Term Project: Rate my Roommate
CSCI 4370, Spring 2025
Prepared for Dr. Sami Menik
By Nadia Ismail, Shelby Osteen, Hadiza Sarr, Netra Amin

# Rate my Roommate

#### **Problem Domain**

The problem domain of *Rate my Roommate* focuses on enhancing the shared living experience by increasing transparency, accountability, and compatibility. It is the intersection of peer review systems, reputation and trust management, roommate and housing compatibility, and feedback. By developing a platform for honest and constructive feedback, the application aims to reduce conflicts, promote healthy cohabitation, and help users find their perfect roommate who aligns with their lifestyle and values.

# **Problem Description**

Finding a compatible roommate is often a stressful and uncertain gamble, especially for students or young adults first entering the realm of shared housing. Currently, there is no reliable and user-centered platform allowing individuals to post firsthand reviews on past or current roommates based on important compatibility factors and experiences. As a result, many enter living situations without adequate insight, which can lead to conflicts, discomfort, and overall a negative experience for everyone involved. There is a clear need for a platform to increase transparency and assistance for users to make better-informed decisions when choosing a roommate.

# Solution Description and User Interfaces *Solution Description*

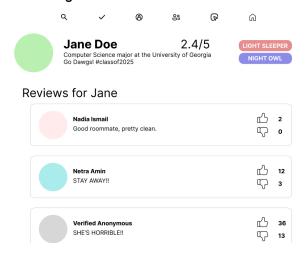
To address the lack of transparency and direction in roommate selection and matching, *Rate my Roommate* is a web application that enables users to rate and review individuals they have lived with. This platform allows users to leave structured reviews based on experiences, key traits, and a rating. Each user is assigned an overall rating derived from all reviews written by them and receives tags from reviews as well.

Users are able to vote on roommate reviews based on how helpful or relevant they find them. This helps other users find the most insightful and trustworthy feedback.

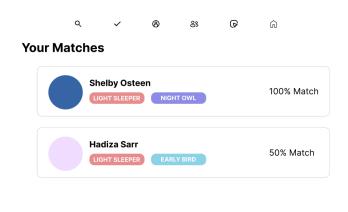
The app also includes a private matching tool to find compatible roommates based on shared tags. This empowers individuals to make well-informed decisions when selecting a roommate while making the process significantly easier.

#### User Interfaces

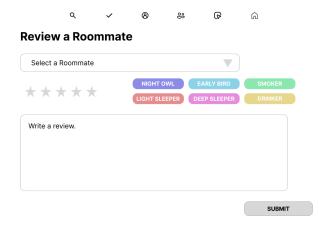
## Profile Page



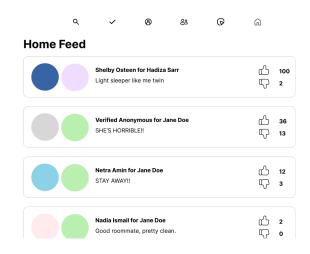
# Matches Page



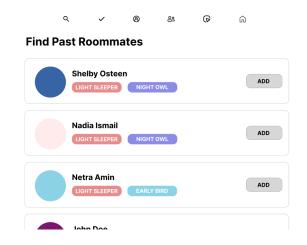
# Review Page



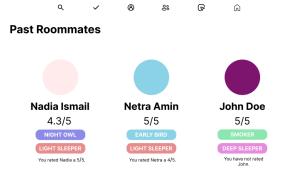
# Feed Page



## Find Past Roommates Page

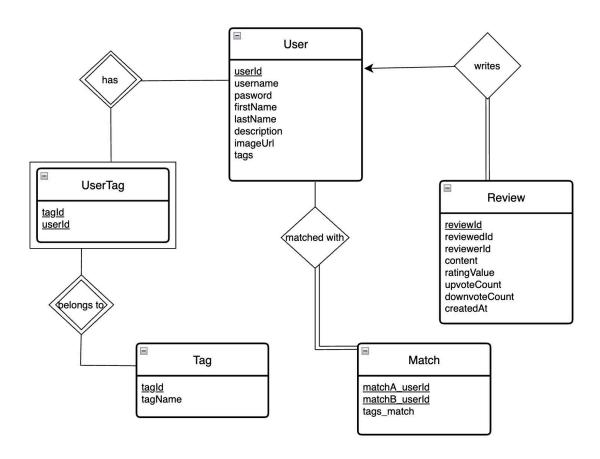


## Past Roommates Page



# **Preliminary ER Diagram**

This is the first ER diagram we developed when beginning our database design. Our final ER diagram is refined and at a higher-level of abstraction to be more representative of business requirements rather than actual implementation-level details.



# Technologies to be Used

We begin the project by designing a user interface using Figma.

Further technologies to be used include Java Spring Boot (for web application implementation), Docker (as a container service provider), MySQL (for database management), CSS (for styling), JavaScript, and Mustache (for front-end templates).

We predict the use of various APIs to assist us further, however their details remain unknown until further development. They will be included in the README.txt file as needed.