MISTRICONNECT: The Handyman Network

PHASE-1
Problem Identification
&
Stakeholder
Analysis

Problem Statement:

Finding reliable handymen like plumbers and carpenters in Calicut is a challenge, especially for newcomers, students, and working professionals. Many rely on word-of-mouth or random searches, leading to uncertainty in service quality, pricing, and availability. Even when a handyman is found, scheduling is difficult due to unstructured booking systems, causing delays and last-minute cancellations. For those new to the city, the lack of contacts makes home maintenance even more frustrating. A dedicated platform connecting users with verified handymen, offering reviews, fair pricing, and easy scheduling, would make home services more accessible and hassle-free.

Stakeholder Identification:

- **Primary Users:** Residents of Calicut, including newcomers, students, and working professionals, who need reliable handymen for home services like plumbing, carpentry, electrical work etc.

- **Service Providers:** Local handymen (plumbers, carpenters, electricians etc.) looking for a platform to connect with customers, manage bookings, and grow their business.

- **Decision-Makers:** The MistriConnect team, responsible for maintaining service quality, verifying professionals, and enhancing user experience.

- **Regulators:** Local municipal authorities and trade associations that set guidelines for service providers and ensure compliance with labor and safety regulations.

Stakeholder Roles and Interests:

- **Residents in Need of Handymen:** Seek reliable, skilled professionals for home repairs and maintenance with transparent pricing and easy scheduling.

- **Handymen & Service Providers:** Want a steady stream of customers, fair compensation, and a platform to manage bookings efficiently.

- **Newcomers to Calicut:** Need multiple home services but lack local contacts, making it difficult to find trustworthy professionals.

- **Local Authorities & Trade Associations:** Aim to ensure fair practices, service quality, and compliance with labor and safety regulations.

Interview Questions:

1. Questions for Residents(Service seekers):
1. How do you currently find handymen for home repairs?

2. What challenges have you faced when hiring a plumber, carpenter, or electrician?

3. Have you ever had trouble scheduling a service at a convenient time? If so, why?

4. How do you verify the quality and reliability of a handyman before hiring them?

5. Have you ever been overcharged or had a bad experience with a service provider?

6. If a platform could help you find and book reliable handymen, what features would you want?

7. How important are customer reviews and ratings in your decision-making process?

8. How quickly do you usually need a handyman once you start looking for one?

2. Questions for Handymen(Service providers):

1. How do you currently find customers for your services?
2. What are the biggest challenges you face in getting jobs?
3. How do you manage your work schedule and client appointments?
4. Would you be open to using a digital platform to get job requests? Why or why not?
5. How do you set your pricing, and would you be comfortable listing standard rates online?
6. Have you ever faced last-minute cancellations or payment issues? How do you handle them?

Interview Simulation :

Interview Video on Youtube

Initial Requirements:

Based on the problem statement and stakeholder feedback, the following functional and non-functional requirements are identified:

Functional Requirements:

1. **User Registration and Authentication:** Secure sign-up/login for both customers and service providers.
2. **Service Listing and Booking:** Users can search for handymen by category and book services.
3. **Scheduling System:** Users can select available time slots, and handymen can manage their schedules.
4. **Review and Rating System:** Customers can rate and review handymen based on their service quality.
5. **Notification System:** Alerts for booking confirmations, reminders, and handyman availability updates.
6. **Job Matching Algorithm:** Suggests handymen based on location, availability, and user ratings.

Non-Functional Requirements:

1. **User-Friendly Interface:** Intuitive design for easy navigation and service booking.
2. **Security and Privacy:** Ensures secures transactions, user data protection, and verified professionals.
3. **Performance Optimization:** Fast response times for searches, bookings, and communications.
4. **Scalability:** Supports an increasing number of users and service providers.

Specification Conversion:

1. **User Registration:** The platform must allow users to sign up using their mobile number or email, with verification for security. Handymen should register with their trade details and identification for authentication.

2. **Service Listings:** Users should be able to browse and book handymen based on service type, availability, and pricing.

3. **Matching Algorithm:** The system should recommend handymen based on location, availability, user ratings, and past booking preferences.

4. **Notification System:** Users should receive real-time updates on booking confirmation, service reminders, and handyman availability. Handymen should be notified of job requests and schedule changes.