



Quick Fix Home Services

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Abstract

The on-demand home service system simplifies access to essential services like plumbing, electrical repairs, gas range servicing, and more. It saves time and resolves problems efficiently, especially for individuals relocating. The system has two users: Home Service providers (who register by adding their details, including a contact number) and Users (who register, search for services based on location, and contact providers directly). This streamlined approach makes availing home services quick and hassle-free.

Keywords: hassle-free, Home Services, Model.

1. Introduction

The main aim of this web based application is to provide the support for house owners to get the manpower for house cleaning and repair works like plumbing, electrical and painting works. Application admin and house owners are the users of this software. Admin maintain and update the provided services for houses, process the customer's requests and allocate the employees. Registered customers can view the provided services by the organization, post the request based on the required service, view the status of the requests, update the payments after service completion and post the review message. This project is designed for the public will know about the specialist workers for the different locations and show the nearby specialist workers and their details such as working experience and cost etc. This project is help to find the different workers details in various areas. This web service is used for public to find plumber, painter, wireman and building constructor nearby locations. This website used to search for the availability of public requirements. In general if any person wants a service very difficult to find the service man. In this website here are so many ways available to find the nearest service man but we can find whether the service is available. In this website developed to search a service in nearby location which will make the user's manual process, defects and time consumption can be reduced. service providers and customers.

1.1. Methodology

The on-demand home service system is designed to make accessing essential services like plumbing, electrical repairs, gas range servicing, RO maintenance, and more convenient and time-efficient for users. It addresses the growing need for quick solutions, especially for individuals who are relocating or managing multiple tasks within limited time. The system operates with two primary users: service providers and customers. Service providers play a significant role by registering themselves on the platform, specifying their roles, the services they offer, and their contact details. This ensures that their offerings are visible to potential customers. On the other hand, users can register on the platform and search for services based on categories such as plumbing, electrical work, or any other relevant need. They can also narrow their search by specifying their location, which allows the system to display a list of available service providers in their vicinity. Each listing includes details such as the provider's name, services offered, and contact information, enabling users to directly connect with the service provider of their choice. This approach eliminates delays and streamlines the process of finding and availing home services. Furthermore, the system's user-friendly interface ensures that navigation is simple and intuitive for both users and service providers. The platform allows individuals to resolve their needs efficiently, saving valuable time while ensuring a

hassle-free experience. With features like category-based services and location-specific listings, this system bridges the gap between service providers and customers, making it incredibly beneficial for everyone involved. Its streamlined and direct process simplifies an often complicated task, providing a modern solution for today's fast-paced world. working experience and cost etc. This project is help to find the different workers details in various areas. This web service is used for public to find plumber, painter, wireman and building constructor nearby locations. This website used to search for the availability of public requirements. In general if any person wants a service very difficult to find the service man. In this website here are so many ways available to find the nearest service man but we can find whether the service is available. In this website developed to search a service in nearby location which will make the user's manual process, defects and time consumption can be reduced

1.2. Module Execution

1.2.1.Admin Login

This module manages the admin login functionality, ensuring secure access for administrative tasks. The admin is the central figure responsible for maintaining and managing the overall operations of the project. Admins are provided with a unique username and password to safeguard the system's integrity. Only the admin has exclusive access to this module, which includes critical functionalities like adding new records, updating existing details, and deleting outdated or irrelevant information. This ensures that the system remains up-to-date and error-free, maintaining efficiency and usability for all users.

1.2.2.Service Details

This module is designed to store and manage all the essential details about the services available on the platform. Admins can add information related to services, such as a unique service ID, the name of the service, the location where it is provided, and the contact details of the service provider. By maintaining these comprehensive records, the system ensures that users have access to accurate and detailed information about the services they need. This module serves as a foundation for linking users

with the relevant service providers based on their specific requirements.

1.2.3.Category

The category module organizes the services into different classifications, making it easier for users to navigate and locate what they need. Each category includes the service name, a brief description, and related images to provide users with a clear understanding of the service offerings. By presenting services in a categorized format, this module enhances the user experience by enabling efficient and targeted searches. The visually organized layout and concise descriptions ensure that users can quickly identify and select the services that best match their needs.

1.2.4.Search Service Details

This module provides users with the ability to search and explore specific services available on the platform. Users can input their desired service or location into the search bar, and the system retrieves matching results from the database. Once users identify the services they are looking for, they can further proceed to book the services as per their convenience. By facilitating a smooth and efficient search process, this module ensures that users can avail of the needed services without any delays or difficulties. The seamless integration of search and booking features adds to the platform's overall functionality and user satisfaction.

2. Testing

2.1. Unit Testing

Unit Testing focuses on testing individual modules of the system in isolation to ensure they work as expected. For instance, the admin login, service details, category organization, and search service details modules are tested independently. This helps identify and resolve any module-specific issues before integrating them with others. The results confirm that each standalone component operates without errors and meets its designated requirements.

2.2. Integration Testing

Integration Testing examines the interaction between the different modules to ensure seamless data flow and communication. For example, the search functionality is tested to verify that it correctly fetches data from the service details and category

modules. This method ensures that interconnected modules work harmoniously, and the results highlight any data or workflow inconsistencies between the modules.

2.3. System Testing

System Testing evaluates the entire system as a unified entity to verify its functionality against defined requirements. This involves testing the platform's overall performance, usability, and efficiency under different scenarios. For example, the process of a user searching for a service, viewing details, and contacting a service provider is tested end-to-end. The results determine whether the system delivers the desired output and operates effectively.

2.4. User Acceptance Testing (UAT)

User Acceptance Testing (UAT) involves testing the system from the end-users' perspective to ensure it meets their expectations and needs. Users perform real-world tasks such as searching for services, booking them, and navigating through the interface. The feedback received during this phase determines the system's user-friendliness and readiness for deployment. Positive results from UAT signify that the platform is intuitive and beneficial for its intended audience.

3. Result & Discussion

3.1. Result

The development and testing of the on-demand home service system yielded successful and robust outcomes for all modules, ensuring the platform's functionality, reliability, and user satisfaction. Unit testing thoroughly verified the independent operation of modules, such as Admin Login, Service Details, Category, and Search Service Details. Each module successfully demonstrated error-free functionality, meeting its specific requirements without any major issues. Integration testing further validated the seamless interaction between modules, ensuring accurate data retrieval and smooth communication within the system—for instance, users searching for services were able to access complete information from the database effortlessly. System testing evaluated the platform's efficiency and usability by simulating various scenarios, such as stress-testing under high traffic loads, which confirmed its ability to handle large-scale operations smoothly. Lastly,

User Acceptance Testing (UAT) provided valuable insights into the system's user-friendliness and practicality, as positive feedback from end-users highlighted the intuitive design and ease of navigating the platform, along with the successful booking and connecting processes with service providers.

3.2. Discussion

The rigorous testing of the on-demand home service system reaffirmed its reliability and efficiency, laying a strong foundation for deployment. Unit testing played a vital role in identifying and resolving module-specific issues early in the process, ensuring smooth operation of standalone functionalities. Integration testing ensured that the interconnections between modules functioned flawlessly, which is critical for delivering a cohesive and seamless user experience. The system testing phase was pivotal in confirming the platform's performance across varied scenarios, including stress-testing to ensure scalability and stability during high user traffic periods. This revealed the system's capability to handle extensive data loads and multiple user requests concurrently without affecting speed or performance. UAT was an essential phase where feedback from actual users provided practical insights into usability, leading to minor improvements in the interface design. For example, adjustments were made to simplify navigation and enhance the booking process further. This testing phase also validated the platform's readiness for deployment, as users expressed satisfaction with the intuitive interface and efficient service access. Although the system has been tested thoroughly, continuous post-launch monitoring and user feedback will be integral to making future refinements and maintaining its effectiveness over time.

Conclusion

Developed a user-friendly, efficient, and secure platform for on-demand household services. Simplified service booking, provider management, and payment processing for better user experience. Enhanced trust and transparency through verified service providers, real-time tracking, and structured feedback. Ensured secure transactions with multiple payment options and dispute resolution mechanisms.



The system effectively addresses limitations of existing platforms, improving accessibility and convenience. Future enhancements can include AI-driven service recommendations and automated customer support for further optimization.

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