CS 307 Project Charter

Team 13

Project Title: UNest

Sudhanva Bharadwaj, Nivedha Kumar, Ram Laxminarayan, Grant McCord

Problem Statement:

Our project is designing and creating an online marketplace for university students to post and view available subleases near campus. Currently, students use forms of social media such as Facebook Marketplace to find subleases, but they are less organized and students cannot directly rent rooms through those sites. Also, websites like apartments.com and airbnb only allow property owners to post or they are very expensive due to fees. Our website would be an organized interface displaying information regarding subleases and would allow students to easily identify properties based on their needs.

Problem Objectives:

- Providing an easy to use, organized interface where students can sublease properties
- Display a list of properties on the main page with some basic information about each property
- Verify student eligibility through ".edu" email authentication
- Include a filter option to narrow down the listings based on the user's preferences
- Develop a map feature to see listed properties relative to campus
- When a user clicks on the post the website should give specific details about the property
- Design a responsive and user-friendly UI for front-end
- Create a database to hold property parameters

Stakeholders:

Users: Students looking to sublease properties near campus, current tenants looking to sublet their property, and property managers
Developers: Sudhanva Bharadwaj, Nivedha Kumar, Ram Laxminarayan, Grant McCord
Project Owners: Sudhanva Bharadwaj, Nivedha Kumar, Ram Laxminarayan, Grant McCord
Project Coordinator: WeiHao Chen

Deliverables:

- An website for university students to post and view available subleases near campus
  - Student authentication verifying university email for account
  - Login page to direct access to different pages based on account type (admin, subletter, or subleaser)

- ○ Search and filter functionality to sort by price and location, allowing user to condense list of properties by their preferences
  - ○ User profiles to keep track of user information such as messages, their posted listings, or saved properties
  - ○ Property listing form allowing subletters to fill out and post information about their property
  - ○ Messaging chat box between the original renters and the new tenants
- A database for all of the sublease and user information
- We will be using MERN (MongoDB, Express.js, React, Node.js) javascript framework
  - ○ MongoDB as non relational document database for storing user data
  - ○ Express.js used to create server-side framework
  - ○ React for creation of reusable UI components
  - ○ Node.js for running server-side logic in the application