

SHAHARE SHAYAK: REVOLUTIONIZING URBAN SERVICE PROVIDER HIRING WITH A CROSS-PLATFORM SOLUTION

Project Reference No.: 48S_BE_3728

College : *New Horizon College of Engineering, Bengaluru*

Branch : *Computer Science and Engineering*

Guide(s) : *Dr. D Roja Ramani*
Dr. Rajlakshmi Ghatkamble

Student(s): *Mr. Swapnil Datta*
Mr. Shreyas P Kuppasad
Ms. Mitali Trivedi
Ms. Spoorthi Shree Cm

Keywords:

Urban Service Providers, Subscription-Based Model, Hourly Bookings, Cross-Platform Application, User Verification, Service Provider Vetting, Real-Time Booking System, Secure Payment Gateway, Feedback and Rating System, Middlemen-Free Hiring.

Introduction:

In today's fast-paced urban lifestyle, households often struggle to find reliable and verified service providers such as drivers, maids, cooks, babysitters, and house helpers. The traditional methods of hiring through word-of-mouth or local agents involve high dependency on middlemen, lack of transparency, and unreliable service quality. To address these challenges, **Shahare Sahayak** has been introduced as a modern, tech-driven solution to streamline and simplify the hiring process.

Shahare Sahayak is a cross-platform mobile application that directly connects users with trusted and verified service professionals, eliminating the need for intermediaries. Designed for both Android and iOS platforms, the app offers a seamless and user-friendly interface that allows individuals to explore, select, and manage service bookings effortlessly. The core objective of the platform is to provide accessible, affordable, and high-quality urban services.

The application offers two flexible modes of hiring: hourly booking for short-term needs and monthly subscription plans for long-term requirements. These options are tailored to meet varying user preferences and budgets, making it easier for households to maintain consistent

support or request services on-demand. The built-in feedback and rating system ensures service quality, accountability, and continuous improvement based on user experiences.

Objectives:

1. To simplify the hiring process for urban service providers like drivers, maids, cooks, babysitters, and house helpers.
2. To eliminate middlemen and enable direct connections between users and service providers.
3. To offer flexible hiring options, including hourly bookings and monthly subscription plans.
4. To ensure the reliability of service providers through a strict vetting process, including background checks and skill assessments.
5. To enhance user experience with a user-friendly and intuitive mobile application.
6. To provide a cross-platform solution compatible with both Android and iOS devices.
7. To build trust and transparency through a robust feedback and rating system.
8. To reduce overall service costs by cutting out intermediary commissions.
9. To support secure and seamless payments via integrated gateways like Stripe and PayPal.
10. To maintain real-time updates and notifications using tools like Firebase.
11. To store and manage data efficiently using scalable databases like MongoDB and Firebase.
12. To ensure high performance and availability through cloud services like AWS (EC2, S3, RDS).
13. To encourage continuous service improvement based on user reviews and system analytics.
14. To promote user adoption through targeted marketing strategies including social media and local partnerships.
15. To scale the platform effectively across various urban areas, adapting to different regional needs and service demands.

List the objectives 3 of project

1. To simplify the hiring process for urban service providers like drivers, maids, cooks, babysitters, and house helpers.
2. To eliminate middlemen and enable direct connections between users and service providers.
3. To offer flexible hiring options, including hourly bookings and monthly subscription plans.

Methodology:

The development of Shahare Sahayak followed a structured and user-centric approach, prioritizing accessibility, trust, and seamless connectivity between users and service providers. The project employed a modern full-stack architecture with React Native for cross-platform front-end development, Node.js for the backend, and MongoDB and Firebase for flexible and real-time data management.

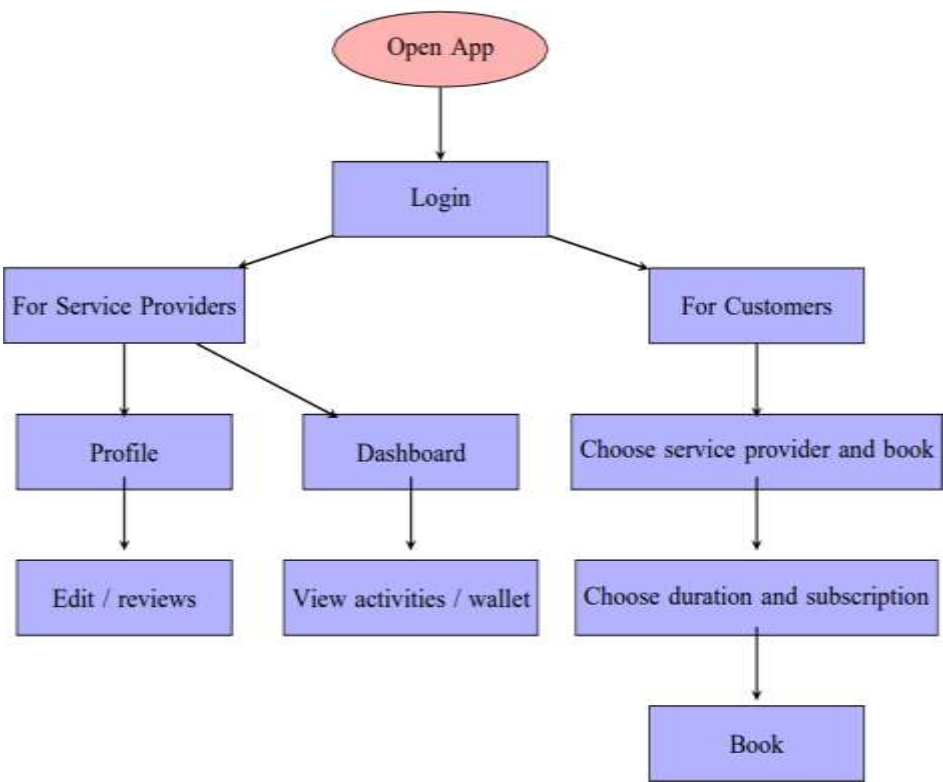


Figure 1: Data Flow Diagram

Result and Conclusion:

The development and deployment of Shahare Sahayak have demonstrated substantial improvements in the efficiency, transparency, and reliability of hiring urban service providers compared to traditional methods that involve intermediaries. The platform successfully digitalized the entire hiring workflow, from service discovery and provider vetting to booking, payments, and feedback management, offering users a seamless and cost-effective experience.

Key results include the successful implementation of a React Native frontend to ensure cross-platform compatibility and a Node.js backend that handled booking logic, user management, and data interactions efficiently. The use of MongoDB and Firebase enabled real-time data syncing, secure user authentication, and scalable storage for user and service provider profiles. Secure payment integrations using Stripe and PayPal provided users with a trusted and smooth transaction experience.

Users reported a high satisfaction rate due to the app's intuitive design, transparent pricing, and consistent availability of verified service providers. The subscription-based model offered long-term convenience, while the hourly booking option provided flexibility for short-term needs. Additionally, the feedback and rating system contributed to building trust and improving service quality over time.

The project successfully met its objectives of eliminating middlemen, lowering service costs, and empowering both users and service providers with direct communication and accountability. Shahare Sahayak proved to be a scalable and impactful solution for urban service hiring, with the potential to expand across cities and service categories.

Overall, the results validate Shahare Sahayak as a transformative solution for streamlining domestic service hiring, fostering autonomy, and improving the livelihood of gig workers in urban settings

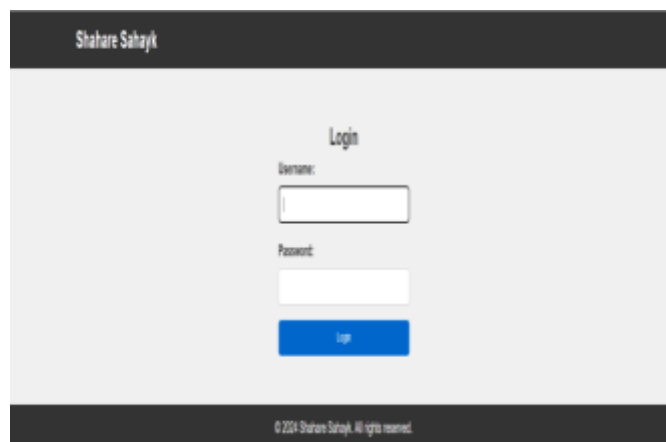


Figure 2: Login Page

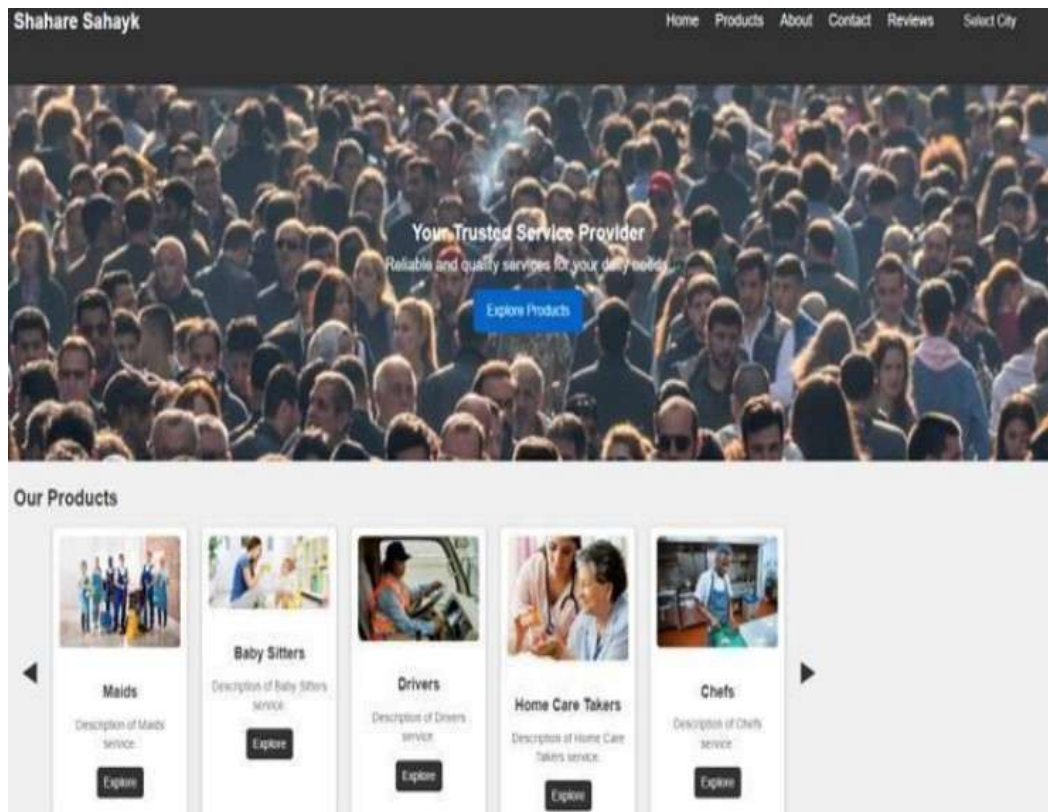


Figure 3: Landing Page

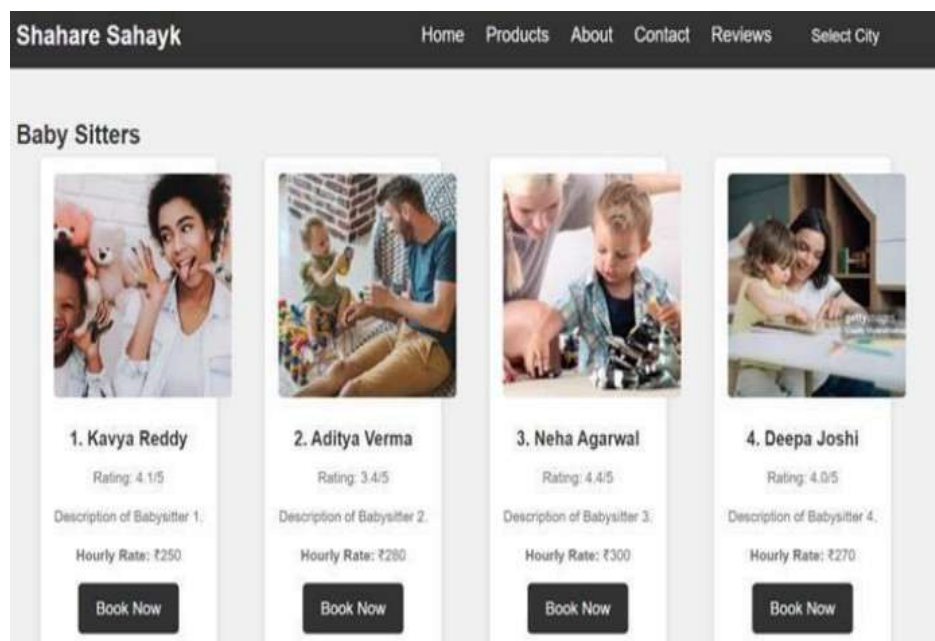


Figure 4: Service Providers Page



Shahare Sahayk

Confirm Your Booking

Service: babysitter

Name: Babysitter 3

Select a time slot:

9:00 AM - 10:00 AM

This is a booking confirmation form for Shahare Sahayk. It features a dark header with the organization's name, followed by a light section for booking details. The details include the service type (babysitter) and the provider's name (Babysitter 3). A time slot selection is shown with a dropdown menu currently displaying '9:00 AM - 10:00 AM'. A 'Confirm Booking' button is positioned to the right of the dropdown. The form concludes with a dark footer bar.

Figure 5: Booking Confirmation



Shahare Sahayk

Booking Confirmed

Thank you for booking with Shahare Sahayk!

This is a confirmation message from Shahare Sahayk. It consists of a dark header with the organization's name, a light section with the message 'Booking Confirmed' and 'Thank you for booking with Shahare Sahayk!', and a dark footer bar.

Figure 6: Booking Confirmed



Figure 7: SMS

Future Scope:

The future scope of Shahare Sahayak is vast and full of potential, driven by the increasing demand for reliable, user-friendly, and efficient domestic service platforms. While the current system successfully streamlines the process of connecting users with service providers through monthly subscriptions and hourly bookings, there are numerous avenues for future enhancement that can further elevate its functionality, user experience, and market reach.

One of the most impactful developments would be the integration of Artificial Intelligence (AI) and Machine Learning (ML) algorithms to enable smart matching between users and service providers based on preferences, previous interactions, location proximity, and availability. These models can also be used to predict peak service demand, helping optimize resource allocation and reduce service delays.

Incorporating Natural Language Processing (NLP) can enable users to interact with the

app using voice commands or chatbots for a more accessible and intuitive experience.

Multilingual support could also be introduced, catering to users from various linguistic backgrounds across India and beyond, making the platform more inclusive and regionally adaptable.

Another promising enhancement is the implementation of geo-fencing and real-time tracking, allowing users to view the live location of service providers and receive alerts when providers enter or leave predefined zones. This would improve safety, transparency, and trust between users and service providers.

The application can be scaled into a Software as a Service (SaaS) platform, where housing societies, gated communities, or corporate offices can onboard multiple users and providers under a centralized, branded portal. Custom dashboards, analytics, and service logs can be offered for better administrative control and auditing.

Gamification elements, such as reward points, badges for trusted service providers, and loyalty programs for users, can be incorporated to enhance engagement and satisfaction. Additionally, integrating wallet systems, UPI support, and dynamic pricing based on demand-supply analysis would add significant value to the transactional ecosystem.

In terms of accessibility and digital inclusion, features like offline booking capability, SMS integration, and progressive web app (PWA) support can be implemented to reach users with limited internet access or those using basic smartphones.

From a security standpoint, future iterations could include biometric authentication, facial recognition for service provider verification, and blockchain-based service history to ensure transparency, immutability, and accountability. Background checks, government ID verification, and digital contracts can also be introduced for added legitimacy and trust.

Finally, community-building features such as ratings-based forums, feedback-driven improvement loops, and referral programs can be added to foster a collaborative, trustworthy ecosystem.

By pursuing these directions, Shahare Sahayak can evolve from a local utility app to a robust, intelligent, and scalable digital service platform, meeting the growing needs of urban households, communities, and enterprises across geographies.

Project Synopsis
Format