

Daily Fixers: An Android-Based Platform for On-Demand Home Services

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Abstract - Daily Fixers is an on-demand home service platform that connects users with skilled professionals for tasks such as plumbing, carpentry, electrical work, and repairs. The platform offers an easy-to-use interface where customers can browse services, book appointments, make secure payments, and submit feedback. Service providers can manage their profiles, receive job requests, track bookings, and improve their performance through customer reviews. Real-time notifications keep both users and vendors updated on booking status, service progress, and payments, ensuring quick and efficient communication. An admin module oversees user management, vendor verification, bookings, payments, and feedback to maintain service quality and platform reliability. With automation, secure transactions, and real-time communication, Daily Fixers provides a convenient and efficient solution for household maintenance, making professional services accessible with minimal effort.

Key Words: On-demand services, Home service platform, Real-time booking, Service providers, Secure payments, Customer feedback, Automation.

1. INTRODUCTION

Android development refers to the creation of applications for devices running the Android operating system, the most widely adopted mobile platform. It involves designing, coding, testing, and deploying applications using languages such as Java and Kotlin, with XML for UI development. The Android SDK provides essential tools like Android Studio, Gradle, and emulators to support efficient development workflows. Modern Android development also integrates Jetpack libraries, Firebase services, and Room Database to enhance application performance, security, and stability. Android applications may be developed as native apps, hybrid apps using frameworks such as Flutter or React Native, or Progressive Web Applications (PWAs). With increasing demand for mobile-first solutions, Android apps often incorporate advanced technologies like Machine Learning (ML Kit), Augmented Reality (ARCore), and IoT-based features to deliver smart and interactive experiences.

Our project, **Daily Fixers**, aims to digitalize the traditional home service sector by offering a structured, technology-driven platform that connects customers with

skilled service professionals. Conventional service booking methods often involve uncertainty, inconsistent pricing, and unreliable communication. Daily Fixers simplifies this process by providing users with options to browse services, book appointments, track service progress, make secure payments, and give feedback. Vendors benefit from tools to manage job requests, update availability, track service history, and engage with customers. Administrators manage users, vendors, services, feedback, and transactions to ensure smooth and reliable platform operations. The system is implemented using Java for backend logic and MySQL for data management, deployed via WAMP on Windows. The platform supports secure payments, real-time notifications, vendor verification, and invoice generation, ensuring a seamless experience for both users and service providers.

1.1 EXISTING SYSTEM

The current home service industry largely operates through informal and unorganized channels. Customers typically depend on word-of-mouth recommendations or local searches to find electricians, plumbers, carpenters, or cleaners. This leads to issues such as unreliable quality, unclear pricing, unverified workers, and poor coordination. Most communication happens through calls, resulting in scheduling conflicts and miscommunication. Service providers also face challenges due to the absence of digital tools for showcasing skills, managing appointments, receiving real-time updates, or tracking feedback. The lack of transparency and standardization creates a gap between customer expectations and service delivery. A modern, centralized system is required to offer convenience, accountability, and an organized service experience.

DISADVANTAGES OF EXISTING SYSTEM

- Lack of verified service providers, leading to safety and quality concerns.
- No fixed pricing structure, causing negotiation and billing issues.
- Absence of real-time updates or service tracking.
- No feedback or rating system to assess provider reliability.
- Limited opportunities for service providers to reach new customers.

1.2 PROPOSED SYSTEM

The proposed solution is an Android-based Service Hub application that provides a unified platform for booking diverse household and personal services such as plumbing, carpentry, electrical repairs, tailoring, gardening, home cleaning, pest control, and more. When a user books a service, vendors receive instant notifications and confirm their availability. To enhance safety and trust, the system integrates OTP verification for users, Aadhaar-based authentication for vendors, and facial recognition verification at the time of service delivery. Additional features include location-based vendor matching, categorized services, secure digital payments, and a feedback system. The application maintains a detailed service history for both users and vendors to support transparency and accountability. A customer support module addresses user queries, while multilingual interfaces ensure accessibility. An emergency assistance option is included for safety during service delivery. Vendors receive periodic training and rating-based incentives to maintain service quality.

ADVANTAGES OF PROPOSED SYSTEM

- **Multi-service platform** offering a wide range of household and personal services.
- **Enhanced security** through OTP, Aadhaar verification, and facial recognition.
- **Real-time notifications** for booking updates and service confirmation.
- **Location-based vendor matching** to provide faster and more convenient service.
- **Feedback and rating system** to promote accountability and improve service quality.

2. Literature Review

Recent advancements in digital platforms have significantly transformed the delivery of household services, with on-demand systems emerging as efficient intermediaries between customers and service professionals. Platforms like Daily Fixers exemplify this shift by providing a structured digital environment where users can access diverse home services such as plumbing, carpentry, electrical repairs, and maintenance work. Existing studies highlight that user-friendly interfaces, service categorization, and streamlined booking processes enhance customer engagement and reduce friction in service acquisition. Integrated payment gateways further contribute to user trust by enabling secure and transparent financial transactions. Literature also emphasizes the importance of real-time communication features, which improve service coordination through instant notifications on bookings, service status, and payment updates. Additionally, research indicates that vendor-side tools—such as profile management, job request monitoring, and feedback mechanisms—support service quality improvement and operational efficiency. Centralized admin

modules, commonly discussed in service management systems, play a crucial role in ensuring reliability through user oversight, vendor verification, booking management, and feedback evaluation. Overall, the adoption of automation, real-time interactions, and digital interfaces in platforms like Daily Fixers aligns with broader trends in service digitization, promoting accessibility, efficiency, and enhanced customer satisfaction.

3. METHODOLOGY

The methodology for developing the *Daily Fixers* application follows a systematic approach, covering system design, detailed design, and implementation phases to ensure a reliable, scalable, and user-friendly platform.

3.1. System Design

The system design phase provides the high-level blueprint for the application, defining its architecture, core modules, and interactions. The platform is structured around three main modules: the **User Module**, the **Service Provider (Vendor) Module**, and the **Admin Module**, each containing specific components to ensure proper functionality and efficient communication. System design also addresses integration with third-party services such as payment gateways and notification systems. Security considerations, data integrity, and user privacy are incorporated, particularly in sensitive areas like payment processing and personal information management. The primary goal of this phase is to design a robust and organized framework that meets both functional and non-functional requirements.

3.2. Detailed Design

Detailed design focuses on the internal logic and implementation of the modules defined during system design. While system design identifies *what* components are needed, detailed design specifies *how* each component will be implemented within the software. It includes the development of algorithms, workflows, data structures, and input/output mechanisms for each module. This phase ensures that the application's functionality aligns with the design specifications, preparing it for successful development and integration.

3.3. Implementation

Implementation involves converting the detailed design into a working system. This phase includes coding, testing, and deployment while ensuring minimal disruption to organizational operations. Each program is tested individually during development, followed by integration testing to confirm that modules function together as intended. Test data from the old system or sample files are used to verify system performance and reliability.

Hardware and software requirements are identified, and the application is deployed on a common server accessible to all users. User training, documentation, and operational procedures are provided to facilitate adoption. Phased implementation is applied, introducing the system gradually to reduce risk and ensure smooth transition. The final stage involves comprehensive system testing, verification, and user acceptance to ensure that the application operates effectively and meets user expectations.

By following this methodology, the *Daily Fixers* application is developed in a structured, organized, and controlled manner, ensuring efficiency, reliability, and user confidence in the system.

4. CONCLUSIONS

The *Daily Fixers* application has been successfully developed and implemented as a comprehensive platform for managing home services efficiently and reliably. It enables users to seamlessly access a wide range of services, including plumbing, carpentry, electrical repairs, cleaning, and other household maintenance tasks, through a user-friendly interface. Customers can register, browse service categories, schedule appointments, make secure digital payments, and provide feedback, ensuring convenience, transparency, and accountability. Service providers benefit from dedicated tools to manage profiles, track service requests, update availability, and monitor customer ratings, which help improve service quality and enhance professionalism. Administrators can efficiently oversee the system, managing users, vendors, service listings, bookings, and financial transactions to maintain platform integrity and operational efficiency.

The system incorporates secure payment gateways, real-time notifications, and robust communication channels to ensure seamless interaction among users, service providers, and administrators. Extensive testing and validation confirm that all modules perform reliably, from registration and booking to service fulfilment and payment processing, resulting in a stable and efficient platform. In summary, the *Daily Fixers* application addresses the need for a dependable and organized home service ecosystem. It provides tangible benefits to users by offering convenience and time-saving solutions while supporting service providers through streamlined workflows and performance tracking. Its successful implementation establishes a strong foundation for scalability, future enhancements, and integration of additional features, ensuring that the platform can adapt to a growing user base and evolving market demands over time.

REFERENCES

- [1] Anderson, P. (2018). TaskRabbit and the Gig Economy. *Journal of Business*, 12(3), 45-60.
- [2] Brown, K., & Green, J. (2019). The Role of Reviews and Ratings in Service Selection. *Customer Experience Journal*, 5(2), 77-90.
- [3] Kumar, R., & Singh, A. (2021). Evolving Mobile Service Platforms in India: Case Study of On-Demand Home Services. *Indian Journal of Mobile Computing*, 7(2), 45-58.
- [4] Johnson, R. (2019). Thumbtack: A Case Study in Service Provider Platforms. *Service Management Journal*, 6(1), 33-47.
- [5] Lee, S., & Wong, T. (2021). Real-Time Tracking in Service Apps: Enhancing User Satisfaction. *Technology and Innovation Journal*, 9(2), 58-72.
- [6] Martin, A., & Lee, C. (2020). Designing User-Friendly Interfaces for Service Platforms. *UXDesign Quarterly*, 8(3), 45- 60.
- [7] Miller, J. (2018). Booking Systems and Their Impact on User Experience. *Journal of Technology*, 15(1), 89- 104.

- [8] Nguyen, T. (2021). Improving Customer Experience with Real-Time Updates. *Service Quality Journal*, 10(1), 12-25. REFERENCES
- [9] Anderson, K., & Harris, M. (2022). Advancements in Mobile Service Platforms: Addressing Home Service Needs Through Android Apps. *Mobile Application Journal*, 14(3), 88-
- [10] Ellis, B., & Morgan, T. (2020). User-Centric Design for Android-Based Home Service Applications. *Interaction Design Quarterly*, 12(1), 42-59.
- [11] Patel, R., & Shah, K. (2021). Enhancing User Engagement in On-Demand Service Apps Using RealTime Features. *International Journal of Mobile Computing*, 15(2), 76-89.
- [12] Nguyen, T., & Lee, J. (2023). Geolocation and Its Applications in Android Service Platforms: Bridging the Gap Between Providers and Consumers. *Journal of Applied Mobile Technology*, 18(4), 121-135.
- [13] Kumar, S., & Desai, P. (2022). Overcoming Challenges in Verification and Trust for Service Applications. *Journal of Consumer-Centric Technologies*, 19(3), 65-78.