FIXER

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ABSTRACT

Fixer is a comprehensive online platform that connects users with skilled professionals for a variety of tasks, offering expert local helpers 24/7. Whether it is cleaning, plumbing, electrical repairs, or other services that require human effort, Fixer simplifies the process of finding reliable assistance

Keywords: Flutter,Node.js,MySQL,Firebase,Dart,Home-Services,Workers,Clients.

I.   INTRODUCTION

The "Fixer" app is designed to streamline the process of finding and hiring professionals for home services. It serves as a one-stop solution for users seeking assistance with tasks ranging from plumbing and electrical work to cleaning and maintenance. The app allows service providers to register and list their services, including their expertise and contact information. Users can browse through these services, filter based on their location, and book the required service directly through the app. This system not only saves time, but also provides a reliable way to connect with qualified professionals. With a focus on convenience and efficiency, "Fixer" aims to enhance

the experience of obtaining home services in today's fast-paced world. The app would feature a user-friendly interface, secure payment options, and a review system to ensure equality and trustworthiness.
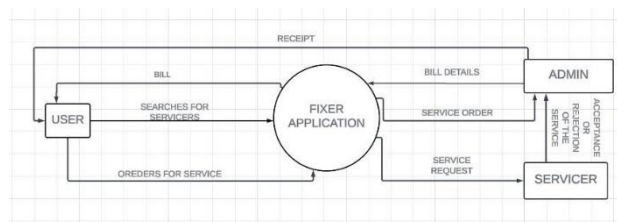

Fig:1: System Architecture

A. Key Features

User Roles and Authentication Service Providers, Use/Clients, Admin: Manages the overall platform, including user management, service listings, and analytics. Service Provider: Offers various services, manages bookings, and interacts with customers. Customer: Searches for services, books appointments, and provides ratings and reviews. Authentication: The app uses a robust authentication mechanism to ensure secure access.

Category ID	Service Category	Description
ID-1	Home Improvement	Services related to home renovation and repairs
ID-2	Pet Care	Services for pet grooming and care
ID-3	Health and Wellness	Services promoting health,personal care
ID-4	Cleaning	Services for residential and commercial cleaning

Fig 2: Services List

B. User Documentation

To start using FIXER, you first need to create an account. This module uses SQLite to store category. The details are stored based on different categories and saved in a SQLite database. Select from a list of popular chores and submit your request.This allows FIXER to instantly find Services in your area ready to help.Choose a service provider

Database example model is given in below figure Fig 2.

FIELD NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
User-ID	INT	PRIMARY KEY	Unique identifier for users,Auto generated
User-Name	VARCHAR(50)	NOT NULL	Name of the User
Password	VARCHAR(50)	NOT NULL	Login password of User
Emai-iD	VARCHAR(35)	NOT NULL	Login password of User
Payment iD	INT	PRIMARY KEY	User Email ID
Amount	INT	NOT NULL	Amount
Transaction-id	INT	PRIMARY KEY	Transaction id of User
Transaction-details	VARCHAR(50)	NOT NULL	Transaction detais of User
Payment History	TIME and DATE	NOT NULL	Time and Date of the payment

Fig 3: Data Dictionary

II. WHY YOU CHOOSE US?

The reasons clients choose Fixer are clear: the platform provides round-the-clock availability, ensuring that help is always accessible, regardless of the time or situation. This flexibility is a key differentiator that allows us to serve clients whenever they need assistance, even in emergencies. Moreover, Fixer offers comprehensive coverage for all types of tasks, from household chores to more specialized services like plumbing and electrical work, ensuring that clients can find exactly the kind of help they need, all in one place. Our helpers are not only experienced professionals, but they are also friendly and approachable, enhancing the overall client experience. With Fixer, users can expect both efficiency and a pleasant interaction, as our workers are trained to be polite, respectful, and considerate of clients' needs. The platform's focus on affordability ensures that even those with limited budgets can access high-quality services without worrying about excessive costs. This combination of professionalism, expertise, security, and affordability makes Fixer a trusted

III. METHODOLOGY

A. User Interface

The User Interface (UI) management module focuses on creating a simple, yet effective, user experience for both service providers and clients. The platform is designed to offer easy navigation, with clean and accessible layouts for searching

Fig:4: Home Page

and booking services. The UI adapts for different roles—whether it's a service provider managing listings and schedules or a user browsing and booking services.

B. Testing and Quality Assurance

Testing and quality assurance are integral to the development process of FIXER. Rigorous testing ensures that each component of the platform functions as intended and meets the highest standards of quality and reliability.

Testers employ various techniques such as unit testing, integration testing, and user acceptance testing to identify and rectify any defects or inconsistencies. Through meticulous testing and quality assurance processes, FIXER is thoroughly vetted to ensure its functionality, usability, and performance, ultimately delivering a seamless and satisfying experience to its users.Testing the Project Fixer app is a crucial phase that ensures the platform functions as expected for both users and administrators. Given that the app serves as a marketplace where users can book service providers (such as plumbers, electricians, and other professionals), the testing process must focus on the core functionalities. This includes user registration, booking, managing profiles, listing services, and

processing payments. Each feature must be tested thoroughly to verify that users can smoothly navigate through the app, search for services, book providers, and complete transactions without issues.

Fig.5: Test Cases

TEST CASE ID	TEST CASE DESCRIPTION	PRE CONDITION	STEPS	EXPECTED RESULT
TC01	Test user login functionality.	User must have a registered account.	1.Open the app. 2.Enter the valid email and password. 3.Click on the login button.	User should be logged in successfully.
TC02	Test service booking functionality.	User must be logged in.	1.Navigate to the services section. 2.Select a service. 3.Click on the book button. 4.Confirm booking details.	Booking should be confirmed and confirmation message should be displayed.
TC03	Test user registration Functionality.	User must not have an existing account.	1.Open the app. 2.Navigate to the registration page. 3.Enter valid user details	User should be registered successfully and redirected to the login page.
TC04	Test password reset functionality.	User must have a registered account.	1.Open the app. 2.Navigate to the Login page. 3.Click on the forget password. 4.Enter registered email address. 4.Click on the reset button.	Password reset email should be sent to the user's email address.
TC05	Test service provider listing	User must be logged in.	1.Open the app 2.Navigate to the service section. 3.Select a category.	List of available service providers in the selected category should be displayed.
TC06	Test service provider profile view.	User must be logged in.	1.Open the app 2.Navigate to the service section. 3.Select a service provider from the list.	Detailed profile of the selected service provider should be displayed.
TC07	Test booking history view.	User must be logged in.	1.Open the app 2.Navigate to the user profile section. 3.Click on the "Booking History" option.	List of past bookings should be displayed.
TC08	Test user logout functionality.	User must be logged in.	1.Open the app 2.Navigate to the user profile section. 3.Click on the logout button.	User should be logged ou and redirected to the login page.

C. Requirements Gathering

Requirement gathering is the process of collecting and documenting the needs, preferences, and expectations of stakeholders for a system. It involves identifying, analyzing, and prioritizing requirements to ensure that the final product meets the desired objectives and specifications.,collecting details of well trained workers and update information.

D. On-boarding and Support

Once the candidate is selected, the platform will facilitate the on-boarding process and may provide additional support via 24/7 customer service. The employer can then communicate with the fixer member directly through the platform.Develop a comprehensive on-boarding process that guides new users through the platform's features and functionalities. This can include tutorials, FAQs, and a step-bystep guide.Customer Support: Provide robust customer support through various channels such as live chat, email, and phone support. Ensure that support is available to address any issues or questions users may have,Feedback Mechanism: Implement a feedback mechanism where users can provide.

E. Platform Administrations

User management tools for overseeing customer and provider accounts.Content management for updating service listings, categories, and pricing. Moderation tools to ensure compliance with platform policies and standards.Customer support features for handling inquiries, issues, and disputes.

F. Analysis Model

Project Fixer's Performance Analysis Model evaluates the overall efficiency of the platform and the service providers. This model tracks important performance metrics like response time, completion rate, and user satisfaction. By analyzing this data, the platform identifies areas for improvement and ensures that services are delivered promptly and effectively. The insights gained from performance tracking also helps ,this application streamline its operations and enhance customer.

IV. STSTEM FEATURES

The Fixer app is equipped with an array of robust system features designed to enhance usability and elevate the overall

user experience. At the core of the application is a user-friendly interface that boasts a clean and intuitive design,

enabling users to navigate seamlessly between various services. This streamlined layout caters to users of all technical

backgrounds, ensuring that even those with minimal experience can effortlessly find and book the servicesthey require.

One of the standout features of Fixer is its real-time booking system, which allows users to select and secure services

instantly. This capability significantly reduces waiting times and increases overall user satisfaction, as individuals can

quickly accessthe assistance they need. Complementing thisis the presence of detailed service provider profiles, which

offer insights into their skills, availability, reviews, and ratings from past customers. This transparency empowers users

to make informed decisions when choosing a service provider, further enhancing the trustworthiness of the platform.

V. TECHNOLOGY STACK

A. Flutter

Flutter is a open-source UI Software created by Google.It can be used to develop cross flatform applications from a single codebase for the web.

B. MySQL Database

MySQL is an open-source relational database management system known for its reliability, robustness, and ease of use. It is used to store and manage the application's data.

C. Node.js

Node.js is a versatile Javascript runtime environment used for building both server-side and client-side applications.

The application interfaces with Firebase for user authentication, storing product data, and handling transactions.

VI. IMPLEMENTATION

A. Configuring MySQL

The MySQL database is configured by creating a database and user, and updating the firebase settings to connect to MySQL.

B. Developing the Application

The application is developed by creating models, views, and templates to handle scheduled works and managing time. User authentication and email notifications are also implemented.

C. Feedback

Rating is your choice and if improvement needed we make it for you.

VII. RESULT

Our FIXER application has been tested by a group of Users and Normal People. The feedback they given was positive and highlighting the application's use and effectiveness in managing scheduled works on time by workers and option of tracking location of workers by Users.
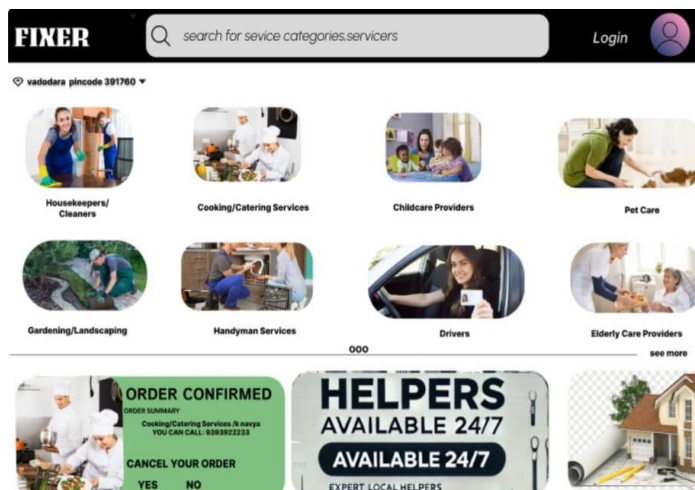

Fig.3: Final User Interface

VIII. CONCLUSION

In recent times, the dearth of available workers for jobs requiring human effort has become a noticeable trend. This phenomenon is mainly due to two significant factors: many individuals are unable to take out the time to search for helpers, and some cannot afford to pay for the workers' services. So the Idea of project is that We offer worker services to our clients at a reasonable rate. Our expert

local helpers are available for booking and can arrive within one hour of the request.We guarantee application security for all our clients Fixer isan online platform that provides expert assistance to urban individuals in India.

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