DE Shaw & Co

FIXLY HOMESERVICES



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EXECUTIVE SUMMARY

Fixly Home Services is a platform designed to address the challenges faced by families in Tier 2 and Tier 3 cities when searching for reliable home maintenance services. Finding skilled professionals like electricians, plumbers, and house help is often time-consuming and difficult in these areas due to limited availability and slow response times on traditional service apps. This platform streamlines the entire process by making service booking effortless, tracking transparent, and issue resolution faster.

Fixly streamlines the entire process with Al-powered features, seamless job allocation, and real-time service tracking, ensuring a hassle-free experience for users. The platform connects customers with trusted professionals swiftly and efficiently, enhancing reliability and transparency. To enhance user experience, Fixly provides subscription-based maintenance plans for regular servicing and reliable customer support. Al-powered recommendation system assist users in choosing the right service. With a focus on affordability, accessibility, and Al-driven efficiency, Fixly Home Services is revolutionizing the home maintenance industry by delivering fast, reliable, and tech-enabled solutions tailored to the needs of growing urban and semi-urban families

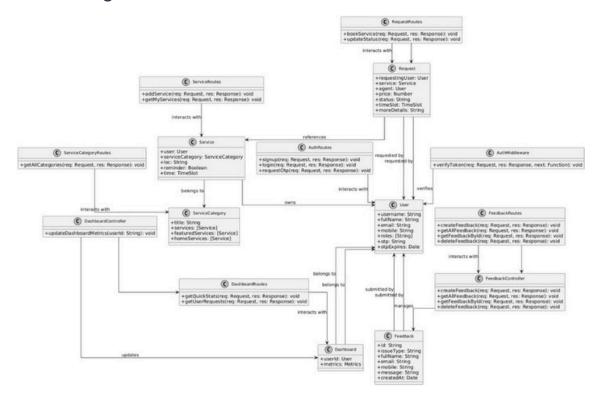
REQUIREMENTS

- User Authentication & Profile Management: The platform requires a secure registration and login system for users and service providers. Users must be able to sign up using email, phone number (OTP verification). The profile page allows users to update personal details, the service providers to update their services and Admins should have the ability to manage user roles, approve new service providers, and oversee platform activity.
- Dashboard for Different User Roles: The user dashboard must allow customers to track active and past service bookings, manage subscriptions, and receive Al-powered recommendations for home maintenance plans. The admin dashboard must provide oversight on service requests, provider approvals, ensuring smooth platform operation. It is shown to all the service providers.
- Service Discovery & Booking: The home page and services page should display trending services and featured providers. A powerful search and filtering system should be in place, allowing users to filter services by category, location, availability, pricing, and urgency. The service filtration model should dynamically rank services based on factors like provider ratings, past service quality, and demand fluctuations.
- Booking & Payment Process: A cart option should allow users to add multiple services, schedule appointments and review total costs before confirming bookings. The platform must support dynamic pricing, where prices adjust based on service urgency and real-time demand. Secure payment integration is required.

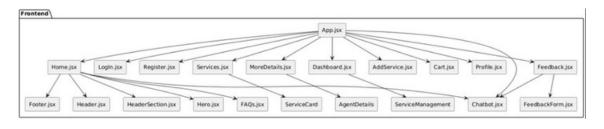
 Al-Powered Support & Recommendations: A customer support chatbot should be available for instant assistance, guiding users through service selection, troubleshooting minor issues, and generating support tickets when needed. The recommendation model should provide personalized suggestions based on past bookings, offering relevant add-on services or predictive maintenance alerts to prevent recurring issues. Al-based loyalty tracking can also recommend discounts and exclusive service bundles based on user history.

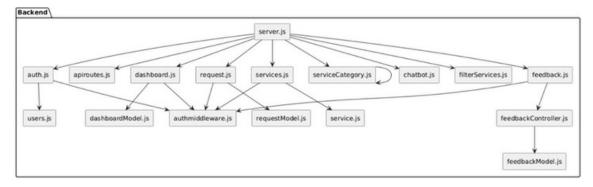
DESIGN & ARCHITECTURE

• Class Diagram

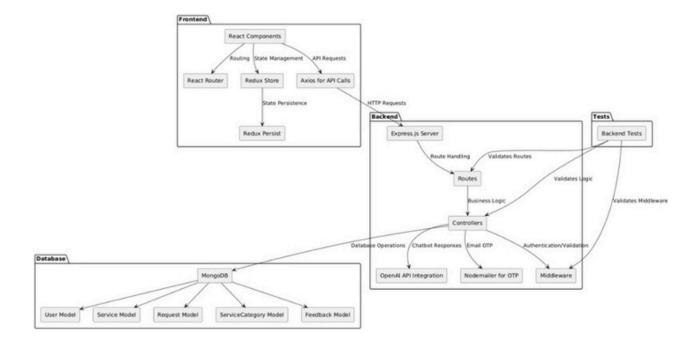


• Components Diagram





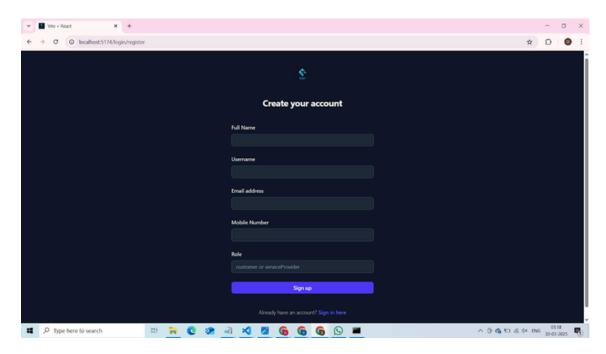
• Project Architecture



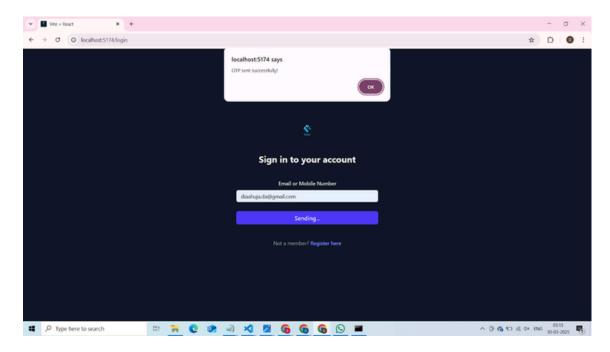
 Conducted backend testing using Jest & Supertest to validate API functionality, ensuring correct request handling and all of them successfully passed.

SNIPPETS

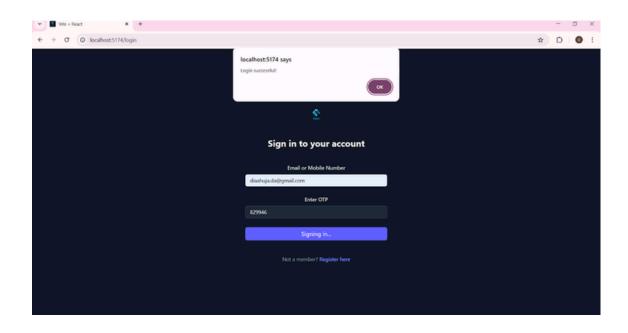
• Register Page



• Login Page



• Login Page with OTP Verification

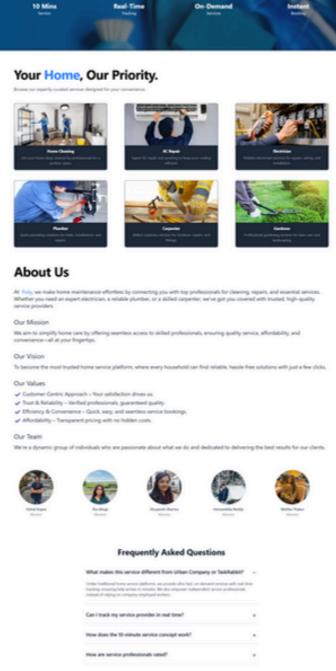


• Home Page



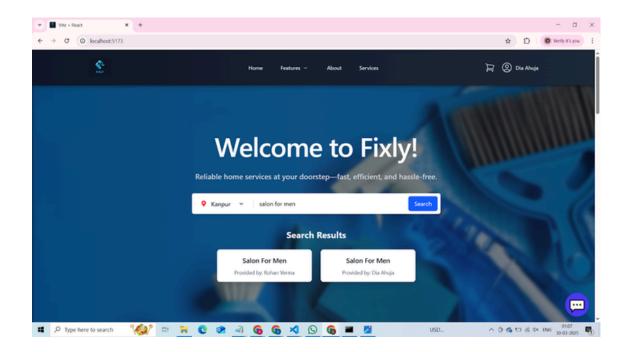
• Full Home Page with Services, About Us & FAQ's



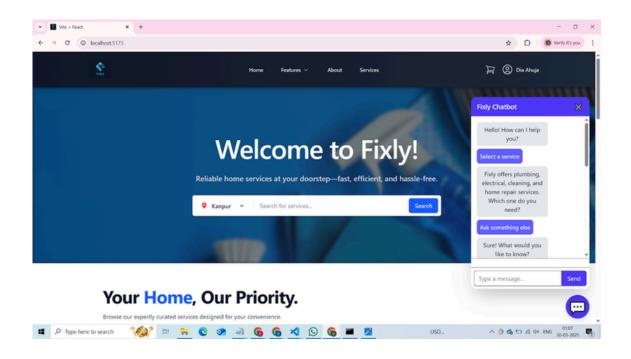


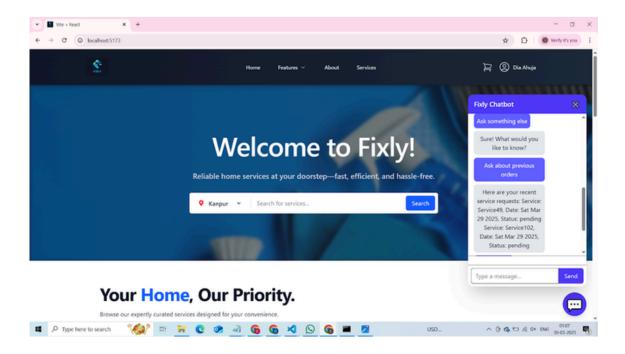


• Service Filtration Model

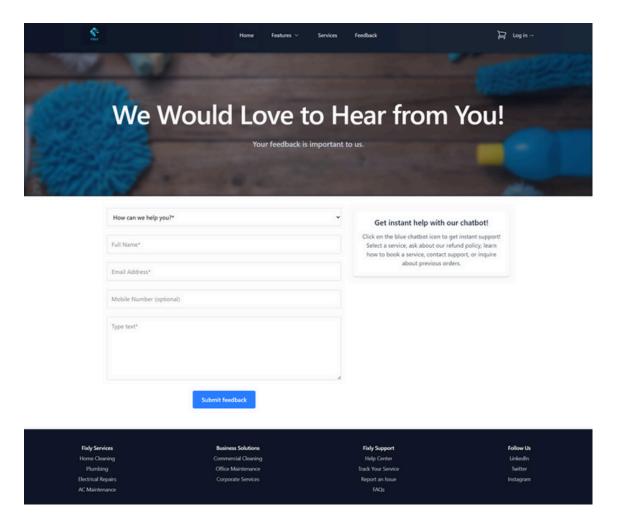


Customer Support Chatbot

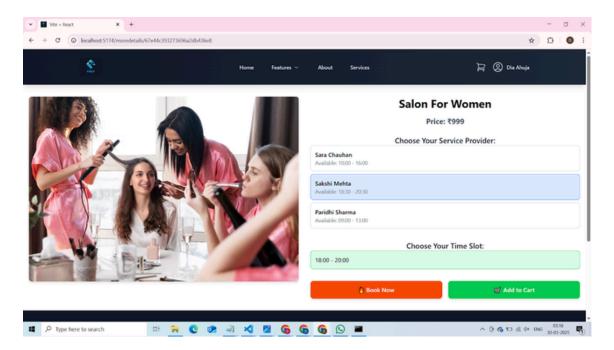




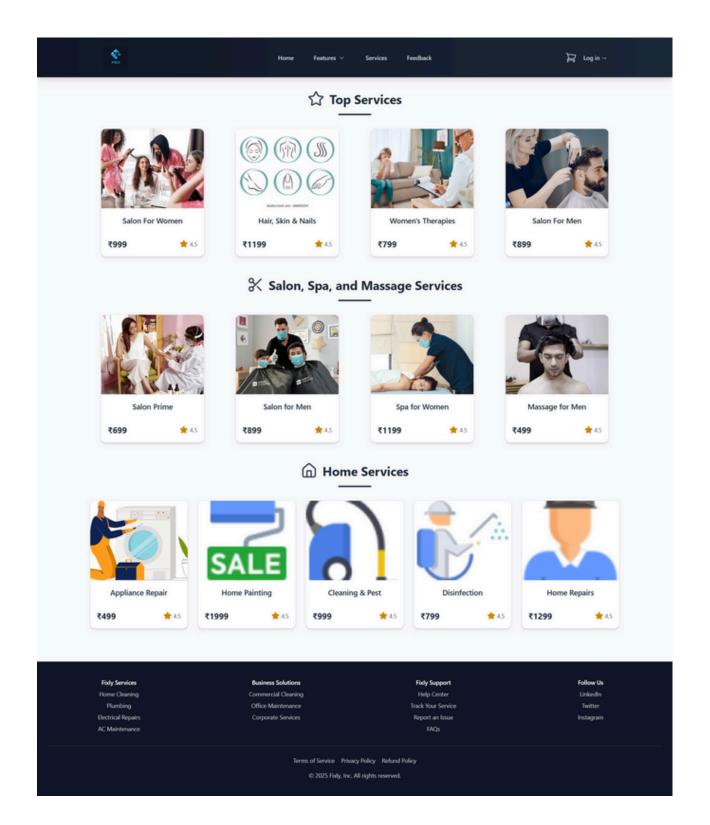
• Feedback Page



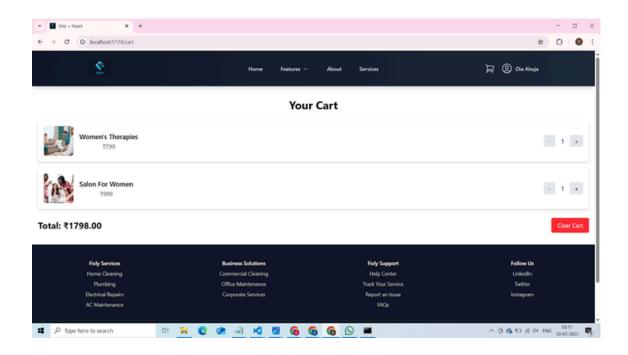
Service Details Page



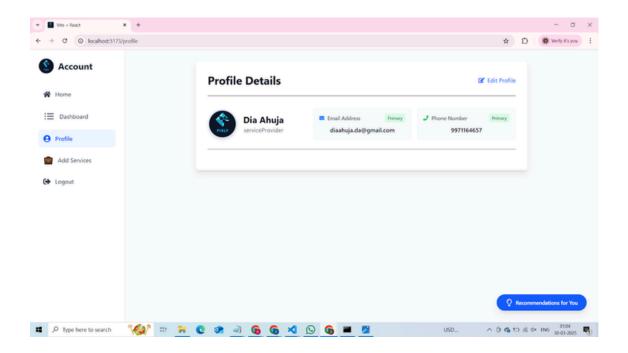
• Service Page



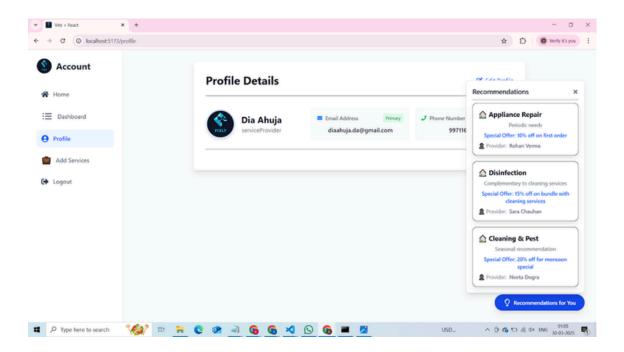
• Cart Option



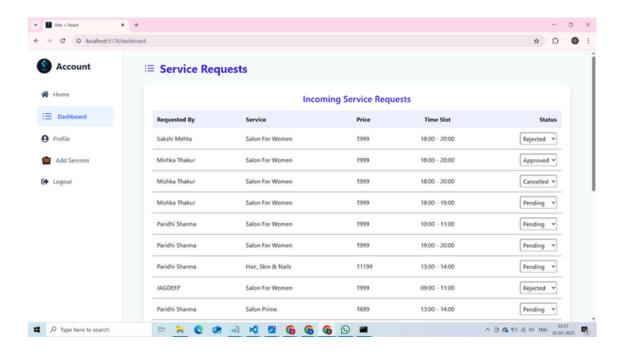
• Profile Page



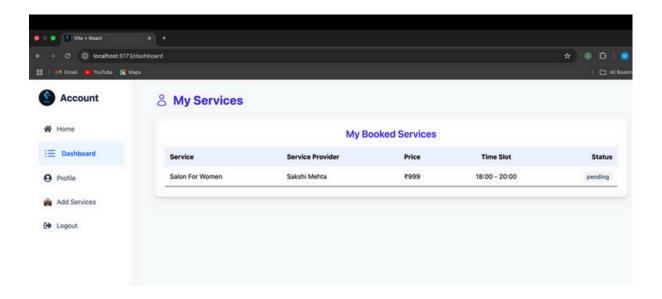
• Recommendation System



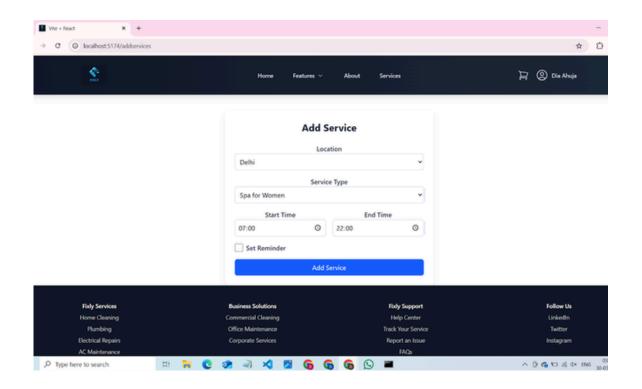
• Dashboard (Service Provider)



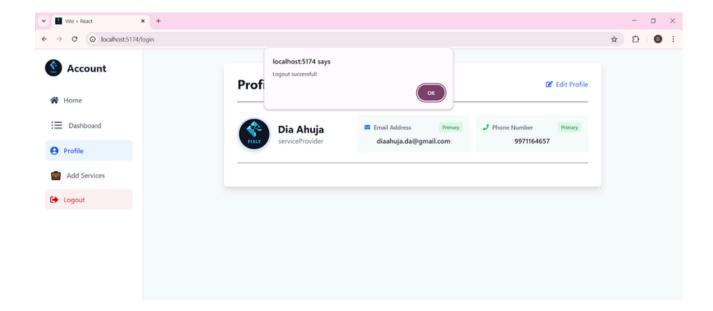
• Dashboard (User)



Add Services Page



• Logout



FUTURE SCOPE

- On-Demand Emergency Services
- A specialized category for urgent requests, such as plumbing leaks or electrical failures, with priority dispatch and response times under 30 minutes.
- Al-Based Smart Pricing Model
- Dynamic pricing algorithms can adjust service costs based on demand, location, technician availability, and urgency, similar to ride-hailing apps.
- Subscription & Loyalty Programs
- Enhancing subscription services with tiered plans, priority booking, and exclusive discounts will increase user retention and long-term engagement.
- Automatic Location Detection for Seamless Service Booking
- Integrating GPS-based automatic location detection will enable users to find nearby service providers instantly without manually entering their address.
- Seamless & Flexible Payment System
- A robust payment system supporting UPI apps (Google Pay, PhonePe, Paytm, etc.), credit/debit cards, net banking, and cash on delivery (COD) will ensure a smooth transaction experience.
- Al-Driven Rating & Feedback Analysis
- Users can rate and review service providers, helping maintain quality standards. Al can automatically analyze feedback, detect common issues, and generate a concise service summary for both users and administrators.

REFERENCES

- https://vite.dev/guide/
- https://www.npmjs.com/
- https://tailwindcss.com/plus/ui-blocks
- https://www.pexels.com
- https://unsplash.com/
- https://www.mongodb.com/products/tools/compass
- https://platform.openai.com/docs/concepts