CS253 PROJECT - ROOMBLE

CS253 Project by Team Marauders

(Github link - *https://github.com/Shlok-Jain/Roomble*)

ROOMBLE

Problems faced while finding properties/flatmates:

- Need a lot of contacts and connections
- Brokers need commission
- Need to be physically present everywhere
- Requires a lot of time and energy

- One - stop solution to cater real-estate needs of immigrants

- **Potential Users:** People who shift to Tier-1 cities for their studies or jobs + Landlords who wish to rent out their properties

- Helps in connecting:
  - Potential tenants with landlords
  - Interested flatmates with each other

REQUIREMENTS

A) Connecting Tenants and Landlords

- The web application must provide the landlords the functionality to add their properties accompanied by various features of their choice.
- It should provide a platform for the tenant to search for properties based on their preferences with respect to locality, price, BHK and area.
- The app also must provide a messaging interface to the tenants so that they can directly contact the landlords. This will allow efficient communication between the two.

REQUIREMENTS

B) Connecting potential flatmates

- The software should provide an intuitive platform for tenants to find flatmates, keeping in mind their compatibilty.
- It should allow tenants to search for flatmates with some helpful indicator of compatibility and manual filter options.
- The application should also permit tenants to bookmark suitable flatmates for future reference.
- The software should allow possible flatmates to contact/message each other, helping them understand if they are truly well-matched.

IMPLEMENTATION

- HTML, CSS and JavaScript were used in the frontend. We used React.js as template and Vite framework for was used for enhancing the overall user experience

- Backend was written in JavaScript and Node.js was used to create a run-time environment

- MongoDB was used to handle our database, since it is user-friendly and easy to handle with for beginners as well.

DEMO TIME!

FUTURE DEVELOPMENT PLANS

A) Expansion to multiple cities :

Presently the software caters to properties and flat mates located in Mumbai. We plan to extend this to several metro cities across India where finding property and flat mates is a major issue.

B) Dynamic distances from map :

Currently, users can search for flatmates and properties in select localities, based on pre-computed distances stored in our database. In the future, we plan to offer more flexible locality selection by using map-based latitude and longitude to calculate distances in real time.

FUTURE DEVELOPMENT PLANS

C) Secure review system :

We aim to secure our two-way review system by allowing only verified tenants to review properties they've lived in and only genuine flatmates to review each other.

D) Dark theme support :

We plan to add dark mode support to our website in the future to give it a sleek and professional look and enhance the browsing experience.

E) Interactive 3D Property tours :

Currently, we show property photos. Soon, users can explore mobile-friendly 3D models with AR/VR support for immersive virtual tours.

LESSONS LEARNT

- HANDS ON LEARNING: This is probably the first departmental course where we used and honed our technical skills and imagination to build a practically working website .

- TEAM SPIRIT: Managing a project with a team of 11 people for the first time made us realize the importance of teamwork and accepting and respecting others' point of views.

- PLAN-DRIVEN PROCESS: The whole project was plan-driven, completing various deadlines on time made us realize the importance of time-managemen and planning.

QNA SESSION

THANK YOU