MOTILAL NEHRU NATIONAL INSTITUTE OF TECHNOLOGY
ALLAHABAD, INDIA-211004

A PROJECT REPORT
ON

(Easy Way Services)
(Empowering Local Workers Through an User-Centric Online Platform)

Submitted to

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In Partial Fulfillment of the Requirement for the Award of
MASTER OF COMPUTER APPLICATIONS
MNNIT ALLAHABAD
2021-2024.

Submitted By:
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ACKNOWLEDGEMENT

We are profoundly grateful to **Dr. Vibhav Prakash Singh** for his expert guidance and continuous encouragement throughout to see that this project rights its target from its commencement to its completion.

I have always considered project development a challenging task that requires a lot of concentration, hard work, and an understanding of several concepts related to the project. I have learned various new concepts such that React, Node Js and Its Frameworks, programming styles and above all I gain wonderful experience in project development and presentation.

Team Member

Abhinav Salar - 2021CA006

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Acharya Juhilal Shanish -2021CA009

Kripanshu Kajwe - 2021CA054

UNDERTAKING

The work presented in our Project titled **Easy Way**, submitted to Computer Science and Engineering Department, **Motilal Nehru National Institute of Technology, Allahabad, Prayagraj** for the award of Master of Computer Applications, is our original work. We have neither plagiarized nor submitted the same work for the award of any other degree. In case this undertaking is found incorrect, we accept that our degree may be withdrawn.

Team Member

Abhinav Salar - 2021CA006

Horil Prasad - 2021CA045

Acharya Juhilal Shanish - 2021CA009

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Project Guide

Dr. Vibhav Prakash Singh

Assistant Professor

CSED , MNNIT Allahabad

CERTIFICATE OF COMPLETION

This is to certify that **Abhinav Salar (2021CA006), Horil Prasad (2021CA045), Acharya Juhilal Shanish (2021CA009), Kripanshu Kajwe (2021CA054)**, a student of Motilal Nehru National Institute of Technology, Allahabad, has successfully completed the project titled "EASY WAY"- Online Worker Service, under the guidance of **Ass. Prof. Dr. Vibhav Prakash Singh**, in partial fulfillment of the requirements for the degree of Master Of Computer Applications.

Dr. Vibhav Prakash Singh
Assistant Professor
CSED , MNNIT Allahabad

MOTIVATION

This software helps users to find different types of workers easily and also workers easily get jobs. It is designed so that any user wants to search for a type of worker, and any worker gets a job in a relevant field. The software will help to maintain and update worker jobs and user service on the website for the administrator. Also, quick and easy comparison of different worker services by their rating highest rated worker service we recommended first so every worker wants to give best. The software is easy to use, with a search function that allows users to quickly find workers based on the type of service they need. The administrator maintains and updates the job listings and services, ensuring users can access accurate information.

The software recommends the best worker services based on their ratings and reviews, making it easy for users to compare and choose the best one for their needs. The software helps workers find job opportunities based on their experience and qualifications, and they can receive ratings and reviews from users to help build their reputation.

The software is a helpful tool for users and workers, making finding and offering services in different fields easier. The user-friendly interface, accurate information, and recommendation system make it convenient and efficient to connect with the right worker for the job.

Contents

Chapter 1

About Project

Our project addresses the challenges which occur when local worker is required to finish their daily work, such as repairing electronic items, cleaning houses and offices and plumbing-related work; on the other side, workers also have to waste their time searching for work. Currently, valuable time is spent searching for suitable workers, leading to inefficiency and frustration. To tackle this problem, we have taken the initiative to develop a user-friendly portal that allows users to register and access a database of local workers easily. The portal provides comprehensive information about each worker, including their experience and ratings, enabling users to make informed decisions when selecting a worker for a particular task. The primary objective of this initiative portal is to digitize the local worker ecosystem, making it convenient for users to search for and contact workers with relevant skills and expertise. By implementing an efficient system, we aim to streamline the process and eliminate the hassles of finding reliable local workers. Ultimately it will improve the overall experience of both users as well as workers.

1.1 User View

1. Login/Register
   Users can register on the website through basic information like name, email, password, location, and more. Moreover, workers can register through some other information like occupation and experience.

2. Top workers
   Top workers are listed on the basis of their ratings and review. Top Workers are also categorized as per their occupation.

3. Filtering workers by occupation

Here service page of this portal provides the feature of searching for a worker through occupation.

4. Request for service

   If the user wants to take service, they can contact the worker through the portal by generating the request, and this request will be shown to the worker; if the worker is interested in this request, then the worker can accept it or reject it.

5. Review and rating for workers

   It provides a feature for users to write their experience and provide ratings to workers based on their work.

6. Contact us

   The portal provides a feature for users and workers to communicate with the Admin for any type of query regarding the portal. Users/workers can fill out the contact us form and mention their issues.

7. Feedback form

   A feedback form is a tool to gather information about a user's opinion or experience regarding a specific service.

Chapter 2

Introduction

2.1 Objective

This project focuses on developing a web application that efficiently searches for local workers like electricians, plumbers, mechanics, cleaners, technicians, and more. Our objective is also to provide the workers with the freedom to select the work with no hassles. This web application involves all the basic features to provide a better experience to both the user and the worker.

(a) Worker Database: The website can maintain a comprehensive database of local workers, including electricians, plumbers, mechanics, cleaners, technicians, and more. Workers can create profiles that showcase their skills, experience, and availability, and users can search and filter through the database to find workers that match their needs.

(b) Search and Filters: The website can provide search and filter options that allow users to easily find workers based on their location, availability, expertise, ratings, and reviews. This can help users quickly identify the most suitable workers for their needs.
(c) Ratings and Reviews: Users can rate and review the workers they hire, which can provide valuable feedback for other users and help improve the overall quality of the service.

2.2 Overview

Our website features local job opportunities for different types of workers, including electricians, plumbers, cleaners, and maids. Users can easily search for workers based on their location and specific service requirements, making it easy to find the right worker for the job. Search relevant jobs of daily base local

workers is very difficult, so this portal provides the worker service system through our website.

Users can also access detailed information about the workers and services available, including their ratings and reviews, pricing, and availability.

One of the key features of the website is the search functionality, which allows users to easily search for workers based on their location and specific service requirements. This can help job seekers quickly identify relevant job opportunities and employers find suitable workers for their needs.
Overall, this website can potentially provide a valuable service to both job seekers and employers, by streamlining the job search and hiring process and helping to connect workers with relevant job opportunities in their local area.

2.3 Problem Statement

If we need a local worker to solve some daily life issue, we waste time searching for them, so we take the initiative to make a portal to register a local worker. If someone needs to do it, we provide workers with their experience and rating.

For workers, the portal can provide a platform to showcase their skills and connect with potential clients. Workers can receive ratings and reviews from previous clients, which can help build their reputation and attract more clients in the future.

Chapter 3

Proposed Work

A website with the following features:

• Information related to Worker and User
• Service Portal
• Admin Panel
• Communication System
• Email Authentication
• Hashing Password
• Rating and Review System

Information related to the worker is stored in the database and is fetched from there to be shown to the user. After logging into the website, we can also take the service of workers and search about workers, which would be visible on the admin side who takes the requested service to which worker by the admin. If the user wants to take service, they can contact the worker through WhatsApp. After taking service, you can review and rate that work, so we want to provide better service next time.

3.1 Information related to Worker and User

Here, we have two types of users first one is the regular user who takes services that's a type of user having information about their Name, Email, Phone, Location, Image, and more, and the other user, which provides service (Worker) that is a type of user having information about Name, Email, Phone, Location, Occupation, Experience, Image, Rating, and more.

3.2 Service Portal

Here, this is a Portal User search worker, and we want to take which type of service requirements, like electricians, mechanics, plumbers, cleaners, maids, and more. In this portal, we recommend the highest-rated worker at the top of the list for that type of service. We try that our customers receive the best possible service from workers consistently rated highly by other users.

When a user searches for a specific service, such as an electrician or a plumber, our system will display a list of available workers in their area. We ensure that users can quickly find the best workers for their needs.

If the user wants to take service, they contact the worker through WhatsApp.

3.3 Admin Panel

An admin has administrative privileges to manage and control various aspects of web-based apps. Admin can monitor and modify all the information of the web app in the Back-end and can resolve the issues of users and workers. Admin can monitor how many users and workers are active. Admin can also manage the rating and reviews provided by users.

3.4 Communication System

In the service portal, we provide the types of communication in which users communicate with workers. The first one is If the User wants to take service, then they contact the worker through the portal by generating the request, then this request is shown by the worker; if the worker is interested in this request, then accept or reject. The second way to use contact the worker is through WhatsApp.

3.5 Email Authentication

Email authentication is a process that verifies the identity of valid users and workers. By implementing email authentication, organizations can protect their brand reputation, increase email deliver-ability, and reduce the risk of email-based attacks. Recipients of authenticated emails can be confident that the messages are from legitimate sources, which can improve trust and engagement.

3.6 Hashing Password

Password hashing is defined as putting a password through a hashing algorithm to turn plain-text into an unintelligible series of numbers and letters. This is important for basic security hygiene because, in the event of a security breach, any compromised hashed passwords are unintelligible to the bad actor. As a result, the theft of this information is considerably more difficult.

3.7 Rating and Review System

It provides a feature for Workers to mention their work experience and rating, which is given by the user (Take service). overall fun, which will help another user judge by seeing the reviews given by other users

Chapter 4

Hardware and Software requirement

4.1 Technology requirements

- Library: React
- Front-end: HTML, CSS, JAVASCRIPT
- Back-end Side Technologies: Node js, Express js
- Database Server: MongoDB
- Operating System: Microsoft Windows/Linux

React:

React is an open-source JavaScript library for building web application user interfaces (UIs). Facebook was created and maintained by both Facebook and a community of developers.

HTML:

HTML is an acronym for Hyper Text Markup Language, used for creating web pages and web applications. Let us see what is meant by Hypertext Markup Language and Web pages.

CSS:

CSS stands for Cascading Style Sheets. It is a style sheet language used to describe the look and formatting of a document written in markup language. It provides an additional feature to HTML. It is generally used with HTML to change the style of web pages and user interfaces. It can also be used with any XML document, including plain XML, SVG, and XUL.

JAVASCRIPT:

JavaScript (JS) is a computer programming language that makes websites and applications dynamic and interactive. It is unique because it can run directly in your browser, not just on a server.

NODE JS:

Node.js is an open-source, cross-platform runtime environment and library used to run web applications outside the client's browser.

EXPRESS JS:

Express.js is the most popular backend framework for Node.js and an extensive part of the JavaScript ecosystem.

4.2 System requirements

- Processor: A processor with a minimum clock speed of 1 GHz
- RAM: At least 1 GB RAM

Chapter 5

System Design

5.1 Use Case Diagram

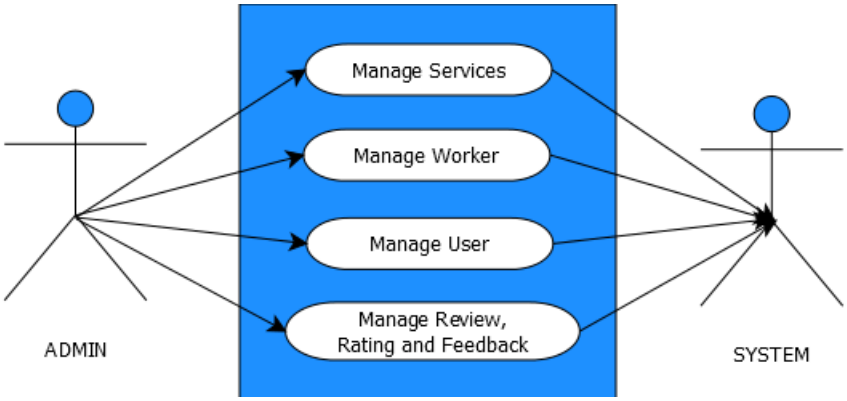


Fig 3.1.1 : Admin Use Case Diagram

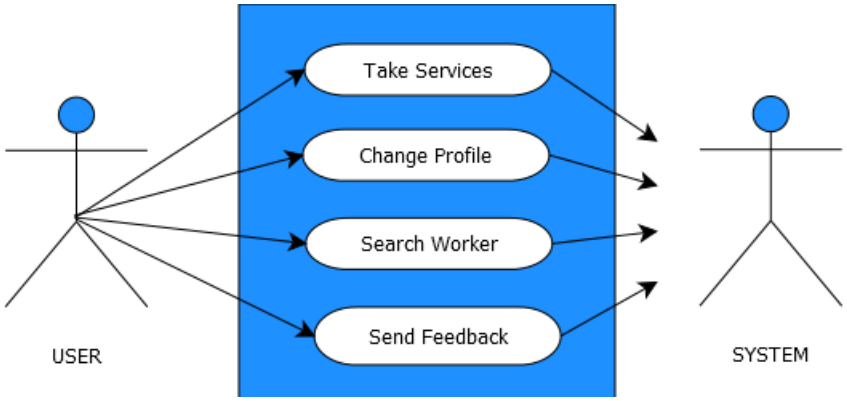


Fig 3.1.2 : User Use Case Diagram

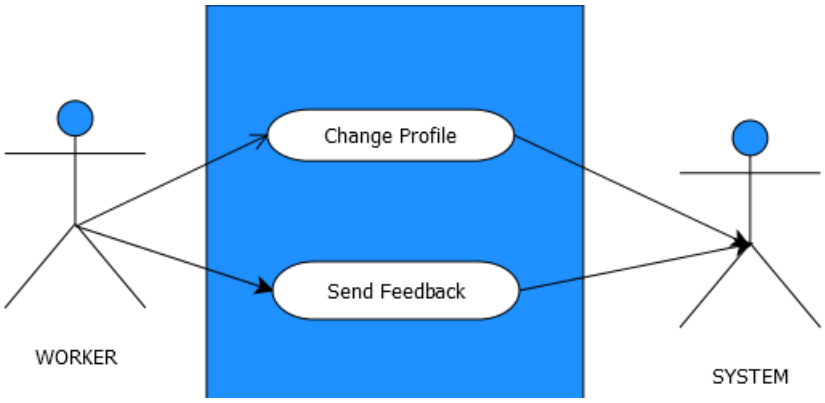
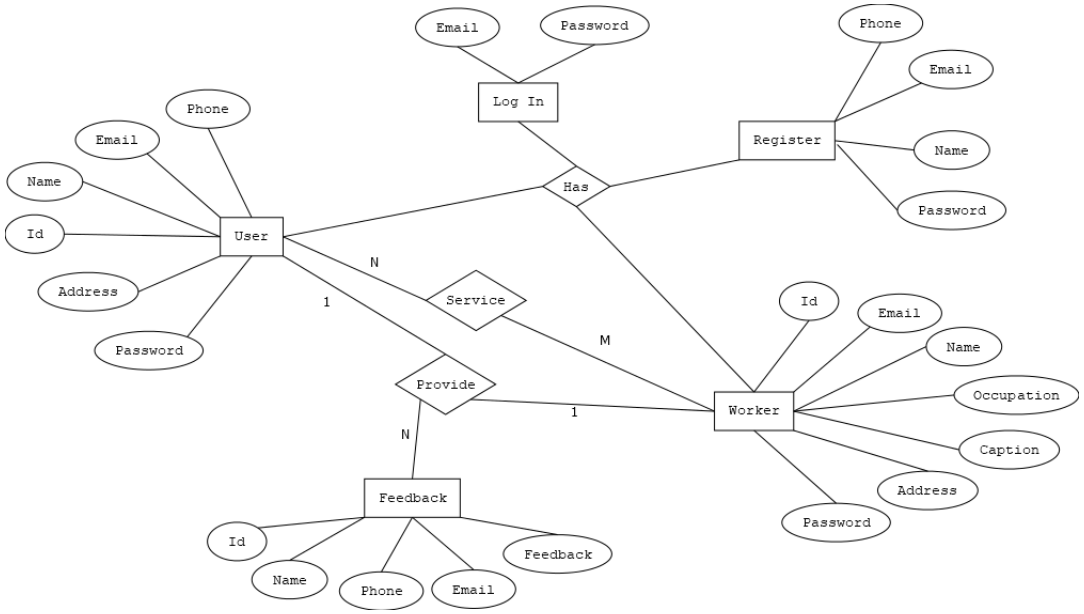


Fig 3.1.2 : Worker Use Case Diagram

5.2 ER Diagram



Chapter 6

Flow Chart

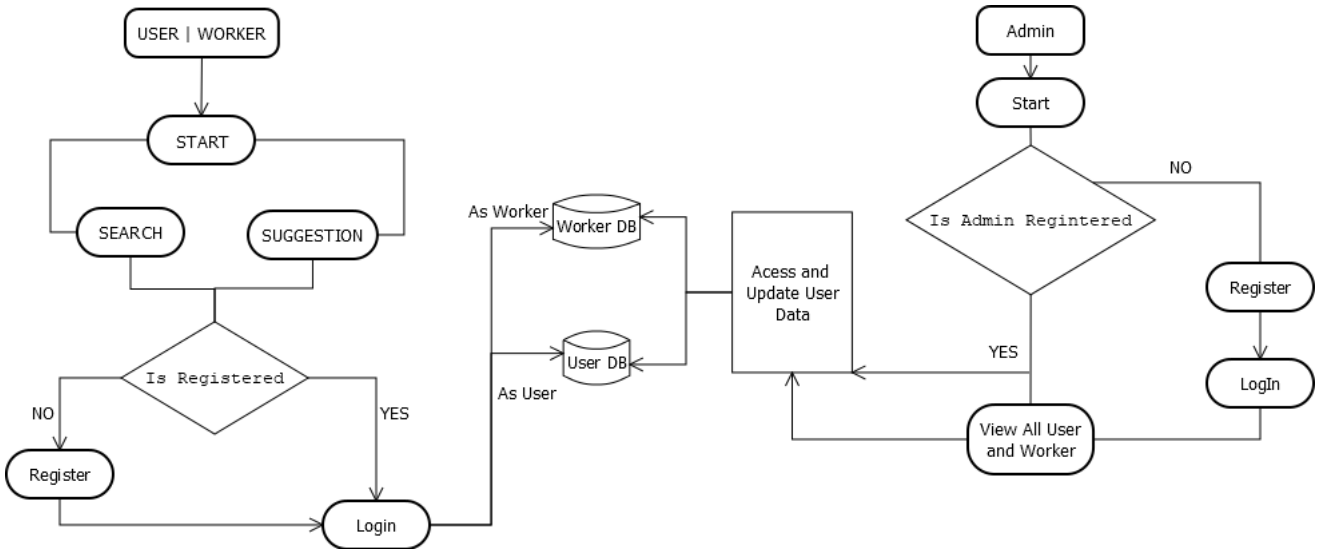
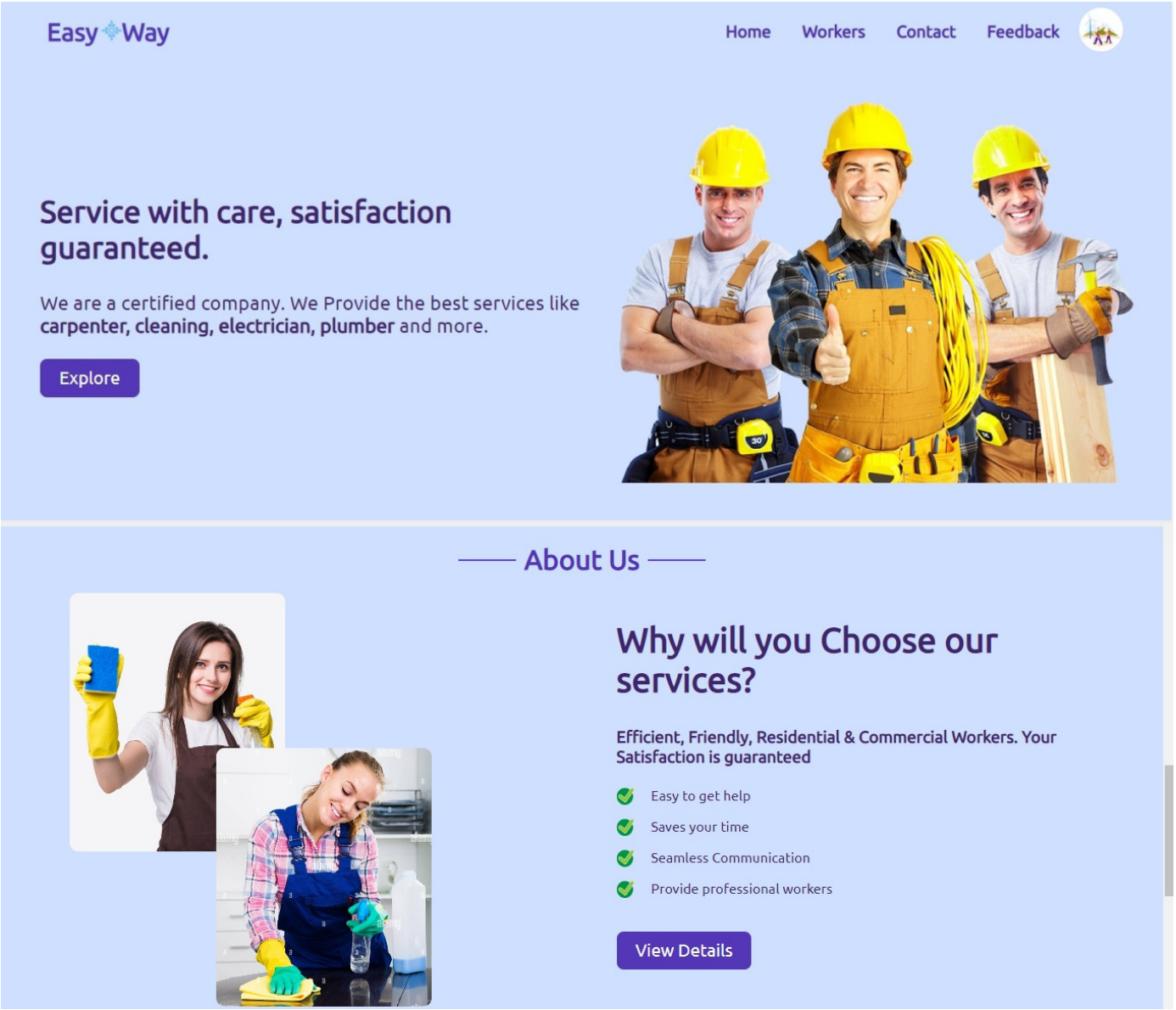


Fig 4.1: Flow Chart

Chapter 7

User Screens

7.1 Home Page



7.2 Sign up Page

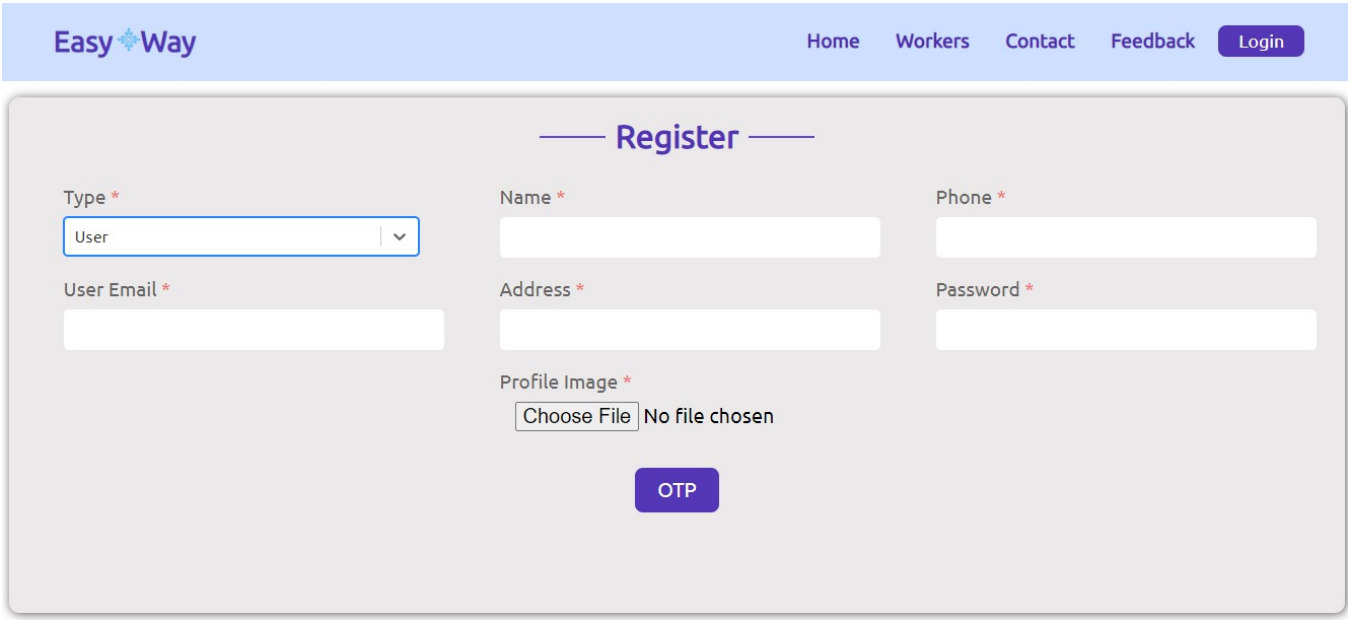


Fig 5.3: Sign up Page

7.3 Email Authentication

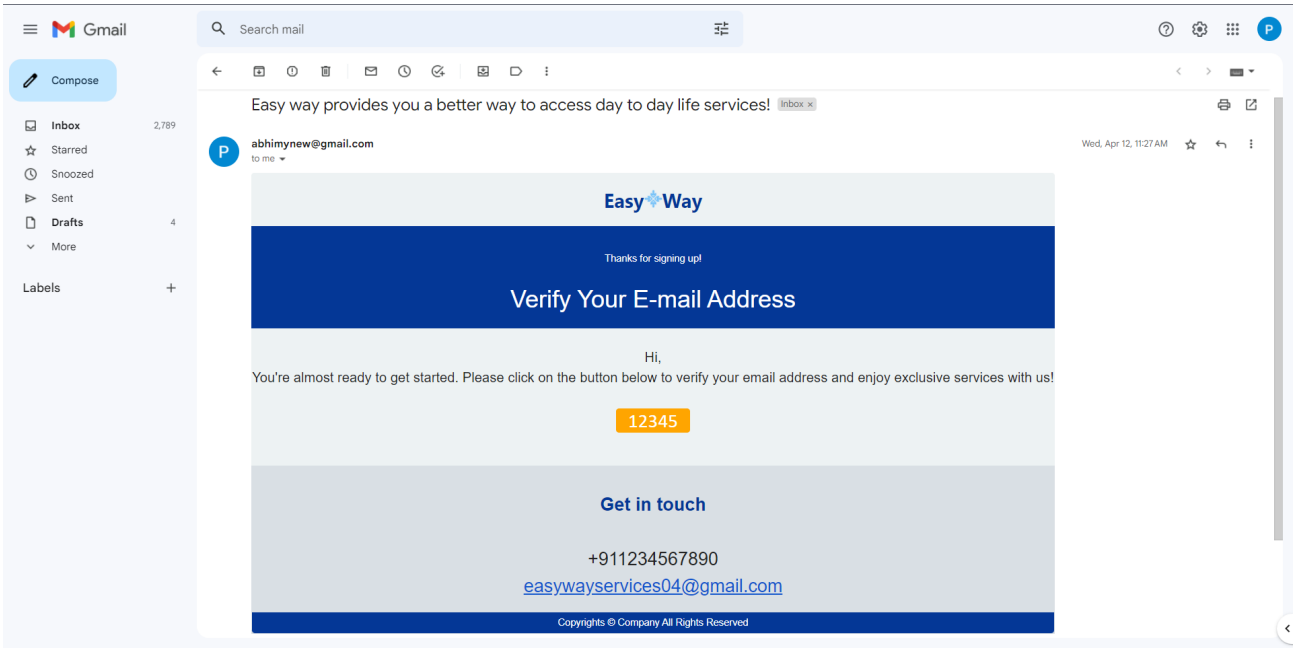


Fig 5.6: Email Authentication Page

7.4 All Available Service

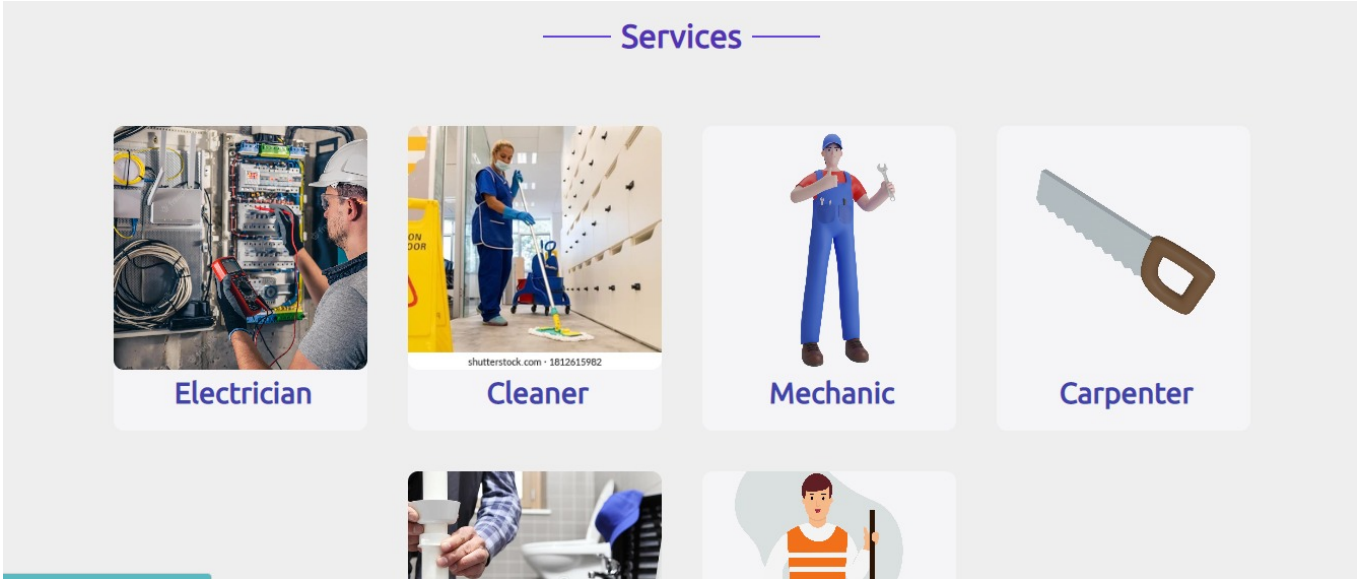
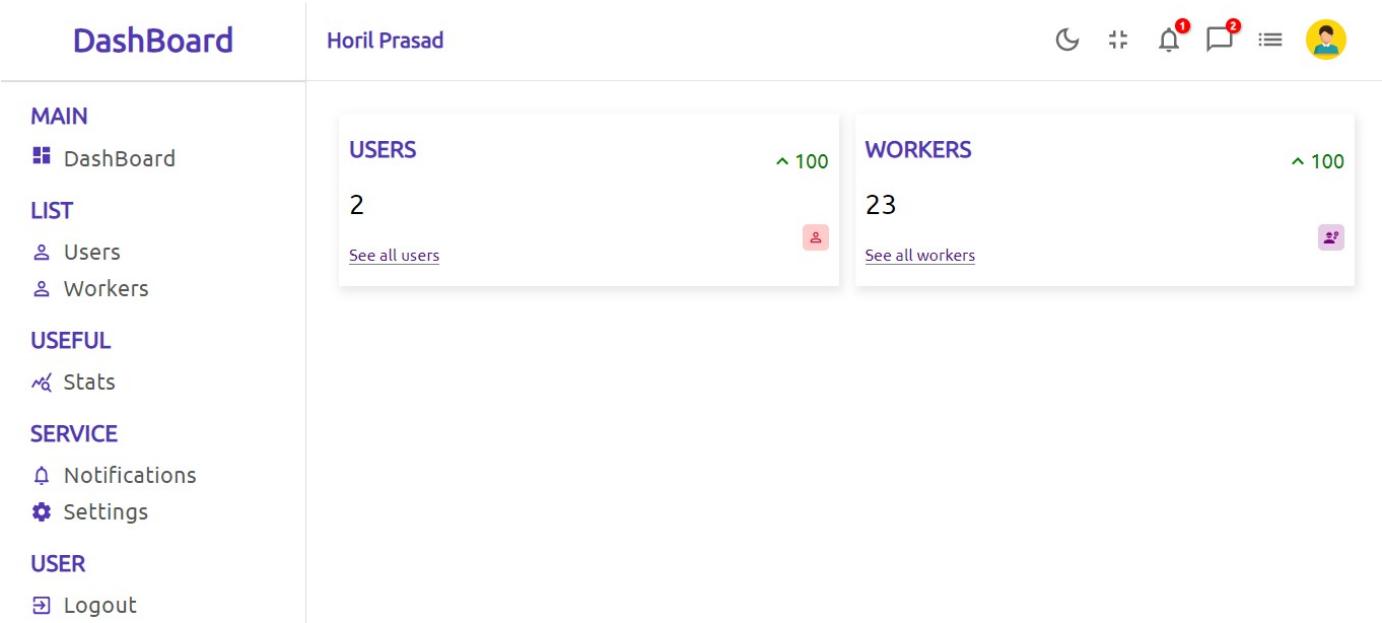


Fig 5.8: All Products Page

7.5 Dashboard Panel



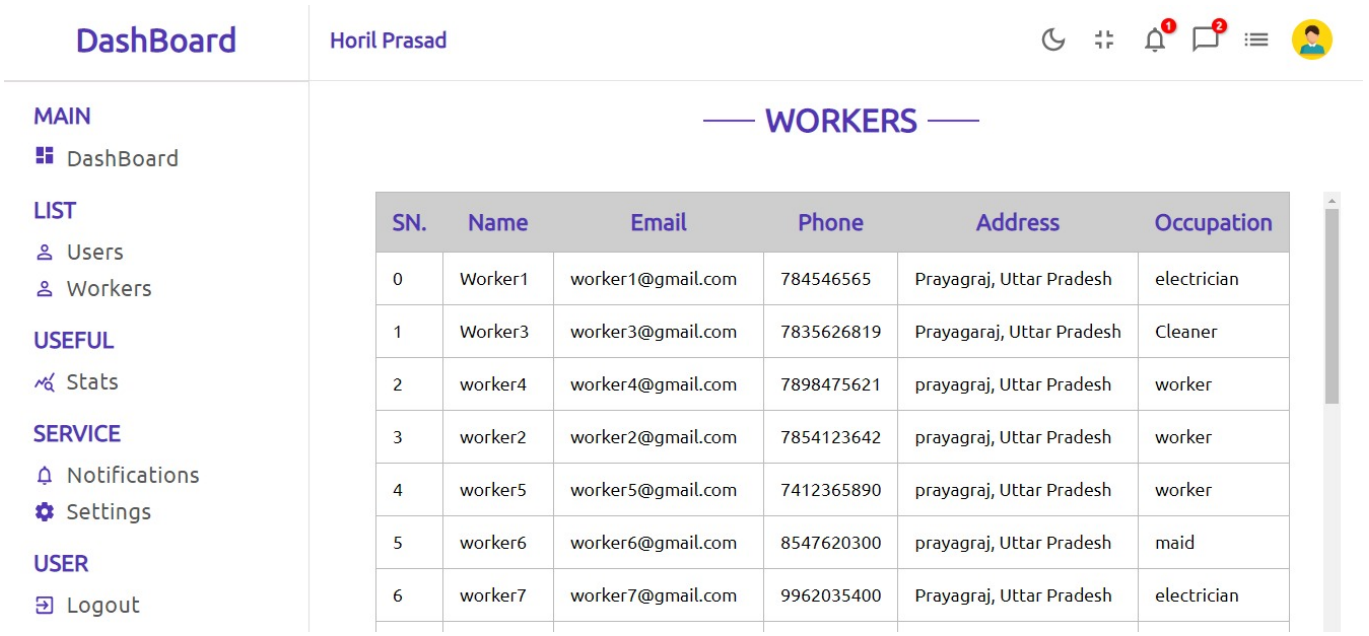


Fig 5.15 : Dashboard Panel

7.6 Rating and Review of Services

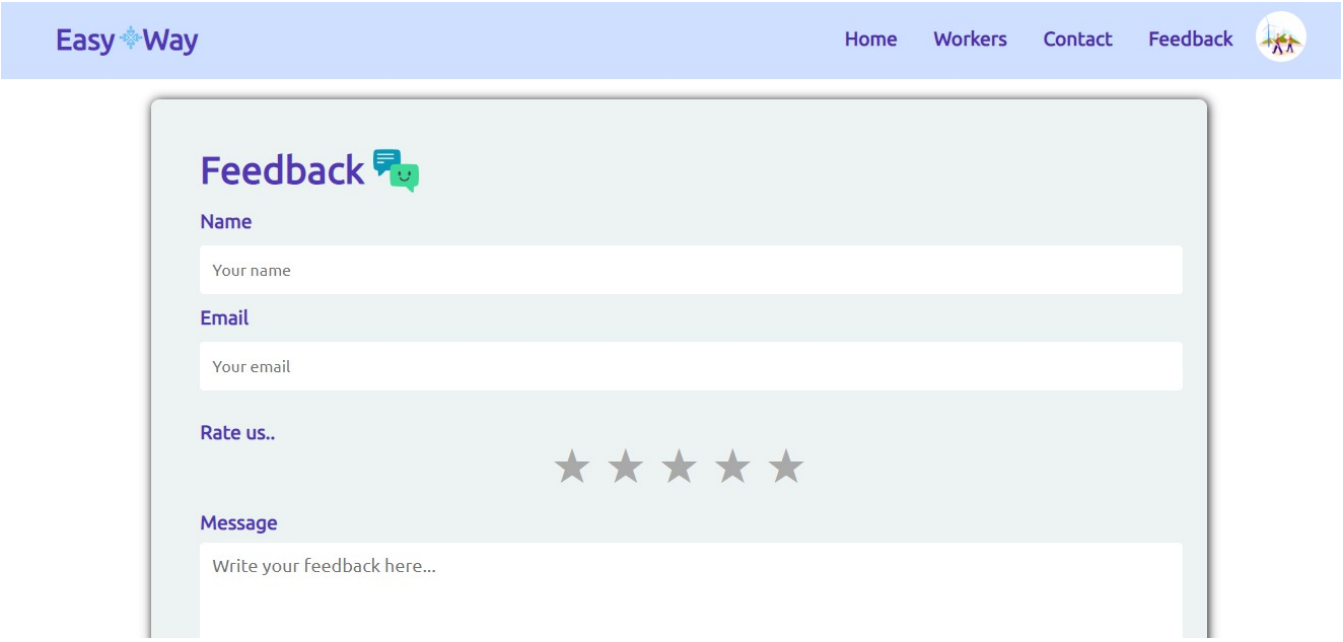


Fig 5.17 : Feedback Page

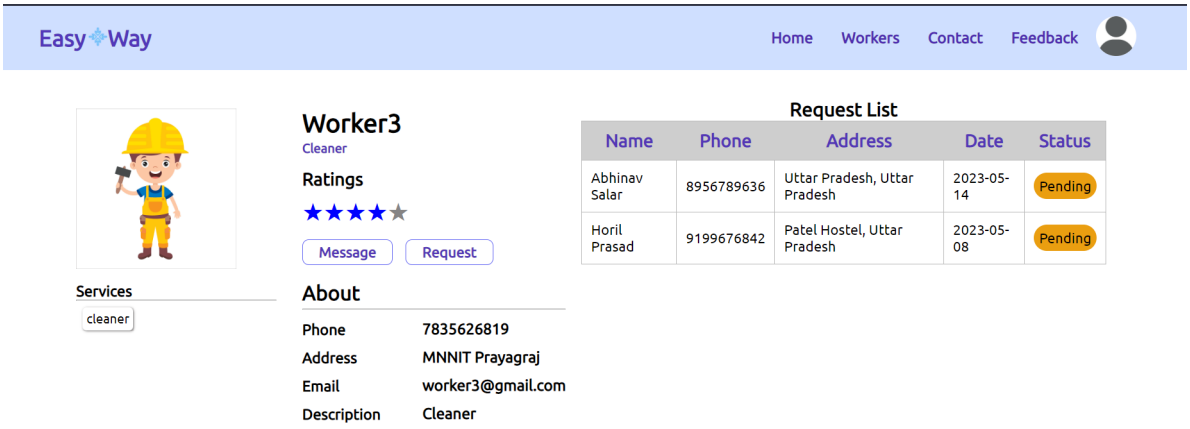


Fig 5.18 : Worker Profile Page

Chapter 8

Conclusion

The project entitled ”Easy Way” is developed using HTML, CSS, and Library React as the front-end, Node JS and its Library for the back-end, and MongoDB as a database to computerize the process of Worker Services. This project covers the essential features required by Workers and Users.

8.1 Future Scope of ”Easy Way”

EasyWay Services provides various features which complement the information system and increases the productivity of the Worker service. There are various possibilities which we will be looking forward to implement to enhance the application’s functionality and user experience.

- We will add location filter so that user can access the details of workers nearby.
- Login/Register using social media authentication like Google, Facebook and twitter
- We will add live location tracker, so that the user can track the location of the worker.
- We will launch this web-app as an Android app in the future.
- Digital payment options can be added for the convenience of both the user and the worker.

Chapter 9

Reference

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