Block Diagram Design Document for Rant.

Group UG-04
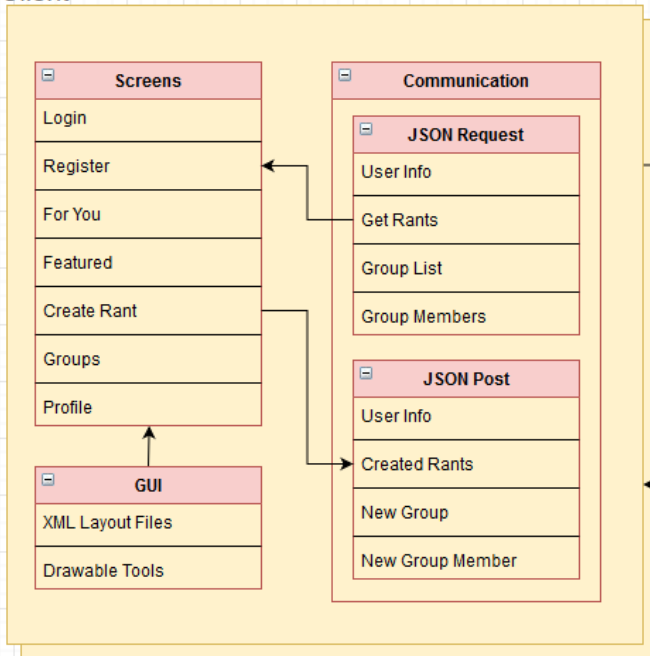
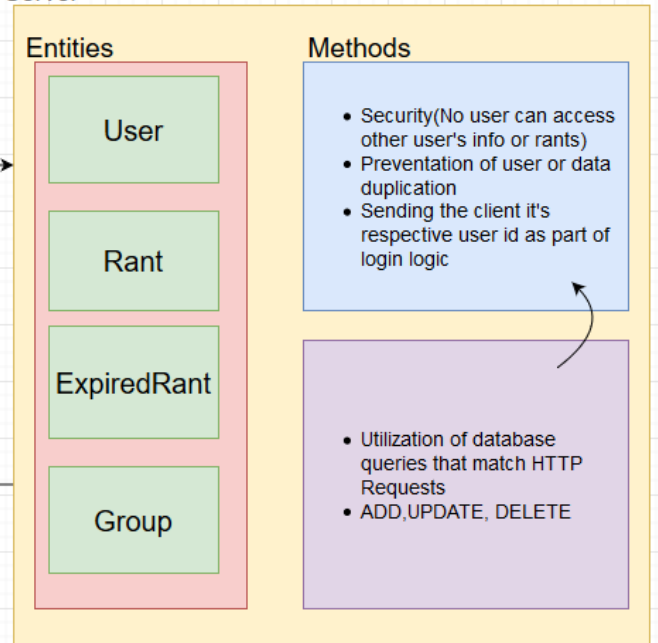Member1 Name: Aryan Prajapati

Member2 Name: Damandeep Riat

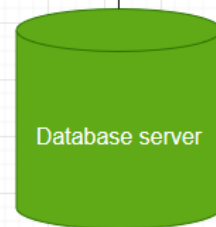Member3 Name: Ege Demir

Member4 Name: Sergio Perez-Valentin

Client

Screens
- Login
- Register
- For You
- Featured
- Create Rant
- Groups
- Profile

GUI
- XML Layout Files
- Drawable Tools

Communication

JSON Request
- User Info
- Get Rants
- Group List
- Group Members

JSON Post
- User Info
- Created Rants
- New Group
- New Group Member

HTTP Request

HTTP Response

Server

Entities
- User
- Rant
- ExpiredRant
- Group

Methods
- Security(No user can access other user's info or rants)
- Preventation of user or data duplication
- Sending the client it's respective user id as part of login logic

- Utilization of database queries that match HTTP Requests
- ADD,UPDATE, DELETE

mySQL Query

Database server

Client

- XML Layouts with implementations from drawable tools create the visible structure of the application screens.
- Screen Activities allow for interaction on the XML Layouts, such as text fields and buttons.
- JSON Request from the server gets processed through screen activities, for example login verifies credentials entered into the text fields.
- JSON Post sends information to the database to be stored. For example, register allows new users to be created and remembered.
- Specialized functions within the Screen Activities allow for navigation between screens, verifies data entries, and gives the user a more responsive experience.

Server

- Checks the login information that the client sends and returns success/fail, the client never sees other users login information.
- Checks register information when creating an account to make sure there aren't any duplicate accounts, returns success/fail.
- Handles requests to change database information (like/dislike, update rants)
- Expired Rants holds the rants haven't seen any activity in the past hour, it's there to help filter rants that we don't need to show.

Database

- Organizes the persistent Rant, user, and group information.
- Executes the queries that are received from Springboot server.

Tables and Fields

1. User Table

UserID	Full name	Username/e-mail	Password	isAdmin	Rants	Groups	Liked Tags

2. Group table

GroupID	Group Name	MemberID's	OwnerID (UserID)	ModeratorID (UserID)	RantID's	Group Picture (JPEG)

3. Rant Table

RantID	Rant (String)	Tags	UserID	RantID	Likes	Dislikes	isProfanity	Last Modified

4. Expired Rant Table

RantID	Rant (String)	Tags	UserID	RantID	Likes	Dislikes	isProfanity	Last Modified