

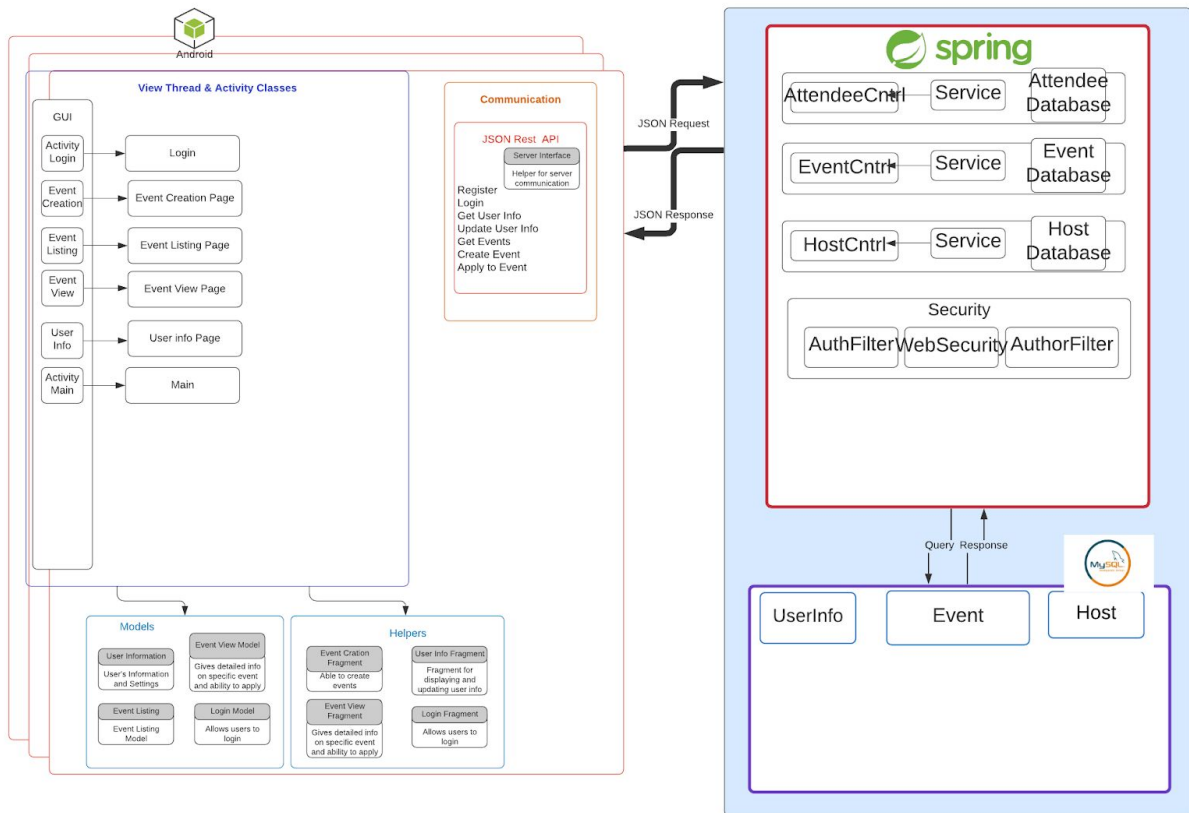
# Design Document for **Gastby**

Group **MC\_07**

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## Design Descriptions

### Android User GUI

The android GUI is composed of various xml documents that are designs of each screen. These screens are then linked to a fragment and a model. The fragment is what executes java code based on user input and interaction. We have an xml document for each screen that depicts the objects and colors and such on screen. We also have activities that decide which phase of the application we are in the first activity that is launched is the login activity and after the user logs in the main activity is started which is a navigation bar where the user can select the intended screen.

### Event Creation fragment

Allows a user to become a host by filling out each section of the event creation page and then posting the event to their area.

### Event Listing Fragment

The event listing fragments displays the events within an area of the user. The events are able to be viewed in more detail by clicking on the view button and being taken to the event view fragment.

### Event View Fragment

There you can see all the information for the event selected in the event listing fragment as well as a button that allows a user to apply to an event.

### User Information Fragment

Displays all of the user's in-app information and allows them to edit and update any of it.

### Android Communication

We should build an interface that houses all of our requests to the backend server. Then from each fragment we would just make a call to the implementation of this interface. And this will be where we send and receive JSON requests.

### Spring Controller

We have controllers for each table in the database. These controllers expose the CRUDL operations of the database. But before being able to access these controllers one must login to the backend using their username and password and then they will receive a JWT authorization token that will allow them to access the other requests.

### Security

We have an authentication filter and authorization filter that handles creating JWT tokens and confirming that JWT tokens are valid. When sending a request to the /login endpoint with

username and password as JSON the authentication filter creates a JWT token that expires in 15 minutes this JWT token can be used for 15 minutes to make requests to the API. The authorization filter ensures the JWT tokens are valid. The web security class decides which endpoints don't need authorization and which endpoints do.

