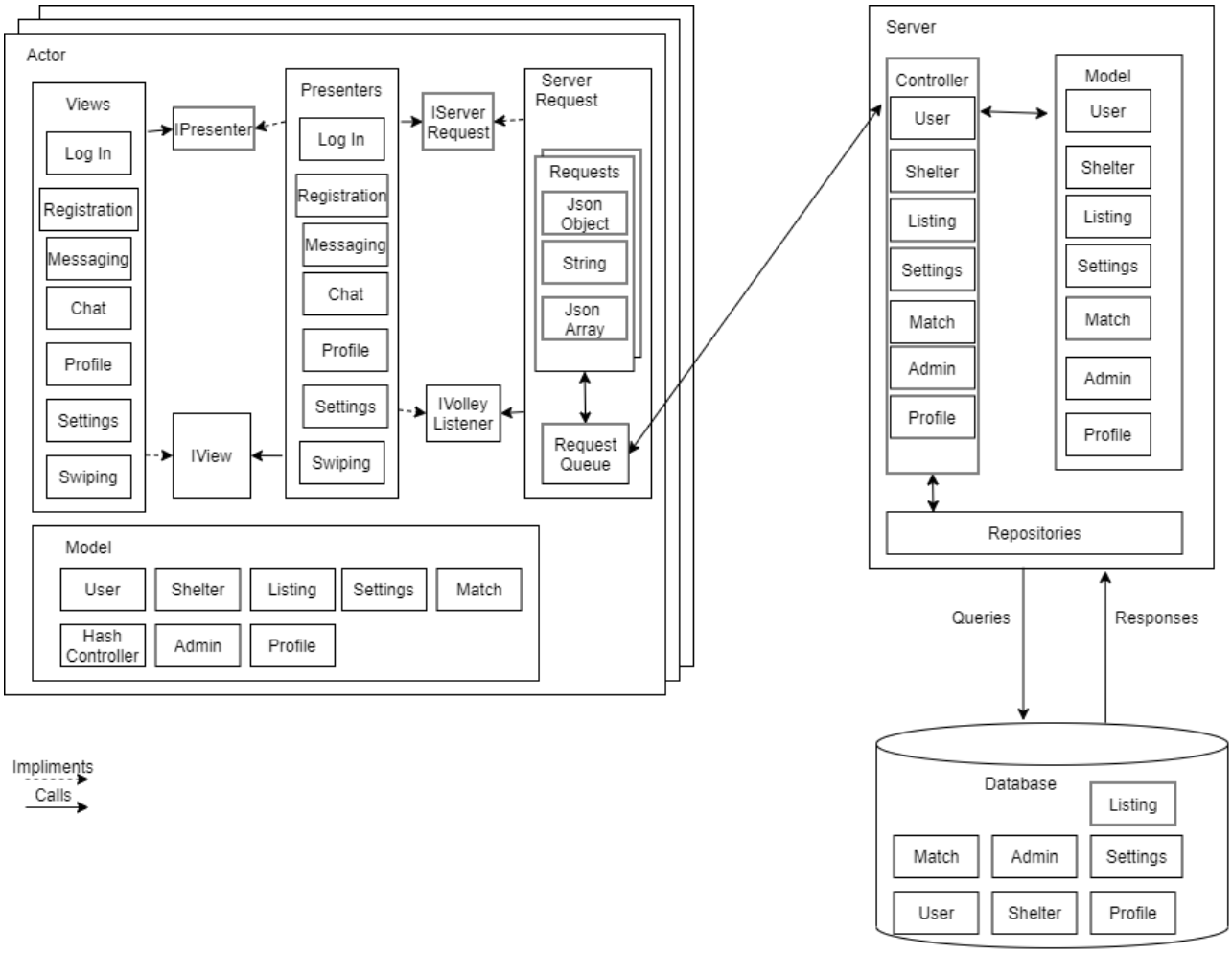
Actor
Views
Log In
Registration
Messaging
Chat
Profile
Settings
Swiping
IPresenter
IView
Presenters
Log In
Registration
Messaging
Chat
Profile
Settings
Swiping
IServer Request
IVolley Listener
Server Request
Requests
Json Object
String
Json Array
Request Queue
Model
User
Shelter
Listing
Settings
Match
Hash Controller
Admin
Profile
Server
Controller
User
Shelter
Listing
Settings
Match
Admin
Profile
Model
User
Shelter
Listing
Settings
Match
Admin
Profile
Repositories
Queries
Responses
Database
Listing
Match
Admin
Settings
User
Shelter
Profile
Impliments
Calls

Block Diagram Description

Actor:

The actor interacts with our application using android views. These views handle user input and UI. Our app has multiple views to accommodate the different screens the actor can switch between. To get the information to be displayed, the views call its corresponding presenter. An example is the login view gets a click from a user and calls the presenter login function. The presenter then calls the ServerRequest class, which handles the different requests made by the presenter. the request is then added to the request queue. When the server then responds, the ServerRequest class calls the success or fail method contained in the VolleyListener. The presenter implements the VolleyListener, and then calls back to the view to display the data retrieved from the server.

Server:

We utilize Spring Boot with Apache Tomcat to act as our server. Our server contains 3 primary components, the Controller which serves as the middleman and messenger between the actor (frontend interface). The Model which serves as the function storehouse filled with constructors, getters, and setters. Finally we have the Repositories which serve as a communicator between the Database and the Server. An example of a typical call from the frontend to create a user would first be sent to the respective controller making a call to the model to create the variables needed with the data given and then communicate with the database to save the new information.

Database:

Our database contains the tables of all of our stored information. This information includes user data (username, password, names, DOB, etc), shelter information, pet listings, user profile data, profile images. Our database acts as the main source of data for our application. We utilize MySQL for our database software. MySQL is a relational database that we use as it supports client-server architecture unlike strictly DBMS options. The tables we use allow us to have relationships between our data points.

Database Schema