

# HOSTEL HUNT: FIND YOUR PERFECT STAY & MESS

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**Abstract** - The “Hostel Hunt: Find Your Perfect Stay & Mess” Android application is a user-centric mobile solution design to provide students and hostel administrators with easy access to the functionalities of the online hostel and mess management system. This mobile app will offer a comprehensive platform that not only helps users discover the ideal place to stay but also facilitates seamless access to meal services within the same interface, enhancing the overall experience of residential living. It will have user-friendly interface, real-time updates, and integrated booking and payment systems enhance the overall residential living experience. Whether seeking a hostel room or planning daily meals, users can rely on Hostel Hunt to streamline the entire process, making it an indispensable tool for students and anyone in search of quality accommodation and dining service. The mobile app will be design to be compatible with a wide range of Android devices and screen sizes, making it accessible to broad user base. It serves as a valuable addition to web-based system, providing mobility and flexibility for both students and administrators.

**Key Words:** K-means, Content-based filtering, recommendation system, clustering, geolocation, visualization

## 1. INTRODUCTION

The fundamental theories of economics underscore the critical importance of effective resource utilization in determining the success of an organization. According to these theories, an organization's ability to harness and optimize available resources, known as factors of production, is key to achieving its objectives. These resources can be broadly categorized into physical and conceptual resources. Physical resources include land, labor/machine, capital, and entrepreneurship, while the conceptual resource is information. Regardless of the financial investments made, without effective coordination of these resources, the investment is likely to be wasted, and the organization's vision will remain unrealized.

Effective management plays a pivotal role in determining an organization's success. Management is responsible for coordinating and utilizing resources efficiently towards the achievement of organizational goals. It involves planning, organizing, directing, and controlling resources to ensure they are used effectively. Without proper management,

even a well-funded project or organization may fail to achieve its objectives due to a lack of coordination and direction.

In today's dynamic and competitive business environment, the role of management in resource utilization has become even more critical. Organizations need to adapt quickly to changing market conditions, technological advancements, and customer preferences. Effective management enables organizations to align their resources with these changes, ensuring they remain competitive and successful in achieving their corporate objectives.

In conclusion, the success of an organization is intrinsically linked to how well it manages and optimizes its resources. Whether it's physical resources like land, labor, capital, and entrepreneurship, or conceptual resources like information, effective management is key. By ensuring the efficient coordination and utilization of these resources, management plays a crucial role in determining the success or failure of an organization in achieving its goals.

Effective resource utilization is not only crucial for achieving organizational objectives but also for sustaining long-term growth and competitiveness. Organizations that can efficiently manage their resources are better positioned to adapt to market changes, seize new opportunities, and mitigate risks. This ability to be agile and responsive to external factors is a key determinant of success in today's dynamic business landscape.

Moreover, effective resource management enhances organizational efficiency and productivity. By optimizing the use of resources such as labor, capital, and technology, organizations can reduce waste, improve operational processes, and enhance overall performance. This, in turn, can lead to cost savings, increased profitability, and a stronger competitive edge in the market.

Furthermore, effective resource utilization is not just about maximizing output; it also involves ethical considerations. Organizations need to ensure that their resource management practices are sustainable and socially responsible. This includes factors such as environmental impact, employee welfare, and community engagement. By incorporating these principles into their resource management strategies, organizations can enhance their reputation, build trust with stakeholders, and contribute positively to society.

## 2. LITERATURE SURVEY

### 2.1 A Study on Hostel Management System

The hotel industry is a crucial component of the hospitality sector, requiring efficient management to meet the diverse needs of guests. This study presents a comprehensive analysis of hotel management systems, focusing on their importance, components, and benefits. The research explores various aspects such as reservation systems, room allocation, billing, and customer relationship management. Additionally, the study discusses the role of technology in enhancing hotel management efficiency, including the use of cloud-based solutions and mobile applications. The findings highlight the significance of implementing robust management systems in hotels to improve service quality, increase operational efficiency, and ultimately enhance guest satisfaction.

### 2.2 Hybrid Technology Based Smart Hostel Management System Using Artificial Intelligence And Internet of Things:

The programme incorporates a crucial method of data collection that strengthens, streamlines, and increases the effectiveness of the recommended system. The program's general picture includes a number of sections, a schedule for transit, or other administrative tasks. In the context of the Hostel accommodation proposal, tracker result is also sufficiently described. The programme uses a single repository to handle all admin work and the complexities of managing a student's dormitory.

### 2.3 Cloud Based Hostel Facility Automation System:

The purpose of this project is to create a system for collecting information and displaying it in around the Hostel. Thanks to this technology, the entire student profile will be available. The number of people in each room and the availability of rooms are displayed. It shows which students have paid in full or still owe money. The main sub divisions of the proposed system are contained in system modules so that they can function independently when used in different situations..

## 3. FEATURES:

### 1. User Registration and Profile:

Users can create accounts with basic information. Profiles can be personalized with additional details like phone numbers and dietary preferences.

### 2. Hostel Discovery:

Users can search for hostels based on location, price range, and amenities. Hostel listings include essential information such as hostel name, location on a map, price range, user ratings, and a list of available amenities.

### 3. Room Booking:

Users can view available rooms within selected hostels, including room types, prices, and current availability. Users can select rooms and make reservations, specifying check-in and check-out dates. Real-time room availability ensures accuracy.

### 4. Online Payments:

Secure online payment options are integrated, allowing users to make payments for room reservations using credit/debit cards, mobile wallets, or other supported methods.

### 5. Mess Services:

Hostels with associated mess facilities provide users with information about meal plans, daily menus, and dietary options. Users can select meal plans, specify dietary preferences, and place meal orders.

### 6. Reviews and Ratings:

Users can read reviews and ratings provided by previous residents for both hostels and mess services. Users can write their own reviews, rate their experiences, and leave comments.

### 7. Notifications and Alerts:

The application sends push notifications and alerts to users for booking confirmations, payment reminders, check-in/check-out reminders, and special offers.

### 8. Feedback and Support:

Users can provide feedback on hostels, mess services, and the application itself. A support ticket system is available for users to report issues or request assistance from administrators.

### 9. User Privacy and Security:

The application ensures the security of user data through user authentication, data encryption, and other security measures.

### 10. User Profile Management:

Users can update their profiles, change passwords, and manage their personal information.

### 11. Real-Time Data:

The application provides real-time information on room availability, meal menus, booking confirmations, and payment statuses.

## 4. MODULE DESCRIPTION

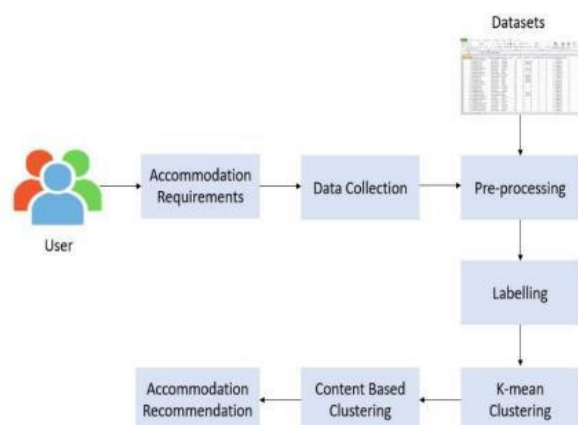


Fig 3.1 System Architecture

### 1. Students and Residents:

- Finding Suitable Accommodation: Students and residents can easily search for hostels that match their preferences, such as location, price range, and amenities. This simplifies the process of finding suitable places to stay.

- Efficient Booking: Users can book hostel rooms with real-time availability, reducing the hassle of contacting hostel administrators directly. The ability to view room types and prices helps them make informed decisions.

- Meal Planning: Users can select meal plans, view daily menus, and specify dietary preferences. This streamlines the process of planning meals and ensures that residents have access to suitable food options.

- Transparency: The application provides access to user-generated reviews and ratings, allowing students and residents to make well-informed choices about hostels and mess services. This transparency contributes to a better living experience.

- Notifications: Users receive timely notifications and alerts for booking confirmations, payment reminders, and special offers, helping them stay updated and organized.

- Feedback and Support: The feedback and support features enable users to report issues, offer suggestions, and seek assistance, fostering a sense of community and improvement in services.

### 2. Hostel Administrators:

- Streamlined Management: Hostel administrators can manage room availability, bookings, and meal services through the application's administrative portal, reducing paperwork and manual effort.

- Real-time Data: Administrators have access to real-time data on room occupancy, payment statuses, and maintenance requests, enabling them to make informed decisions and efficiently allocate resources.

- Feedback and Issue Resolution: The feedback and support ticket system allows administrators to address concerns and issues reported by residents promptly, improving overall satisfaction.

- Promotions and Offers: Administrators can use the application to promote special offers and events, attracting more residents and increasing occupancy.

### 3. Mess Staff:

- Efficient Meal Preparation: Mess staff can plan meal preparation based on user-selected meal plans and dietary preferences, reducing food wastage and ensuring efficient kitchen operations.

- Menu Management: The application helps mess staff update daily menus and accommodate special dietary requests effectively.

- Order Processing: Mess staff can process meal orders placed by users through the application, streamlining the order fulfillment process.

### 4. Educational Institutions:

- Improved Student Services: Educational institutions can offer a valuable service to their students by providing access to the Hostel Hunt application. This can enhance the overall residential experience and student satisfaction.

- Data Insights: Institutions can gather insights from application data, such as user reviews and feedback, to make informed decisions about hostel and mess facility improvements.

## 5. GUI/WORKING MODULES

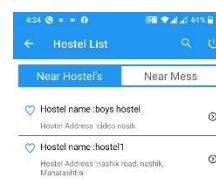


Fig4.1 : Hostel and Mess List



Fig4.2 : Hostel Details

## 6. REFERENCES

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Fig4.3 : Login selection screen

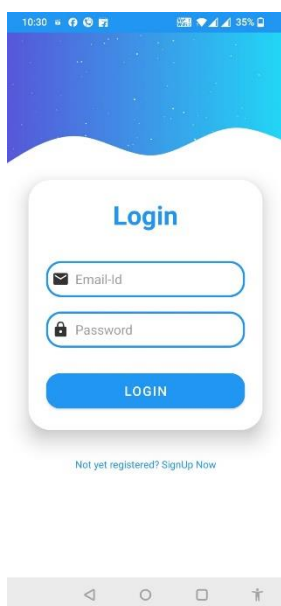


Fig 4.4 Login Screen

## 6. CONCLUSIONS

Hostel Hunt is a valuable tool for students and residents searching for quality accommodations and dinning services. By offering a mobile application that simplifies the entire process, it enhances convenience, efficiency, and transparency. Whether users are looking for a hostel room or planning their daily meals, Hostel Hunt provides a user-centric platform to meet their needs.

As technology continues to play a crucial role in modern living, applications like Hostel Hunt Bridge the gap between traditional processes and digital convenience, making it an indispensable tool for students and residents seeking the perfect stay and mess services.