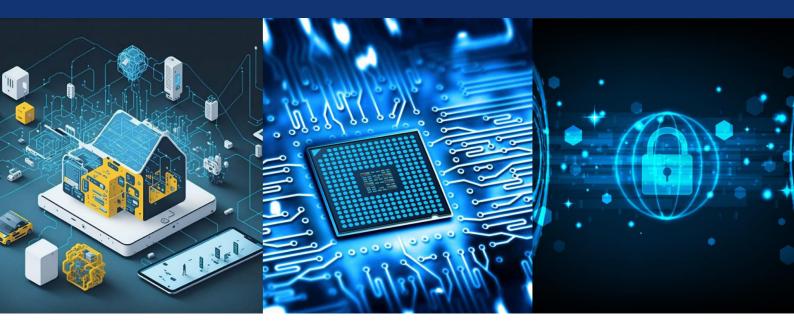


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PG Finder and Local Transport Contact System

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ABSTRACT: This research paper presents the PG Finder project (RentRepose), a web-based application designed to address the challenges of finding suitable paying guest (PG) accommodations and local transport options in urban areas. By integrating PG listings with real-time local transport services such as rickshaws and rental vehicles, the platform provides users with an interactive map and a comprehensive solution for housing and transportation needs. Key features of the application include detailed PG listings with information on rent, mess facilities, and contact details, coupled with an interactive map for easy access to nearby transport services. Advanced search and filtering options allow users to tailor their queries based on personal preferences, while a responsive design ensures seamless functionality across various devices. This project aims to enhance decision-making for individuals seeking short- to medium-term accommodation and reliable transportation, while simultaneously promoting local businesses by increasing their visibility and accessibility. The PG Finder platform is intended to create a more efficient, user-friendly, and community-oriented experience for individuals navigating urban living.

KEYWORDS: Paying Guest Accommodation, Local Transport Integration, Interactive Map, Advanced Search Filters, Responsive Web Design, Urban Housing Solutions, Transportation Services, Local Business Promotion.

I. INTRODUCTION

The rapid growth of urban populations has brought about significant challenges in housing and transportation, particularly for newcomers who are unfamiliar with a city's options. Finding suitable accommodation and reliable local transport often involves navigating fragmented and cumbersome resources, leading to inefficiency and frustration. Traditional methods, such as classified ads, word-of-mouth, and physical inquiries, are still widely used but fail to provide a cohesive, easy-to-navigate solution. This issue is compounded for individuals seeking short-term housing or temporary stays, such as students, or professionals on assignments

Addressing these challenges, the PG Finder project introduces a comprehensive, web-based platform that streamlines the process of finding paying guest (PG) accommodations and local transport options in urban areas. The platform consolidates critical information into one place, helping users quickly access and evaluate available housing and transportation alternatives. By integrating detailed listings of PG accommodations, which include vital details such as rent, amenities, owner contact information, and availability, alongside an interactive map displaying nearby transport services like rickshaws and rental vehicles, PG Finder creates a user-friendly ecosystem for urban dwellers.

One of the key innovations of the platform is its seamless combination of accommodation and transport services. The interactive map allows users to view PG accommodations in their vicinity and simultaneously explore available transport options, streamlining the decision-making process. Additionally, the platform's advanced search filters and customizations enable users to find accommodations and transportation that best suit their specific needs, whether based on location, budget, or additional requirements like proximity to workplaces or educational institutions.

The responsive design of the PG Finder platform ensures that users can access the service across a range of devices, from smartphones to desktops, making it versatile and convenient for on-the-go decision-making. The project is not only aimed at simplifying the user experience but also at supporting local businesses by providing a space for PG owners and transport service providers to gain visibility and connect with potential customers. By promoting small and medium-sized enterprises, the platform contributes to the local economy and fosters community engagement.

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This paper presents the development process of the PG Finder project, the key features and functionalities that set it apart from traditional methods, and its potential social impact. The integration of housing and transportation services into a single platform marks an innovative approach to addressing urban living challenges, offering a more efficient and accessible way to meet the needs of a diverse population. Furthermore, the paper discusses how this model can be expanded and adapted to different urban settings, making it a scalable solution for cities around the world.

III. PROBLEM STATEMENT

Finding suitable paying guest (PG) accommodations and reliable local transport in urban areas is often a fragmented and inefficient process. Users face difficulties with scattered PG listings across multiple platforms, inconsistent information, and a lack of centralized sources for transport options like rickshaws and rental vehicles. The search process is time-consuming, with limited filtering capabilities and poorly designed interfaces that hinder user experience, especially on mobile devices. These challenges make it hard for individuals, particularly newcomers, to efficiently find and compare housing and transportation options.

IV. OBJECTIVE OF PROJECT

The objective of the PG Finder project (RentRepose) is to develop a comprehensive, user-friendly platform that centralizes the search for paying guest (PG) accommodations and local transport options in urban areas. The key objectives of the project are as follows:

- 1. **Centralize Accommodation and Transport Information**: Create a unified platform that consolidates detailed PG accommodation listings and local transport services, reducing the need for users to search multiple sources.
- 2. **Provide Detailed and Comprehensive Listings**: Offer up-to-date information on PG accommodations, including rent, amenities, mess availability, and owner contact details, to help users compare and choose the most suitable options.
- 3. **Integrate Local Transport Services**: Display information about local transport options, including rickshaws, tempos, and rental vehicles, alongside PG accommodations, enabling users to easily access both housing and transportation solutions.
- 4. **Implement Interactive Mapping**: Utilize Google Maps to visualize the proximity of PG accommodations and local transport options, enhancing the decision-making process with interactive map features.
- 5. **Enhance Search and Filter Functionality**: Provide advanced search and filter options, allowing users to refine their searches based on specific criteria such as location, budget, and proximity to transport services.
- 6. **Ensure a Seamless User Experience**: Design a responsive and intuitive platform with mobile and desktop accessibility, incorporating interactive elements to engage users and improve navigation.
- 7. **Support Local Businesses**: Promote local PG owners and transport service providers, fostering community growth and supporting local businesses through increased visibility.
- 8. **Maintain Data Accuracy and Reliability**: Implement efficient data management practices, ensuring that the platform's content is dynamically updated and remains accurate.
- 9. **Enhance Decision-Making Capabilities**: Provide users with the necessary tools to make well-informed decisions about PG accommodations and transport options, ultimately improving convenience and satisfaction.
- 10. **Ensure Security and Platform Reliability**: Ensure the platform's security by protecting user data and maintaining consistent performance for a reliable user experience.

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11. **Include Mess Facility Information**: Provide details about healthy, budget-friendly, and pocket-friendly mess facilities available at PG accommodations to assist users in making an informed choice.

V. SCOPE OF PROJECT

The scope of the PG Finder project (**RentRepose**) is to develop a comprehensive web-based platform that centralizes and streamlines the search for paying guest (PG) accommodations and local transport services. The primary objectives and features include:

- 1. **Centralized Information**: The platform will consolidate PG accommodation listings and local transport services, providing users with a one-stop solution for both housing and transportation needs.
- 2. Accommodation and Transport Data Management: The platform will store detailed data on PG accommodations, including rent, amenities, and location, as well as transport services like rickshaws and rental vehicles, ensuring the information is up-to-date and reliable.
- 3. **Interactive Features**: Google Maps integration will allow users to visualize the proximity of PG accommodations and transport options, enhancing decision-making and improving the overall user experience.
- 4. Advanced Search and Filters: The platform will feature advanced search and filter capabilities, enabling users to narrow down their search based on specific criteria such as location, rent, and transport proximity.
- 5. **Mobile Application Development**: Dedicated mobile applications for iOS and Android will offer a native experience, supporting offline access and enhancing usability.
- 6. **Security and Reliability**: The project will prioritize security by protecting user data and ensuring the platform operates efficiently to handle user interactions and data management.
- 7. **Local Business Support**: The platform will promote local PG owners and transport service providers, fostering community engagement and supporting small businesses.
- 8. **Future Enhancements**: Future features will include advanced analytics, personalized recommendations, IoT and AR integration for virtual tours, sustainability options, and mobile app functionality to further enhance user engagement.
- 9. **Geographic Expansion**: Initially focused on specific cities, the platform will expand to cover additional regions, offering localized data to suit different markets and user preferences.

The scope of this project aims to provide an accessible, centralized, and user-friendly solution to the common challenges of finding PG accommodations and local transport in urban areas. Future scalability and feature enhancements will ensure the platform meets evolving user needs and industry trends.

VI. EXISTING SYSTEM

Current systems for finding PG accommodations and local transport services are fragmented and inefficient. Platforms like 99acres and Magic Bricks primarily focus on real estate listings, with little integration of transport options. Similarly, transport services such as Ola and Uber provide local transport but do not offer accommodation listings. This separation forces users to rely on multiple platforms, making comparisons and decision-making cumbersome. Additionally, many platforms lack mobile-friendly interfaces, advanced search features, and personalization, which limits user experience. Existing search functionalities often fail to offer comprehensive filters or proximity-based search, hindering users from quickly finding suitable options. The PG Finder project addresses these issues by offering a unified platform that integrates PG listings with local transport services in a user-

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friendly, efficient manner.

VII. LIMITATIONS

Geographic Limitation: The platform will initially cover specific cities, with expansion planned for future phases.

Data Accuracy: The accuracy of listings depends on third-party contributions, which may lead to outdated or inconsistent information.

User Adoption: Widespread adoption may be slow, especially in areas where users rely on multiple platforms.

External Dependencies: Integration with services like Google Maps and payment gateways may be affected by service outages or changes.

Feature Limitations: Advanced features like machine learning and AR are not included in the initial release.

Scalability: Managing large volumes of data and expanding to new regions may present scalability challenges.

Device Performance: Low-end devices or poor internet connectivity may affect user experience.

Regulatory Compliance: Compliance with regional laws and regulations may limit certain features.

VIII. DEVELOPED SYSTEM

PG Finder (RentRepose), aims to streamline the search for paying guest (PG) accommodations and local transport services by providing a centralized, user-friendly platform. Unlike existing fragmented solutions, PG Finder integrates both housing and transport information into a single interface. The platform will feature detailed listings of PG accommodations, including essential information such as rent, amenities, mess availability, and owner contact details. It will also provide local transport options, such as rickshaws, tempos, and rental vehicles, displayed through an interactive map integrated with Google Maps.

Key functionalities will include advanced search and filter options, allowing users to narrow down choices based on specific criteria such as location, rent, and proximity to transport. The platform will feature a responsive design, ensuring seamless access across devices, including desktops, tablets, and smartphones.

To enhance user experience, PG Finder will provide real-time data updates and offer personalized recommendations based on user preferences and search history. Additionally, the platform will support local businesses by promoting PG owners and transport service providers. Future scalability will ensure that the system expands to additional cities and regions, further improving its value for users.

By integrating PG accommodations with transport services, providing advanced search tools, and ensuring a mobile-friendly interface, PG Finder aims to simplify the process of finding suitable housing and transportation, offering a more efficient and user-centered solution compared to existing systems.

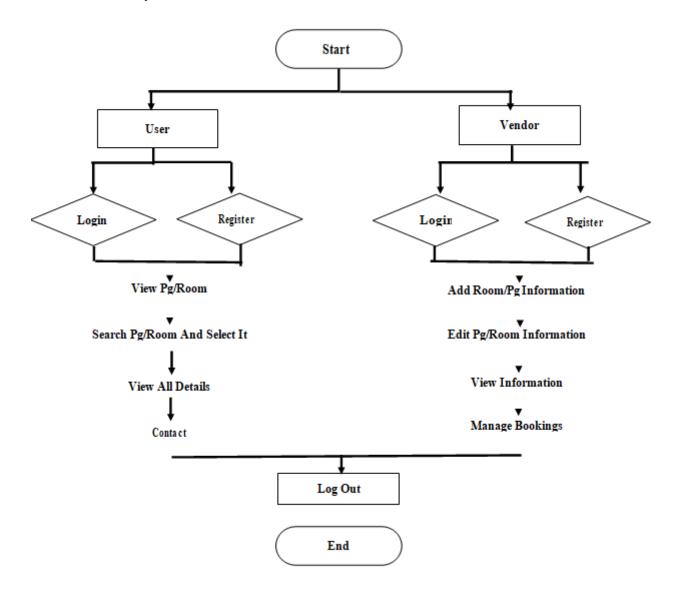
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The flowchart of the system is as follows:



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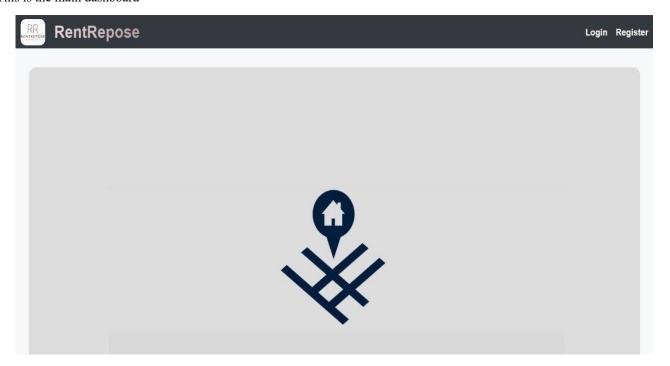
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The actual system that is developed is as follows: This is the user-dashboard -



This is the main dashboard -

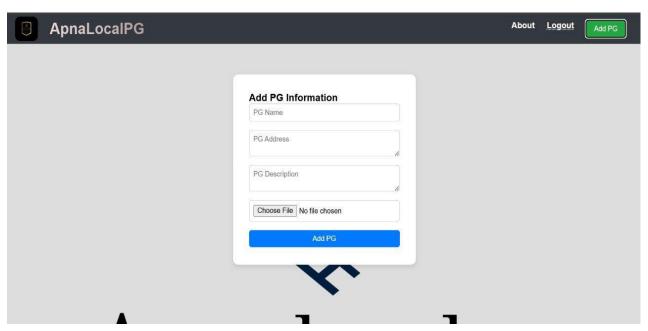


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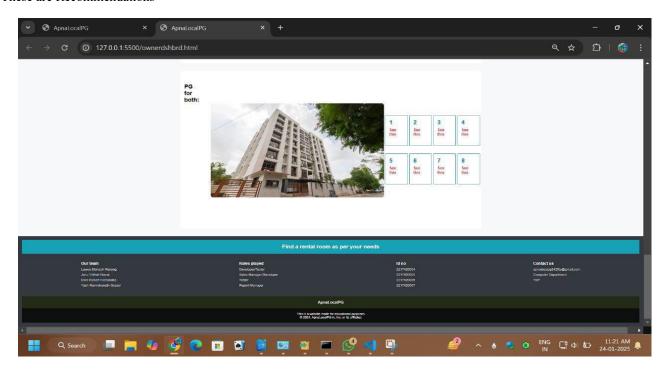
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This is the admin-dashboard where admin can add a room -



These are Recommendations -



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IX. CONCLUSION

The PG Finder project successfully addresses the challenges of finding suitable PG accommodations and reliable local transport options by offering a unified platform. By centralizing PG listings with integrated local transport services, it simplifies the search process and provides users with real-time, detailed information to make informed decisions. Features like advanced search filters, interactive maps, and a responsive design enhance the overall user experience, making it accessible on multiple devices.

Additionally, PG Finder promotes local businesses, fostering community engagement and contributing to the local economy. The project's scalability allows for future expansion into more cities and regions, making it adaptable to changing user needs. As the platform evolves with new features such as personalized recommendations and mobile apps, PG Finder has the potential to redefine how users find housing and transportation solutions, creating lasting value for both users and local service providers.

REFERENCES

- 1. Vaishali S. Rajput, Satyajeet B. Jadhav, Makarand D. Jadhav, Rohit D. Jadhav, Rohan D. Jadhav, Pranav B. Jadhav (Hostel and PG Finder Application) Vishwakarma Institute of Technology, Pune, 411037, Maharashtra, India https://r.search.yahoo.com/_ylt=AwrKFW4DnopnEgIAd0K7HAx.;_ylu=Y29sbwNzZzMEcG9zAzEEdnRpZAMEc2VjA3Ny/RV=2/RE=1738347267/RO=10/RU=https%3a%2f%2fymerdigital.com%2fuploads%2fYMER2111P9.pdf/RK=2/RS=eGjLCggRLwwkBsYLRzWXR6Ireow-
- 2. Mr . Nawale Rohit Ramhari , Mr. Mouriya Narayan Dilip , Mr.Saindane Sumit Madhukar, Mr.Wagh Prasad Sunil.(PG LOCATOR APP)

https://r.search.yahoo.com/_ylt=AwrKAAZen4pnYwIA94C7HAx.;_ylu=Y29sbwNzZzMEcG9zAzEEdnRpZAMEc2VjA3Ny/RV=2/RE=1738347614/RO=10/RU=https%3a%2f%2fwww.ijres.org%2fpapers%2fVolume-10%2fIssue-5%2fSer-15%2f1005105110.pdf/RK=2/RS=qRfa26nzlq0IeX4KfG6ant.gMVM-

- 3. Shrividya Bansode , Vaibhavi Wadibhasme , Akash Kumar Avinash Nishad (PEERROOMS (Hostel / PG Finding Web Application & Mobile App)) https://r.search.yahoo.com/_ylt=AwrKAAZen4pnYwIA.4C7HAx.;_ylu=Y29sbwNzZzMEcG 9zAzUEdnRpZAMEc2VjA3Ny/RV=2/RE=1738347614/RO=10/RU=https%3a%2f%2fijarcc e.com%2fwp-content%2fuploads%2f2023%2f05%2fIJARCCE.2023.125281.pdf/RK=2/RS= ppW9FCETJXNKSiCzVwsstlMATiU-
- 4. Android A beginner's guide http://www.codeproject.com/Articles/102065/Android-Abeginner-s-guide
- 5. P. Singh, N. Singh, 'Analysis of Free and Open Source Software (FOSS) Product in Web Based Client-Server Architecture', International Journal of Open Source Software and Processes (IJOSSP), 9(3), pp. 36-47, 2018.











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