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Home Away from Home

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Abstract: ***"Home Away from Home" is a comprehensive web application tailored to the needs of students and working professionals living away from their homes. It addresses the common challenges faced by individuals who relocate to unfamiliar cities for education or work, particularly when it comes to finding essential services and accommodations. The platform simplifies the search for important daily needs, offering real-time information on messes with updated menus and user ratings, PGs and rental room availability, as well as vital services such as hospitals, electricians, grocery stores, and fitness facilities.***
The application allows users to easily discover and explore services based on their location, helping them make informed choices with the help of user-generated reviews and ratings. Additionally, it empowers service providers, like mess owners, by giving them the ability to update their menus in real time, ensuring that users always have the latest information at their fingertips.
By offering a user-friendly interface and up-to-date details, "Home Away from Home" creates a seamless experience for users, making the process of adapting to a new city smoother and less stressful. The platform serves as a bridge between users and local service providers, ensuring that students and professionals can efficiently navigate their surroundings and access the resources they need to settle into their new environments comfortably.

I. INTRODUCTION

Relocating to a new city for education or work often brings challenges, particularly when it comes to finding essential services and accommodations in an unfamiliar environment. For students and working professionals living away from their families, it can be difficult to discover reliable options for daily needs like food, housing, and basic services. Navigating these new surroundings and accessing trustworthy information can be both time-consuming and stressful. "Home Away from Home" is a solution created specifically to address these concerns. This web application helps students and professionals easily locate nearby messes with up-to-date menus and ratings, find available PGs and rental rooms, and access important services. The platform's user-friendly design allows individuals to browse these services based on their location, view ratings and reviews from other users, and make informed decisions. The application also enables service providers, such as mess owners, to manage their offerings efficiently by updating their menus in real time, ensuring users always have the most current information. With its focus on providing reliable, localized data, "Home Away from Home" connects users with the services they need, making life easier for those navigating a new city. This platform not only saves time but also fosters a sense of community for those who are far from home, helping them adapt more comfortably to their new surroundings.

II. PROBLEM DESCRIPTION & OVERVIEW

Students and working professionals who move to a new city for education or employment often face numerous challenges when it comes to finding essential services such as affordable accommodation, food, and local utilities. The existing platforms for these services are fragmented and lack integration, making it difficult for individuals to access accurate, real-time information tailored to their specific needs. The problem is compounded by the absence of platforms that cater specifically to the affordability and convenience required by these demographics. There is a need for a unified platform that integrates real-time updates on mess menus, PG availability, essential services, and user reviews, helping users make informed decisions and easing their transition into a new environment.

III. DESIGN AND IMPLEMENTATION

1) Technology Stack

- Frontend: The frontend is designed to provide a clean, user-friendly interface for both service seekers and providers. It uses a component-based structure with separate, reusable components like Login, Register, and Dashboard. Navigation is handled using react-router-dom, while custom form validation ensures accurate data entry. Google Maps API is integrated to show service locations with markers, and responsive design techniques are applied to maintain usability across all screen sizes.

- Backend: The backend is built using Spring Boot and provides RESTful APIs to manage server-side operations. It includes entity classes for users and businesses, controllers for handling requests like registration, login, and reviews, and a service layer for business logic and role-based handling. JWT-based authentication secures protected routes, while JPA repositories manage data interaction with the MySQL database.
- Database:The database includes tables for Users, Businesses, Reviews, and Services, with relationships defined using foreign keys—for example, each review links to a specific user and business. Constraints like unique emails are applied to maintain data integrity and prevent duplication.

Fig 1 - Technologies Used

2) User Interaction Design

The user interaction design for *Home Away from Home* focuses on simplicity, clarity, and ease of use. Users can effortlessly navigate through the platform to explore services like accommodation, mess, and maid options. Clear call-to-action buttons, intuitive forms, and responsive layouts ensure a smooth experience across devices. Features like service ratings, feedback submission, and location-based service listings enhance engagement and help users make informed decisions quickly.

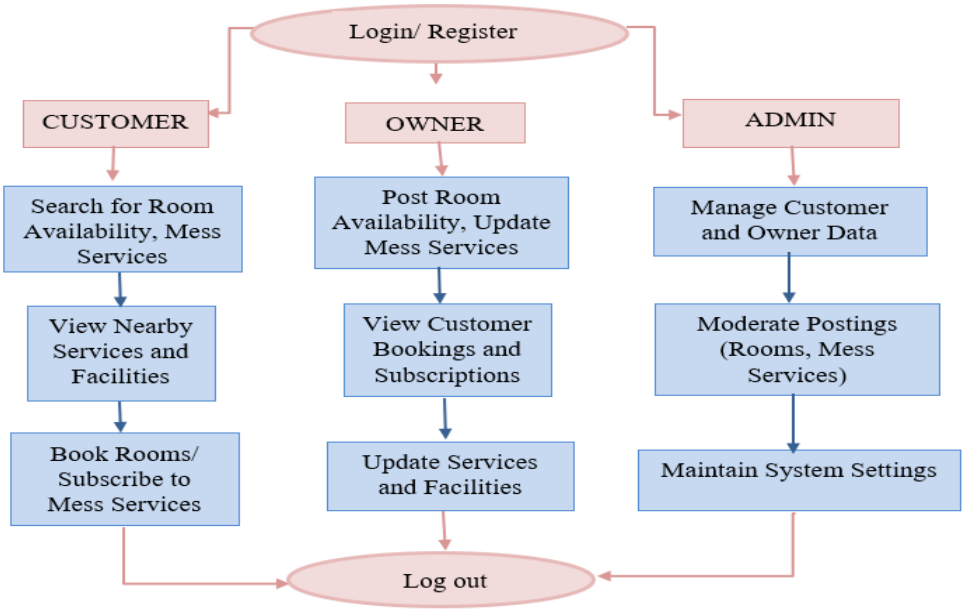


Fig-2:DataFlowofHome Away From Home

3) Google Maps Integration

To enhance usability and user engagement, the application integrates the Google Maps API, allowing service providers' locations to be displayed directly on an interactive map. Users can view nearby accommodations, mess services, and maid providers with visual markers, helping them quickly identify services in their preferred area. Clicking on a marker reveals detailed service information, making the location-based service search both intuitive and efficient.

IV. IMPLEMENTED APPLICATION

1) Home Page

The Home Page serves as the landing screen of the application, providing users with an overview of the services offered — accommodation, mess, and maid services. It includes navigation links to other sections and ensures a user-friendly interface with clean layout and intuitive design.

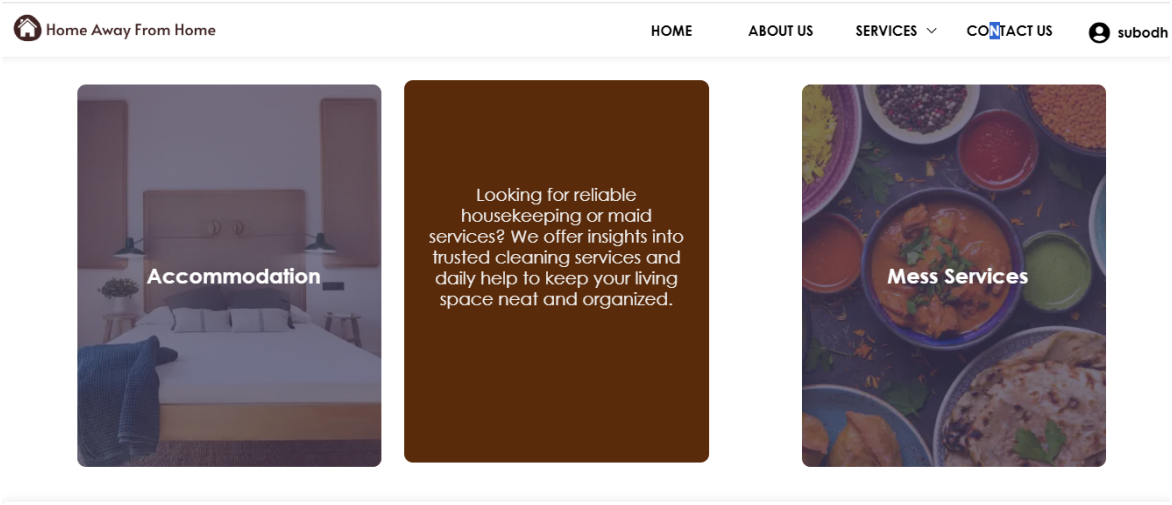


Fig-3:HomepageofHome Away From Home

2) Login/Register

This page allows users to securely log in or create a new account. The registration form collects basic user information, while the login form authenticates existing users. Proper validation is implemented to ensure data integrity and security.

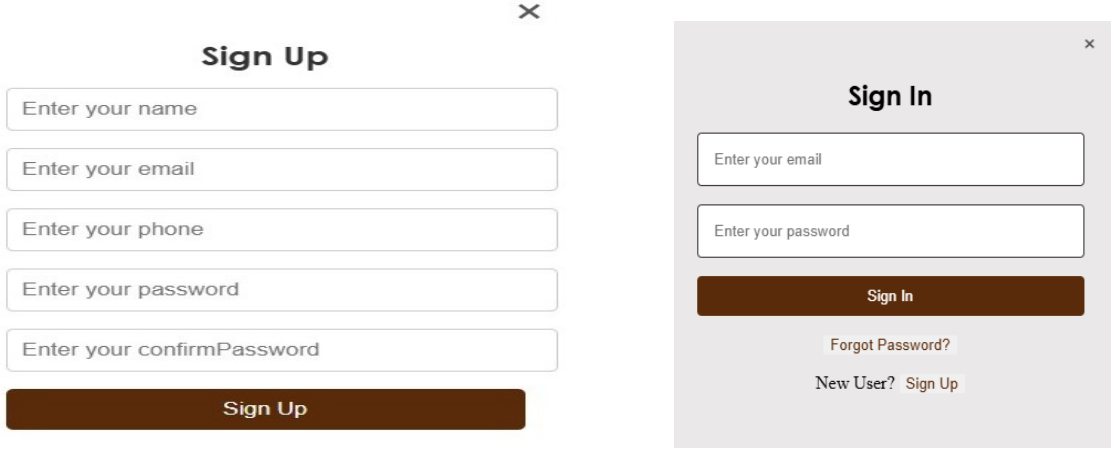


Fig-4:Register/LoginpageofHome Away From Home

3) Accommodation Page

The Accommodation Page displays detailed listings for available housing options such as PGs and rental flats. Each listing provides a description of the accommodation, contact details for the owner, and user ratings, and rate the services based on their experiences. This page helps users find suitable places to stay based on their preferences.

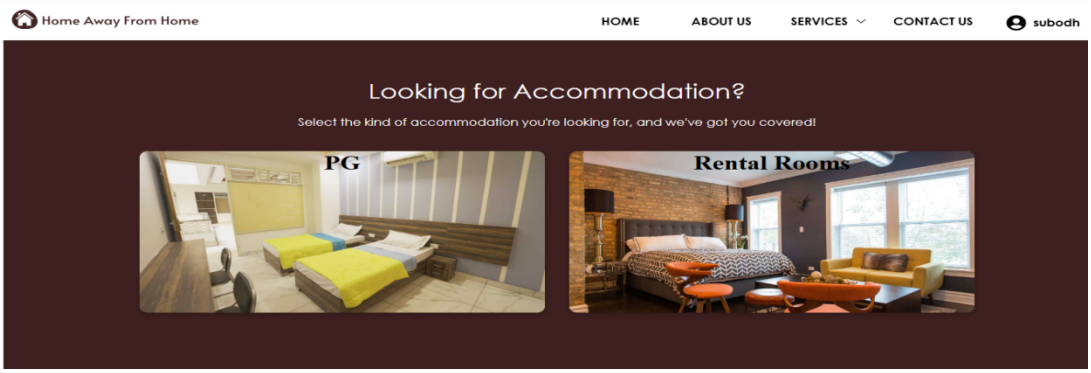


Fig-5.1:Accommodation PageofHome Away From Home

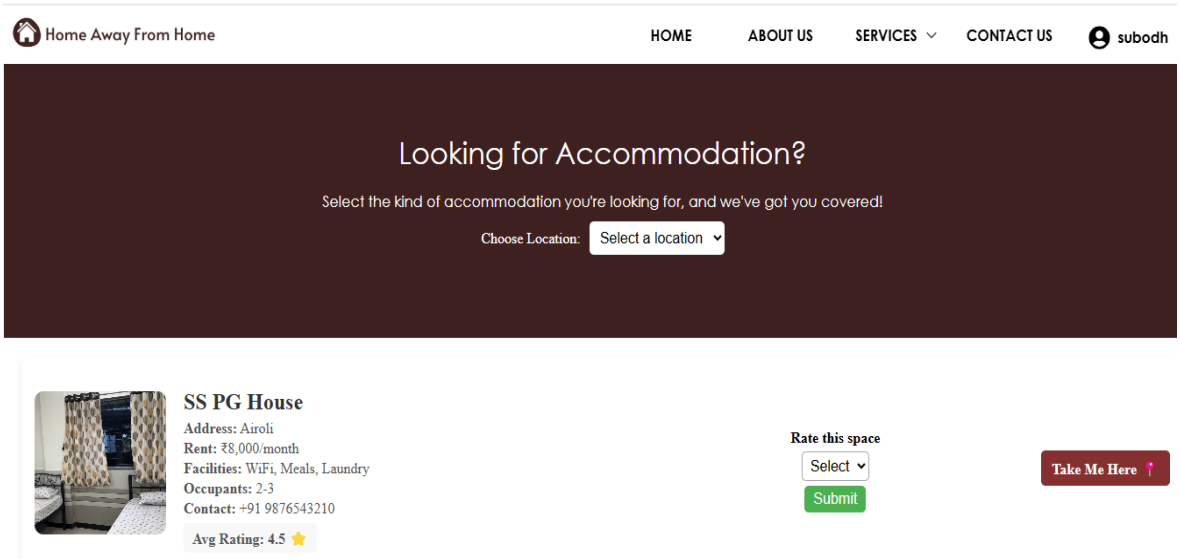


Fig-5.2:PGs PageofHome Away From Home

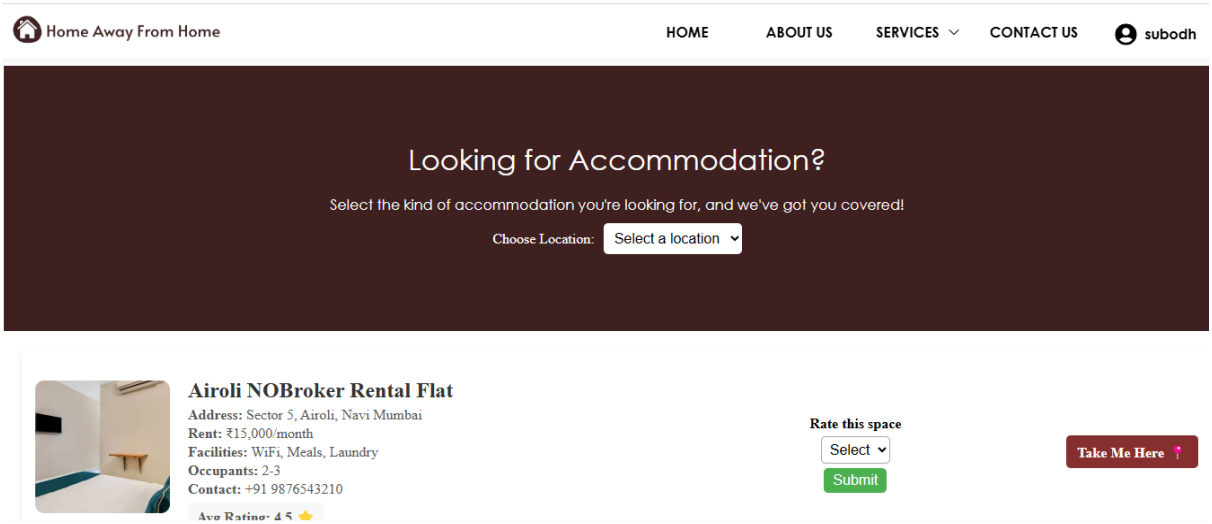


Fig-5.3:Rental Rooms PageofHome Away From Home

4) Mess Services Page

The Mess Services Page provides information about food and tiffin services available for students and professionals. It includes details about the menu, pricing, and contact information for each mess service, along with user ratings. Users can also rate the mess services based on food quality, service, and reliability.

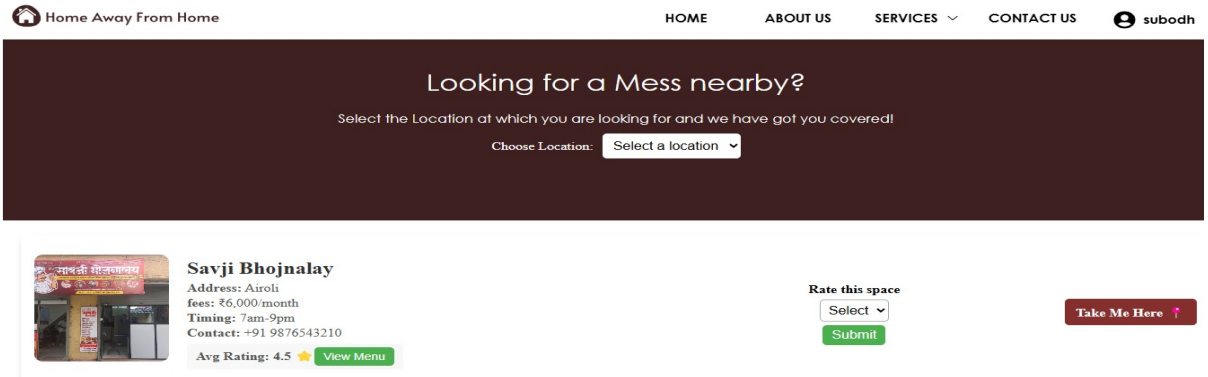


Fig-6:Mess ServicesPageofHome Away From Home

5) Maid Services Page

The Maid Services Page lists available maid services with details such as service types (e.g., cleaning, cooking), availability, and contact details. The page includes user ratings, enabling users to rate on the quality of the services they have used.

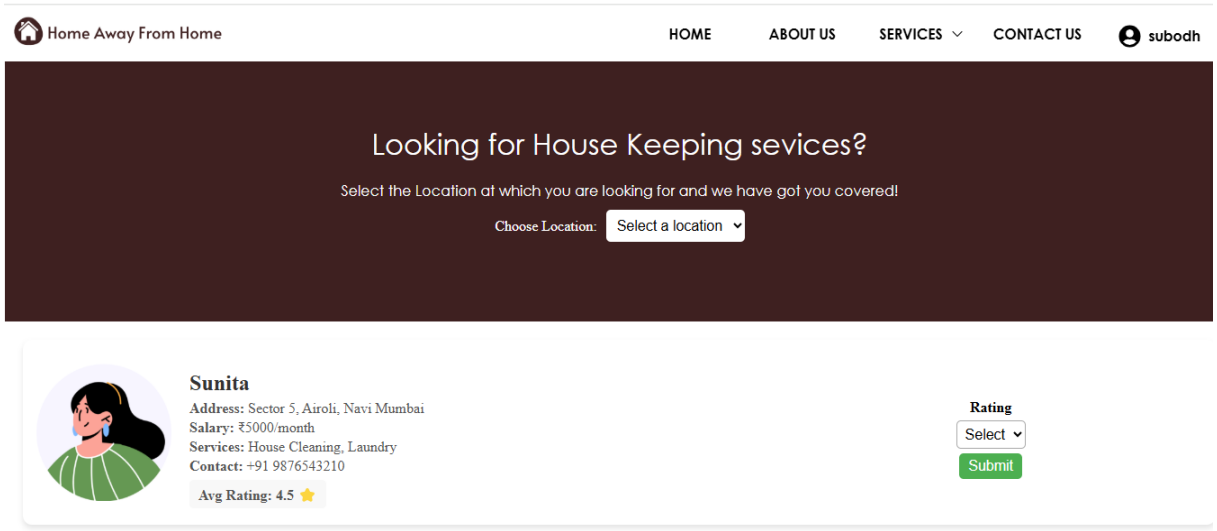


Fig-7:Maid ServicesPageofHome Away From Home

6) Feedback Section

The Feedback Section allows users to submit their thoughts and suggestions about the platform. It provides a form for users to rate their overall experience, and all feedback is collected and stored in the database through email for analysis, helping improve the services offered.

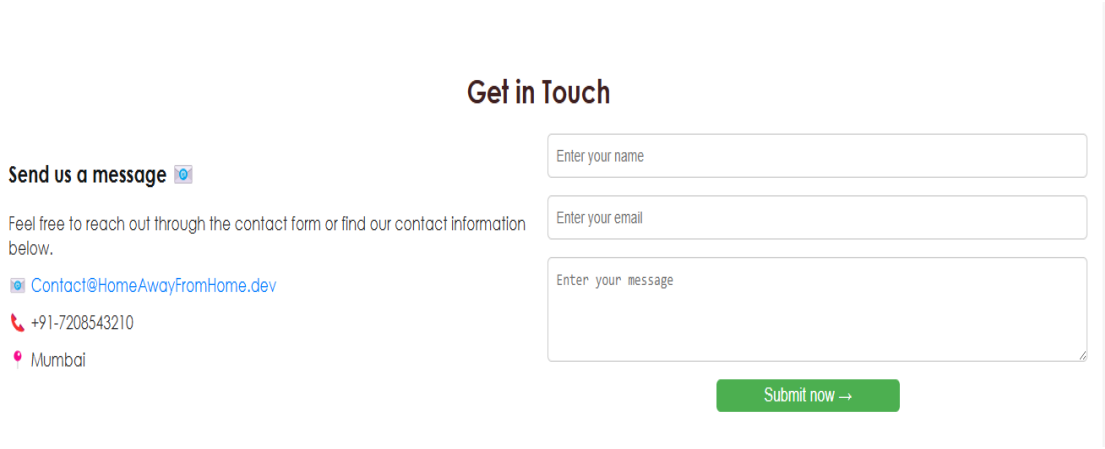


Fig-8:Feedback SectionofHome Away From Home

7) MySQL Database

The MySQL database stores all the data related to users, services, feedback, and ratings. It ensures that user accounts, service listings, contact details, and ratings are managed efficiently with a structured approach. The database supports the smooth functioning of the platform by enabling seamless data retrieval and updates.

V. FUTURE SCOPE

1) Real-time Availability: Integrate real-time availability features for accommodation and services to ensure accurate listings and bookings.
2) Mobile Application: Develop a mobile app version of the platform for easier access and convenience on smartphones and tablets.
3) Payment Gateway Integration: Implement secure payment gateways for online transactions for bookings, service charges, etc.

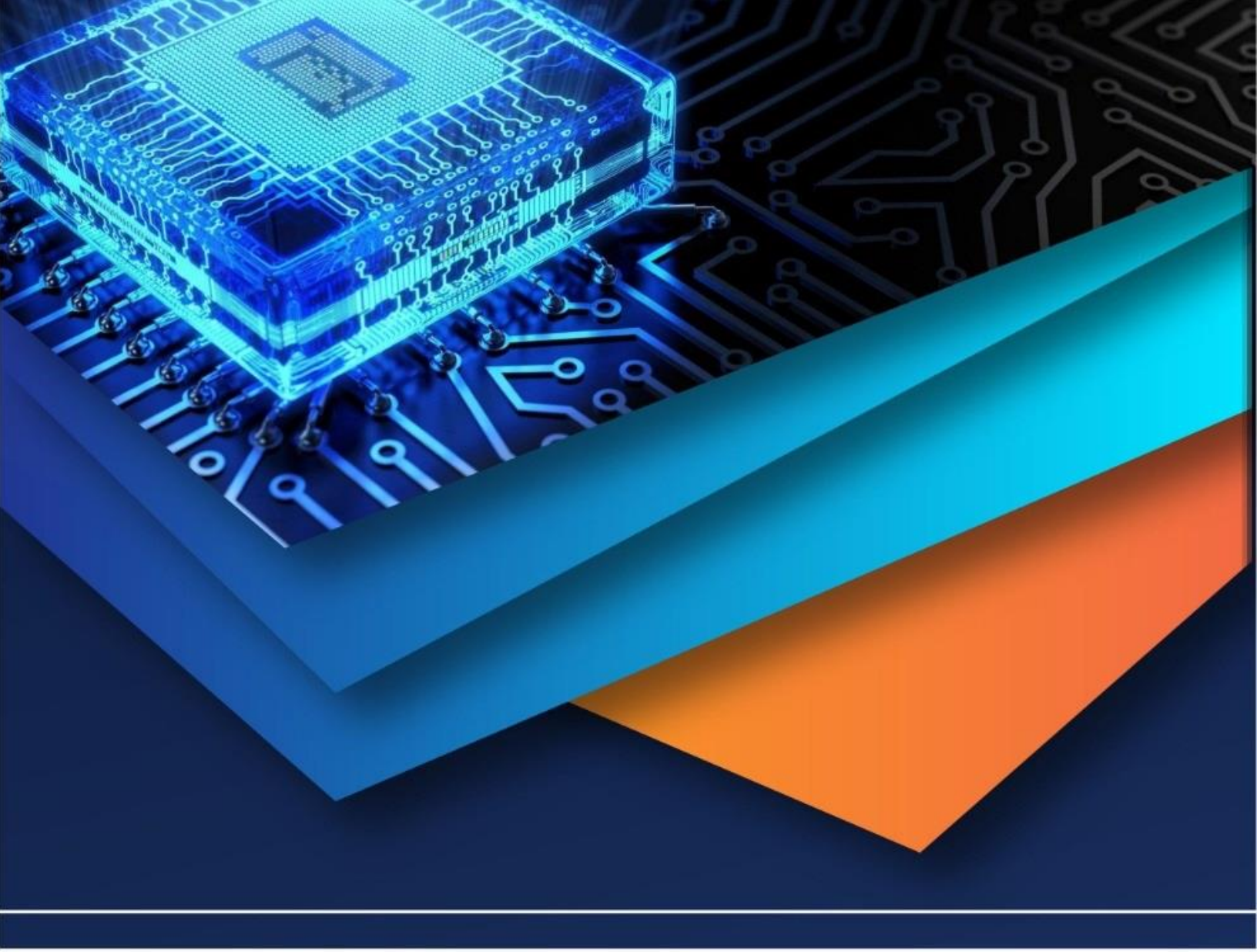
4) Personalized Recommendations: Use AI and machine learning algorithms to offer personalized suggestions based on user preferences, past behavior, and ratings.+14\.3
5) Expansion to Multiple Cities: Extend the platform's reach to different cities, offering more accommodation, mess, and maid service options for users in various locations.
6) Additional Services: Include more essential services such as transportation, laundry, or health services to create an all-inclusive living experience for users.
7) Enhanced Security Features: Add two-factor authentication and better data encryption methods to ensure user information is safe and secure.
8) Admin Panel for Service Providers: Create an admin dashboard for service providers (hostels, mess, maid services) to manage their listings, availability, and bookings.
9) User Dashboard: Offer users a personalized dashboard to track their bookings, reviews, and feedback, along with service history.-

VI. CONCLUSION

The "Home Away from Home" platform successfully addresses the growing need for reliable and accessible accommodation, mess, and maid services for students and professionals living away from home. By providing a user-friendly interface with easy navigation, it offers an all-in-one solution for finding accommodations, food services, and housekeeping help. The integration of a feedback and rating system further enhances the user experience, ensuring that users can make informed decisions based on real-time reviews. The use of MySQL ensures efficient data management, supporting smooth interaction between the front-end and back-end of the application. Overall, the platform has proven to be an effective tool for users looking to simplify their daily living arrangements and make their stay away from home more comfortable and convenient.

REFERENCES

[1] Kumar, R., & Sharma, A. (2020). Urban Accommodation Solutions: A Web-based Approach to Student Housing in Metropolitan Areas. *International Journal of Urban Studies and Technology*
[2] Zhang, J., & Li, H. (2019). Design and Development of a Web Application for Housing Services for Students and Professionals. *International Journal of Web Development and Technology*
[3] Patel, S., & Desai, P. (2021). Digital Platforms for Affordable Housing: Impact on Students and Working Professionals in Urban Areas. *Journal of Housing and Urban Development*
[4] Gupta, A., & Rathi, S. (2020). Web-based Solutions for Daily Services: Mess, Maid, and Accommodation Services for Students. *International Journal of Service Design and User Experience*
[5] Verma, S., & Singh, P. (2019). Technology Adoption in Urban Migration: Digital Solutions for Urban Migrants' Basic Needs. *International Journal of Technology and Society*
[6] Kumar, P., & Desai, R. (2021). User Feedback Systems in Service-Oriented Web Applications: A Case Study for Student Housing Platforms. *Journal of Web Application Development*
[7] Smith, R., & Jones, L. (2020). Integrating User Ratings and Reviews into Accommodation Services: Improving User Experience in Digital Platforms. *Journal of Information Technology and User Experience*
[8] Singh, M., & Patel, A. (2021). Affordable Housing Platforms for Students: A Study on the Effectiveness of Digital Solutions. *International Journal of Housing Research*



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