

RoomR

(ANALYSIS REPORT)

~PBL TEAM PROJECT

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| 1. AYUSH PRASAD | : LOGIN AND PAYMENT MODULE |
| 2. RAGHAV NAGPAL | : PREFERENCES/SETUP MODULE |
| 3. ADITYA SINHA | : HOME MODULE |
| 4. SHANTANU DESHMUKH | : CHATTING PAGE |

LOGIN MODULE

~AYUSH

Demand Analysis:

- **User Base:** Determine the expected number of users who will access the login page.
- **User Needs:** Understand user expectations regarding login methods (e.g. username/password, social media, single sign-on).
- **Frequency of Use:** Analyze how often users will log in.

Technical Analysis:

- **Tools required:** php, MySQL
- **Scalability:** Ensure the login page can handle an increasing number of users.

Manpower Analysis: One person is sufficient for implementing and maintaining the login system

Financial Analysis:

- **Operational Costs:** Server maintenance, security, support
- **Revenue Generation:** Evaluate whether the login page can generate revenue (e.g. through premium memberships or advertising).

Requirements Analysis: login page must offer : password reset, account recovery, CAPTCHA).

PAYMENT MODULE

~AYUSH

Demand Analysis:

- **Payment Methods:** Identify the preferred payment methods of our target audience (e.g., credit cards, Paytm, mobile wallets).

Feasibility Analysis:

- **Payment Gateway Integration:** Determine whether the selected payment gateways are feasible to integrate with our platform.

Technical Analysis:

- **Payment Gateway Selection:** Choosing reliable payment gateways based on our geographic coverage.
- **API Integration:** Evaluate the technical requirements for integrating payment APIs into our platform.
(eg : Razorpay, PayUMoney)
- **Data Encryption:** Implement strong encryption protocols for secure data transmission.

Manpower Requirements:

- Consult with experts or our seniors in payment regulations and security standards.

Financial Analysis:

- **Transaction Fees:** Calculate the fees associated with each payment method and payment gateway.
- **ROI Analysis:** Assess the potential return on investment and revenue generation capabilities of the payment page.
- **Maintenance Costs:** Calculate ongoing operational expenses, such as server hosting, software updates, and security measures.
- **Cash Flow Analysis:** Analyze the cash flow associated with the payment method chosen.

PREFERENCES/SETUP MODULE

~RAGHAV

DEMAND ANALYSIS

- determine the info entered by the user to find a roommate suitable to their needs and lifestyle

FEASIBILITY ANALYSIS

- determine if users are willing to enter info about themselves on a website to find a roommate using surveys, market research and analyse our user base that needs a roommate

TECHNICAL ANALYSIS

- Tools required will be html, css, js for frontend and php for backend

MANPOWER ANALYSIS

- One person is enough to create the setup module, add updates if needed and perform regular checks on the module

FIANANCIAL ANALYSIS

- Estimate the cost of having a setup or preference module
- Conduct possibility of generating revenue from setup module by prohibiting non premium users from entering certain details
- Determine if people are willing to go premium for finding a roommate

REQUIREMENT ANALYSIS

- A mostly graphical, gamified interface for the user to enter their info so that it is eye-catching and not boring
- A simple user friendly interface that isn't overbearing.

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:

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, JavaScript.
 - 2) **Back-End Developer:** To handle server-side functionality, user authentication, 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 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 PAGE

~SHANTANU

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.

SOURCES/REFERENCES

- [Chat.gpt](#)
- [Softwaretestingmaterial.com](#)
- [Crazyegg.com](#)
- [Webfx.com](#)
- [drupal.org](#)

Thank You