RoomR

~PBL TEAM PROJECT

1. Ayush prasad : Login and payment module
2. Raghav nagpal : preferences/setup module
3. Aditya Sinha : home module
4. Shantanu deshmukh : chatting page

Login and payment module

~Ayush

- This will have three modules in total, for sign up, one for signing up, second for logging in and another for the payment.
- Firstly I'll create an HTML form containing input fields and submit button.
- The form will send data to the "login. php" file using the post method when the user clicks the login button.
- If the user doesn't have an account, they'll have an option to sign up. The same architecture will be used for the sign up page.

- For the payment section, first we’ll collect the data from the user in a HTML form, then send the user data like amount, currency, name, description via API calls(eg: Razorpay). We’ll be using php to accomplish this.
- We’ll setup a SQL database to store transaction information, user data, and any other necessary details.
- After the payment is processed, the payment gateway will send a response indicating the status of the payment. After handling this response the website will update accordingly. For example, if the payment is successful, customer’s account will be updated and they’ll receive a receipt.
- In the testing phase we'll check whether the card details are getting masked and encryption of other sensitive information.

Preferences/setup module

~Raghav

- The “setup/preference” module of our website “Roomr” will make the user fill out their details, where they have to fill out all their attributes.
- This module basically helps in building out user’s profile as its the profile which has the potential to match the user with other people to find a suitable roommate
- We want the user experience on Roomr to be highly customisable and personalised, so our setup/preference module will allow the user to be a reflection of their actual personality and exhibit their best sides.
- This module empowers users to find compatible roommates who share similar values, habits, and living expectations.

- Users can specify a wide range of criteria, such as cleanliness, noise tolerance, sleep schedule, smoking preferences, and pet-friendliness. This ensures that potential roommates align with their daily habits and preferences.
- Users can specify their desired living arrangements, such as location, apartment size. This helps in finding roommates who are on the same page regarding their future living situation.
- Users can set privacy preferences, controlling the level of information visible to potential roommates. This ensures a safe and secure environment for sharing personal details.
- The interface will be intuitive and user-friendly, making it easy for users to set up their preferences and navigate the system
- The frontend will use HTML, CSS, JS and the backend will use php

HOME MODULE

~ADITYA

- The "Home" module for our website "RoomR" serves as the landing page and provides a clear and engaging introduction to the platform's purpose and features. Here's a breakdown of what we'll include in this module:

1. Analysis Phase:

- Collect information about the target audience, their preferences, and expectations.
- Determine the type of content that need to be displayed on the homepage, such as images, text, testimonials, and call-to-action buttons.
- Define the user flows from arriving at the homepage to taking specific actions, like clicking a call-to-action button.

2. Design Phase:

- Develop wireframes that outline the layout and placement of key elements on the homepage, including the header, hero section, features, testimonials, and footer.
- Design the graphical elements, including colours, typography, and images, to match the branding and appeal to the target audience.
- Design the hero image that resonates with the platform's purpose and captures attention.

3. Development Phase:

- Convert the wireframes and visual design into HTML, CSS, and JavaScript code.
- Implement responsive design to ensure the webpage looks and functions well on various devices and screen sizes.

4. Testing Phase:

- Test all interactive elements like buttons, links, and forms, to ensure they work as intended.
- Verify that the call-to-action buttons navigate users to the correct pages.
- Verify that the module works correctly on different web browsers (Chrome, Firefox, Edge).
- Check the loading speed of the module and optimize images and code for performance.
- Review all content for accuracy, grammar, and spelling.

CHATTING PAGE

~SHANTANU

- The "Chatting" module for our website "RoomR" serves as the Interaction page between users and provides a clear and engaging introduction to the platform's purpose and features. Here's a breakdown of what we'll include in this module:
- The module will connect users who have liked each others preferences and want to furthere communicate.
- It will help users to interact with each other with features like real time chatting, notifications, message history along with media sharing and user authentication.
- The module will be based on a peer to peer architecture hence no need for a central server is required.
- Users will only be able to chat when they have liked each other hence maintaining privacy.
- Messages will be encrpyted and can only he accessed by the users and the Admin
- Chats can be reported incase of any misuse and will be looked into immediately to make sure Roomr remains user friendly

HOME MODULE

~ADITYA

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❖ **Demand Analysis:**

- **Market Research:** Conduct a market research to understand the demand for roommate finding services in your target region. Analyse demographics, housing trends, and the need for such a platform.
- **User Needs:** Identify user needs and pain points related to finding roommates. Consider conducting surveys or user interviews to gather insights.
- **Competitive Landscape:** Analyse competitors in the roommate finding space to understand their strengths and weaknesses.

❖ **Feasibility Analysis:**

- **Legal and Regulatory:** Assess the legal and regulatory requirements for operating a roommate finder website, including data privacy laws, user agreements, and intellectual property rights.
- **Technical Feasibility:** Evaluate the feasibility of implementing the required technology stack, including databases, hosting, and software development.
- **Market Feasibility:** Determine if there is a viable market for the service, considering factors like user acquisition costs, monetization strategies, and potential revenue streams.

❖ **Technical Analysis:**

- **Platform Selection:** Choose the appropriate technology stack and platform for developing the website e.g., web development frameworks
- **Scalability:** Ensure the technical architecture can handle potential growth in users and data volume.
- **Security:** Implement robust security measures to protect user data and ensure privacy.
- **Performance:** Optimize the website for fast loading times, smooth user experience, and cross-browser compatibility.

❖ **Manpower Analysis:**

- **Skill Assessment:** Assess the skills and expertise needed for each role and evaluate whether you have the necessary talent for example:

1) **Front-End Developer:** To convert the design into a functional web page with HTML, CSS, and JavaScript.

2) **Back-End Developer:** To handle server-side functionality, user authentication, and database integration.

- **Resource Allocation:** Allocate human resources effectively to meet development timelines and project milestones.

❖ **Financial Analysis:**

- **Cost Estimation:** Estimate the initial and ongoing costs, including development, hosting, marketing, and administrative expenses.
- **Revenue Projections:** Create revenue models based on subscription fees, advertising, premium features, or any other monetization strategy.
- **Break-even Analysis:** Determine the point at which the website will cover its costs and begin generating profits.

❖ **Requirement Analysis:**

- **User Stories:** Create user stories and use cases to define the functionality and features required on the home page and throughout the website.
- **Feature Prioritization:** Prioritize features based on user needs, business goals, and development resources.
- **Content Requirements:** Identify the content elements such as text, images, videos, and user-generated content necessary for the home page.

CHATTING MODULE

- **Demand Analysis:**
- Identify the target audience for the chatting module (e.g. hostel students and further more major Pg students on expansion).
- Determine the expected demand for the chatting module based on market research, user surveys, and competitor analysis.
- Analyze the potential user base and their specific needs and preferences for a seamless chatting experience.
- **Feasibility Analysis:**
- Evaluate the technical feasibility of developing the chatting module within the desired timeline and available resources.
- Assess the feasibility of integrating the module with existing platforms or systems.
- Consider the feasibility of complying with data protection and privacy regulations.
- **Technical Analysis:**
- Identify the required technical components for the chatting module, such as a server-side architecture, database management system, and client-side interfaces.
- Evaluate the compatibility of the chosen technologies with the target platforms (e.g., web).
- Assess the scalability, performance, and security aspects of the technical implementation.

- **Manpower Analysis:**
- Determine the skill sets required for developing and maintaining the chatting module (e.g., software development, database management, user interface design).
- Assess the availability of resources within the organization.
- Evaluate the workload distribution and define roles and responsibilities for efficient project management.
- **Financial Analysis:**
- Estimate the development and maintenance costs associated with the chatting module, including software licenses, infrastructure, and ongoing support.
- Assess the potential revenue generation opportunities, such as in-app purchases, subscriptions, or advertisements.
- Conduct a cost-benefit analysis to determine the financial feasibility and profitability of the chatting module.
- **Requirement Analysis:**
- Define the functional requirements of the chatting module, including core features such as real-time messaging, user authentication, and message history.
- Identify any additional desired features, such as file sharing, group chats, or multimedia support.
- Analyze non-functional requirements, such as performance, security, and user interface design, to ensure a satisfying user experience.

Thank You.