Online Fuel Delivery System

A V S Radhika[1], Pamu Sri Vaishnavi[2], Merugu Yamini[3]

[1]Assistant Professor, Department of CSE, Bhoj Reddy Engineering College for Women, India.

[2,3]B.Tech Students, Department of CSE, Bhoj Reddy Engineering College for Women, India.

Abstract

The Online Fuel Delivery System website is an innovative platform designed to simplify fuel procurement by providing on-demand delivery services. This system allows users to conveniently order fuel to their location without the need to visit fuel stations. It features a user-friendly interface for easy navigation, secure payment options, and location-based services to ensure accurate and timely deliveries.

Catering to individual users and organizations managing vehicle fleets, such as taxi operators, bus services, and logistics companies, the platform streamlines the refueling process by enabling users to schedule deliveries effortlessly. Safety and compliance with industry regulations are prioritized to ensure secure and reliable delivery practices.

By connecting consumers and fuel suppliers directly, the Online Fuel Delivery System enhances convenience, optimizes resource management, and promotes sustainable fuel consumption practices. This website aims to redefine the fuel delivery process, making it more accessible, efficient, and hassle-free for users.

INTRODUCTION

The advancement of technology has revolutionized various aspects of our daily lives, including how we procure essential resources such as fuel. The Online Fuel Delivery System is a modern solution designed to simplify fuel access by delivering it directly to customers' locations. The Online Fuel Delivery System facilitates seamless fuel delivery to organizations through a user-friendly online platform accessible via web. Organizations can place orders for fuel refill anytime, anywhere, eliminating the need for physical visits to fuel stations. The system provides real-time availability and pricing information, empowering consumers to make informed decisions. The design and implementation of an innovative Online Fuel Delivery System (OFDS), is aimed at enhancing convenience, efficiency, and reliability in the fuel procurement process.

Proposed System

The proposed online fuel delivery system is a platform that simplifies the process of ordering fuel and related equipment. Customers can easily place orders, schedule deliveries, and track their status in real time through a user-friendly interface. The system also helps manage orders efficiently while providing notifications to keep customers updated. It aims to save time, improve service quality, and make fuel delivery more convenient and reliable for everyone.

DESIGN

Architecture

Project architecture represents number of components we are using as a part of our project and the flow of request processing i.e. what components in processing the request and in which order. An architecture description is a formal description and representation of a system organized in a way that supports reasoning about

the structure of the system. Architecture is of two types. They are

(1) Software Architecture
(2) Technical Architecture

Software Architecture:

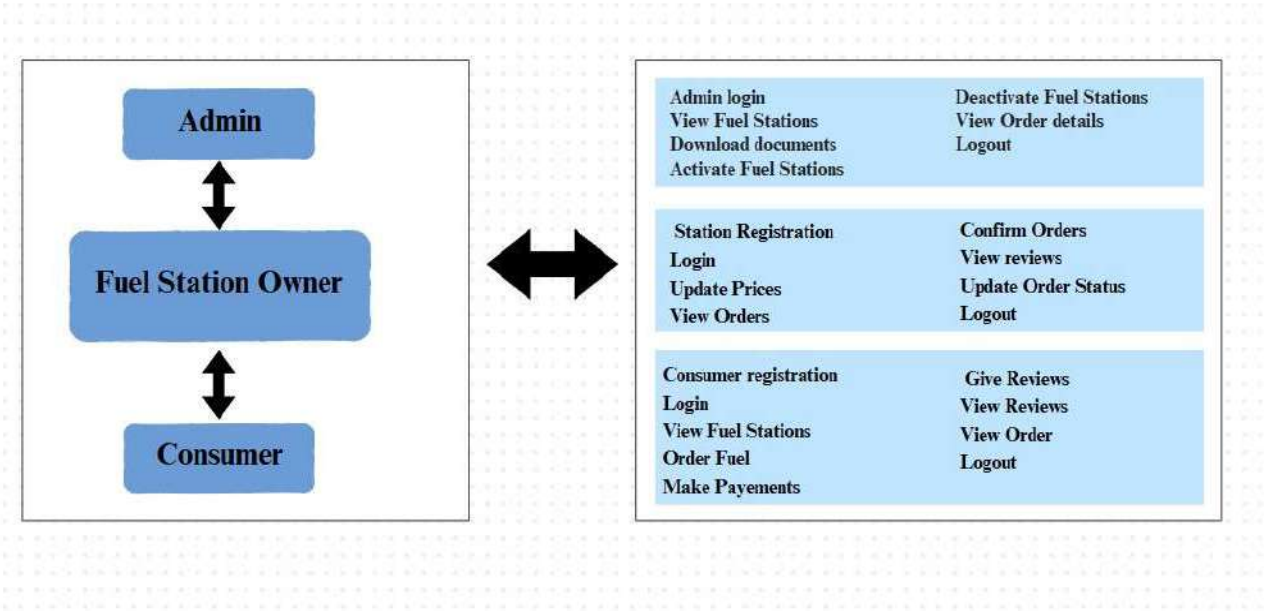


Fig 1 Software Architecture

Technical Architecture :

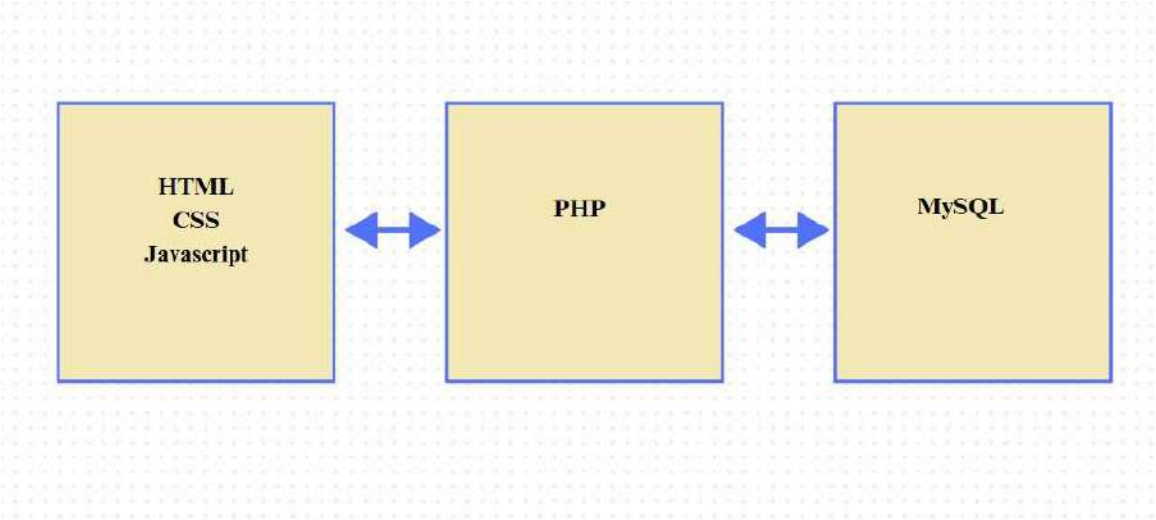


Fig. 2 Technical Architecture

IMPLEMENTATION

Technologies

HTML

HTML (Hyper Text Markup Language) is the standard language for creating web pages. It structures content using elements like headings, paragraphs, lists, links, and multimedia. Each element is defined by tags, which browsers interpret to render the page. HTML is essential for building websites and is often paired with CSS and JavaScript for styling and interactivity.

CSS

CSS (Cascading Style Sheets) is a powerful language used to style and format HTML elements, enhancing the appearance and user experience of web pages. It controls visual aspects like colors, fonts, spacing, layouts, and responsive designs for different devices. CSS allows separation of content (HTML) from design, making websites more manageable and scalable. Styles can be applied using inline, internal, or external stylesheets, offering flexibility in implementation. CSS supports features like animations, transitions, and media queries for dynamic and interactive designs. Together with HTML and JavaScript, CSS forms the foundation.

JavaScript

JavaScript is a programming language that makes websites interactive and dynamic. While HTML structures a webpage and CSS styles it, JavaScript adds life to it. For example, it enables features like image sliders, interactive forms, pop-ups, animations, and buttons that respond when clicked. It can also update content on the page without reloading, like showing live scores or search suggestions. JavaScript works in web browsers and is also used on servers with tools like Node.js to build full web applications. It's a key part of modern web development, making websites more engaging and user-friendly.

PHP

PHP (Hypertext Preprocessor) is a server-side scripting language used to create dynamic and interactive web pages. It works with HTML and databases to process and display content, making it ideal for tasks like handling forms, managing user sessions, and building content management systems. PHP can connect to databases like MySQL to store and retrieve data, enabling features like user accounts or product listings. It's easy to learn, widely supported, and powers many websites, including WordPress. PHP code runs on the server, sending the processed results to the browser, making it essential for backend web development.

MySQL

MySQL is a popular open-source relational database management system used to store, organize, and manage data. It uses Structured Query Language (SQL) to interact with and retrieve information from databases. MySQL is widely used in web applications to handle tasks like user authentication, storing product details, and managing content. It works seamlessly with programming languages like PHP, allowing developers to create dynamic websites and applications. MySQL supports large datasets, multiple users, and complex queries, making it reliable for small projects and large-scale applications. It's commonly used in combination with tools like Apache and PHP in web development stacks.

XAMPP

XAMPP is a free, open-source software package that provides a complete local server environment for web development. It includes Apache (web server), MySQL (database), and interpreters for

PHP and Perl, making it ideal for building and testing web applications on a personal computer before deploying them online. XAMPP is easy to install and configure, offering developers a platform to work on dynamic websites without needing a live server. It supports multiple operating systems, and its control panel simplifies managing services like starting or stopping the server. XAMPP is widely used for learning, development, and testing in web projects.

TESTING

Software testing is a process, to evaluate the functionality of a software application with an intent to find whether the developed software met the specified requirements or not and to identify the defects to ensure that the product is defect free in order to produce the quality product.

As per the current trend, due to constant change and development in digitization, our lives are improving in all areas. The way we work is also changed. We access our bank online we do shop online; we order food online and many more. We rely on software's and systems. We all know that one small bug shows huge impact on business in terms of financial loss and goodwill. To deliver a quality product, we need to have Software Testing in the Software Development Process.

Test Cases

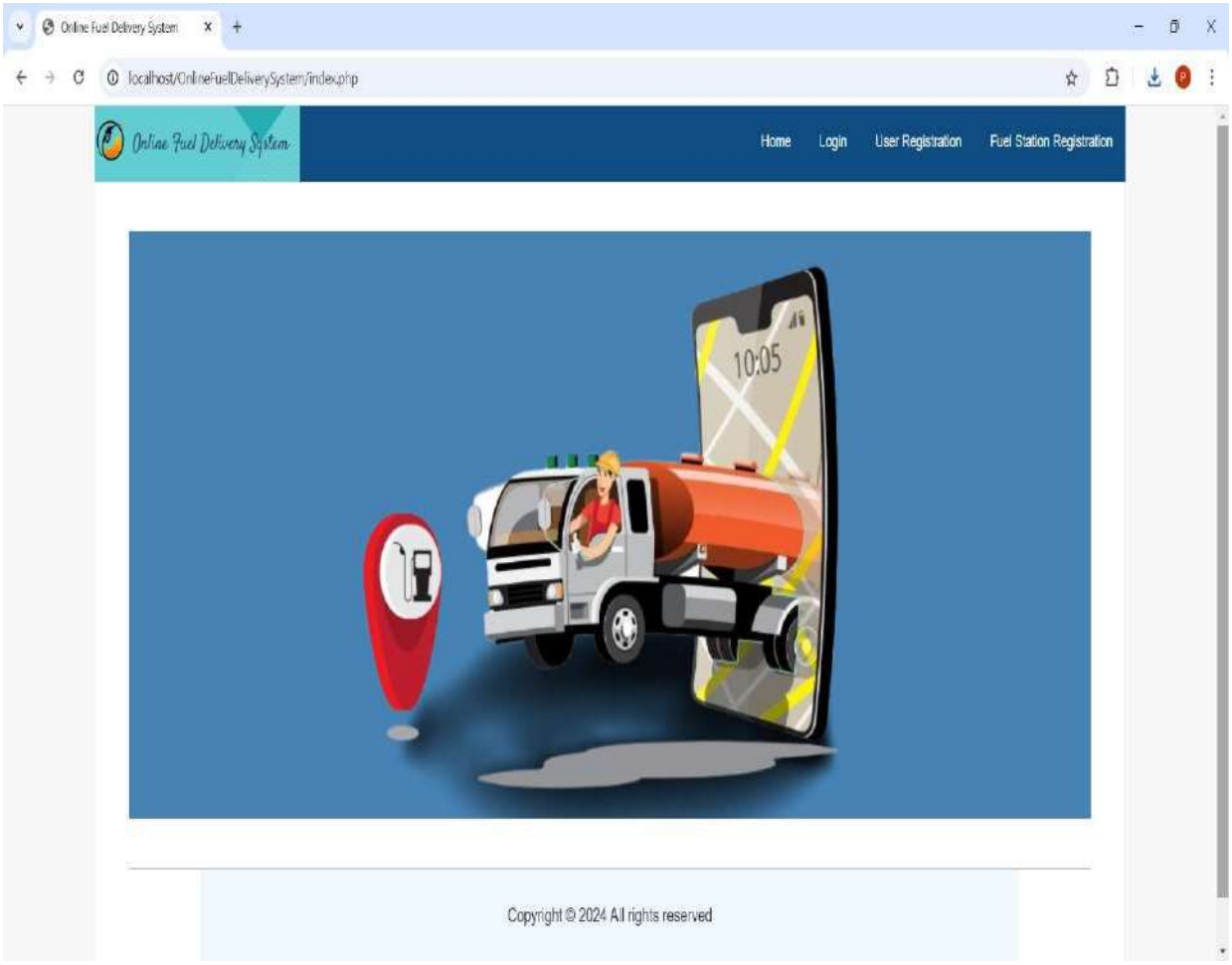
Test ID	Test Name	Inputs	Process	Expected Output	Actual Output	Status
1	Register	Username, Name, Email, Mobile, Address, Password etc	User enters registration details and submits.	User is successfully registered and redirected to login page.	User registered and redirected to login page.	Pass
2	Login	Username, Password, Type	User enters credentials to login.	User successfully logs in and accesses the dashboard.	User logged in and dashboard accessible.	Pass
2.1	Login with Incorrect Password	Username, Incorrect Password, Type	User enters a valid username but an incorrect password.	Error message: "Incorrect username or password."	Error message displayed correctly.	Pass

3	View Stations	User logged in	User clicks on "View Stations" to view the available fuel stations.	List of available fuel stations is displayed.	List of fuel stations displayed correctly.	Pass
4	Activate or Deactivate Stations	Admin logged in, Station: hp	Admin activates the selected station.	Station status is updated to Activate	Station status updated to Activate	Pass
5	User Order	User logged in, Station: HP, Fuel Type: Diesel	User places an order for fuel from the selected station.	Fuel order is successfully placed	Order placed Successfully	Pass
6	Review	User logged in, Station: HP, Fuel Type: Diesel	User submits a review for the station.	Review is successfully submitted and visible on the station's page.	Review submitted and visible under station reviews.	Pass
6.1	Review with Empty Fields	User logged in	User submits an empty review without entering any details.	Error message: "Please enter the required fields."	Error message displayed correctly.	Pass

7	Logout	User logged in	User clicks "Logout" to exit the system.	User is successfully logged out and redirected to the login page.	User logged out and redirected to login page.	Pass

RESULTS

Screenshots

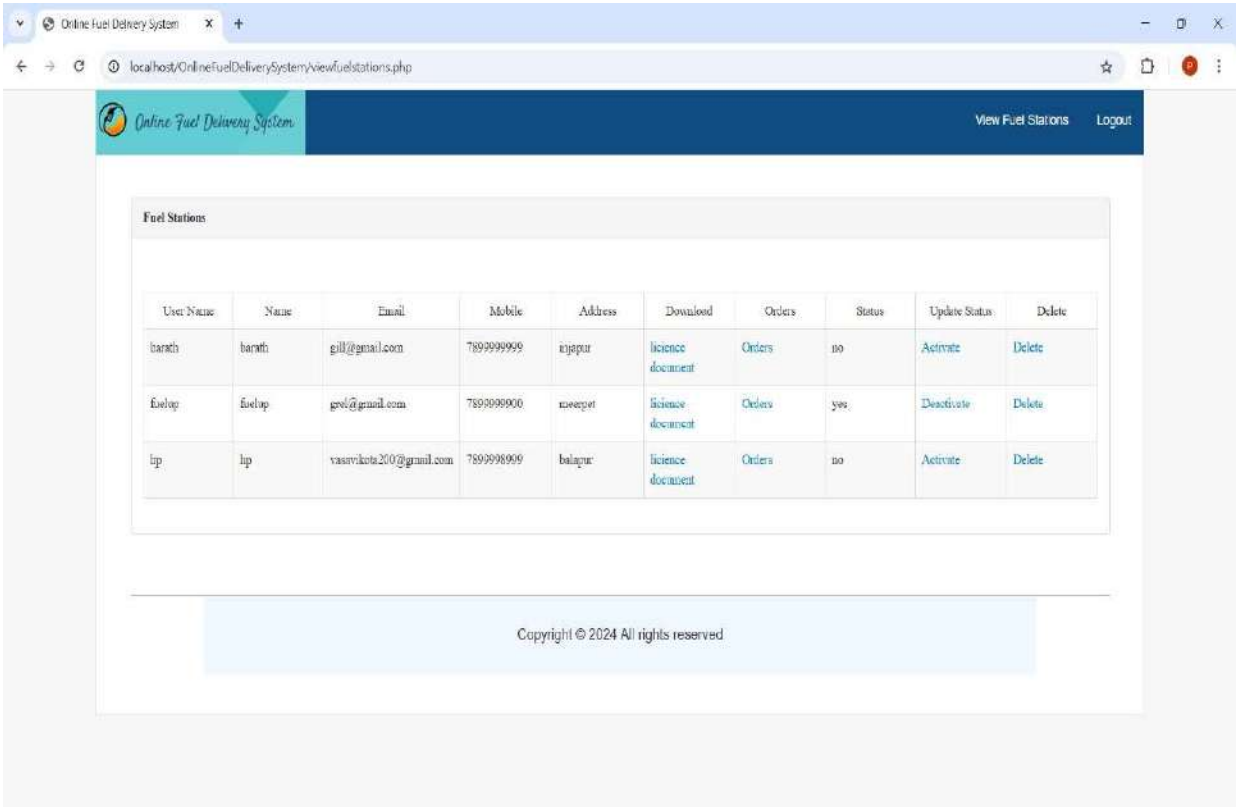


Screenshot 1 Home Page

Screenshot 2 Login Page

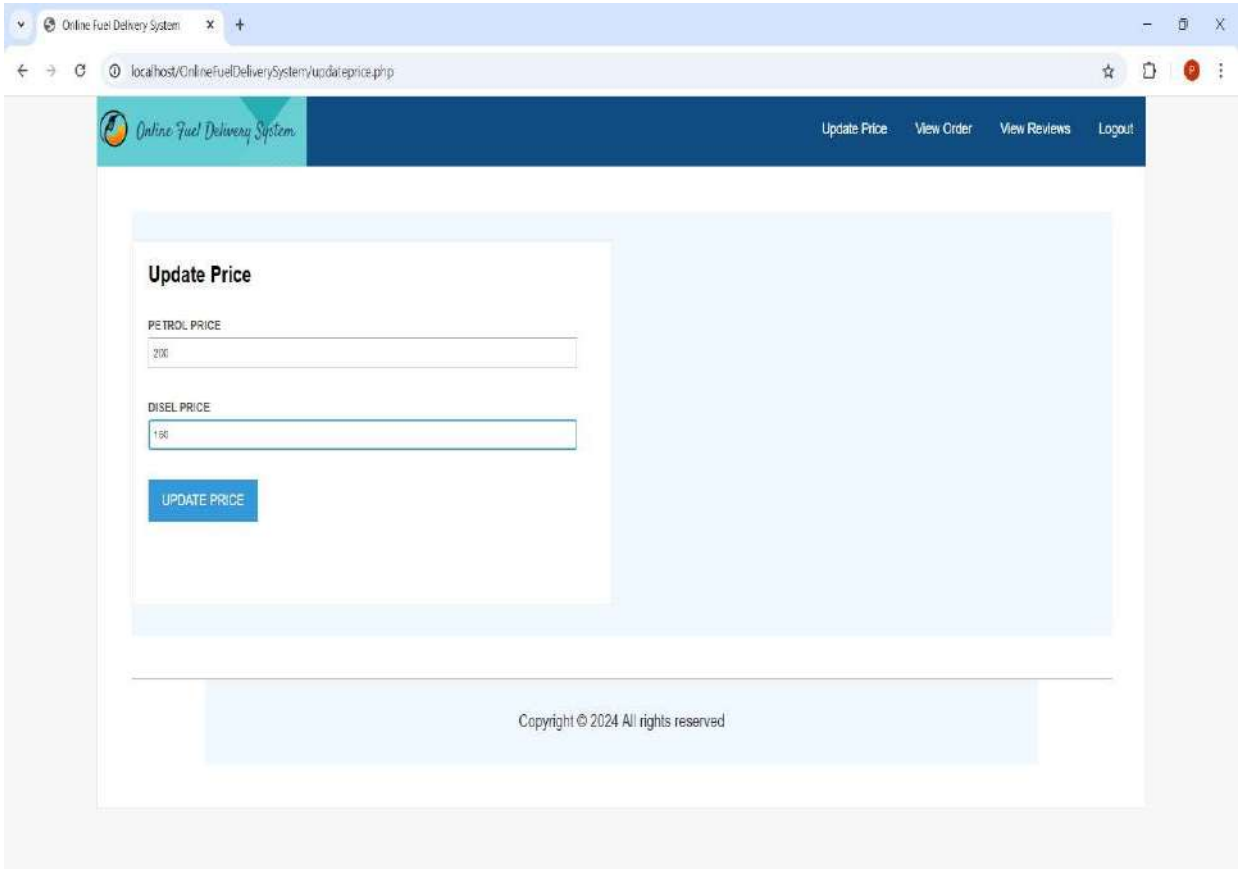
Screenshot 3 User Register Page

Screenshot 4 User Registered Successfully

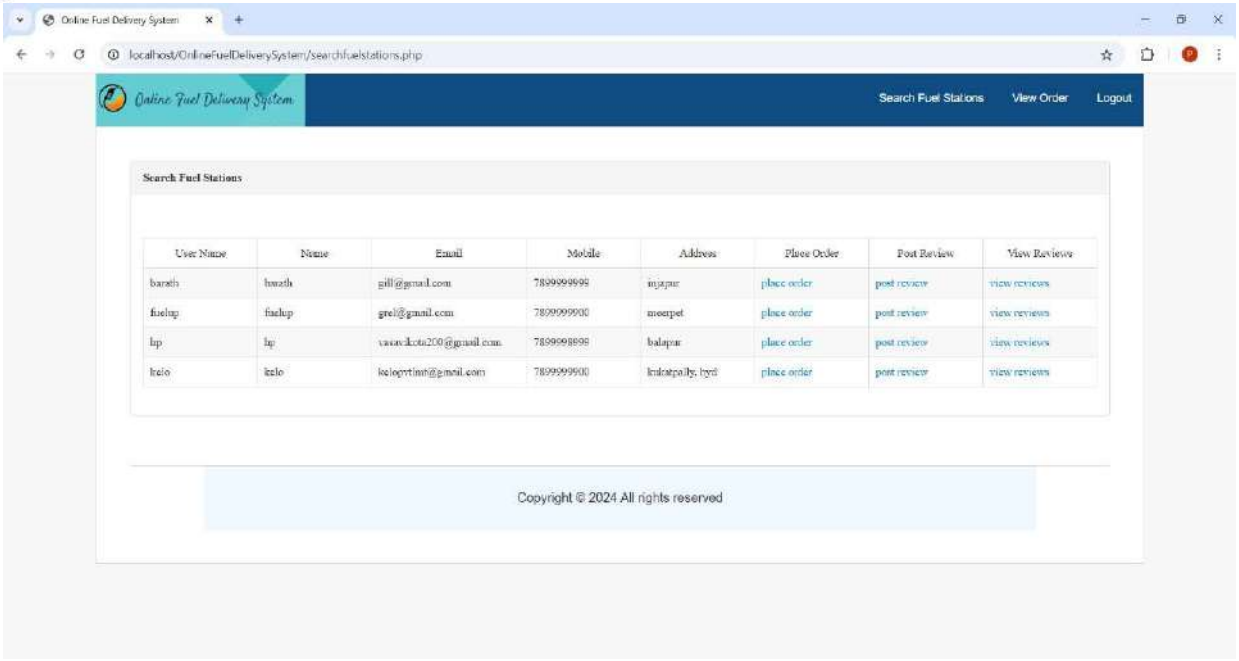


Screenshot 5 Admin Activation / Deactivation page

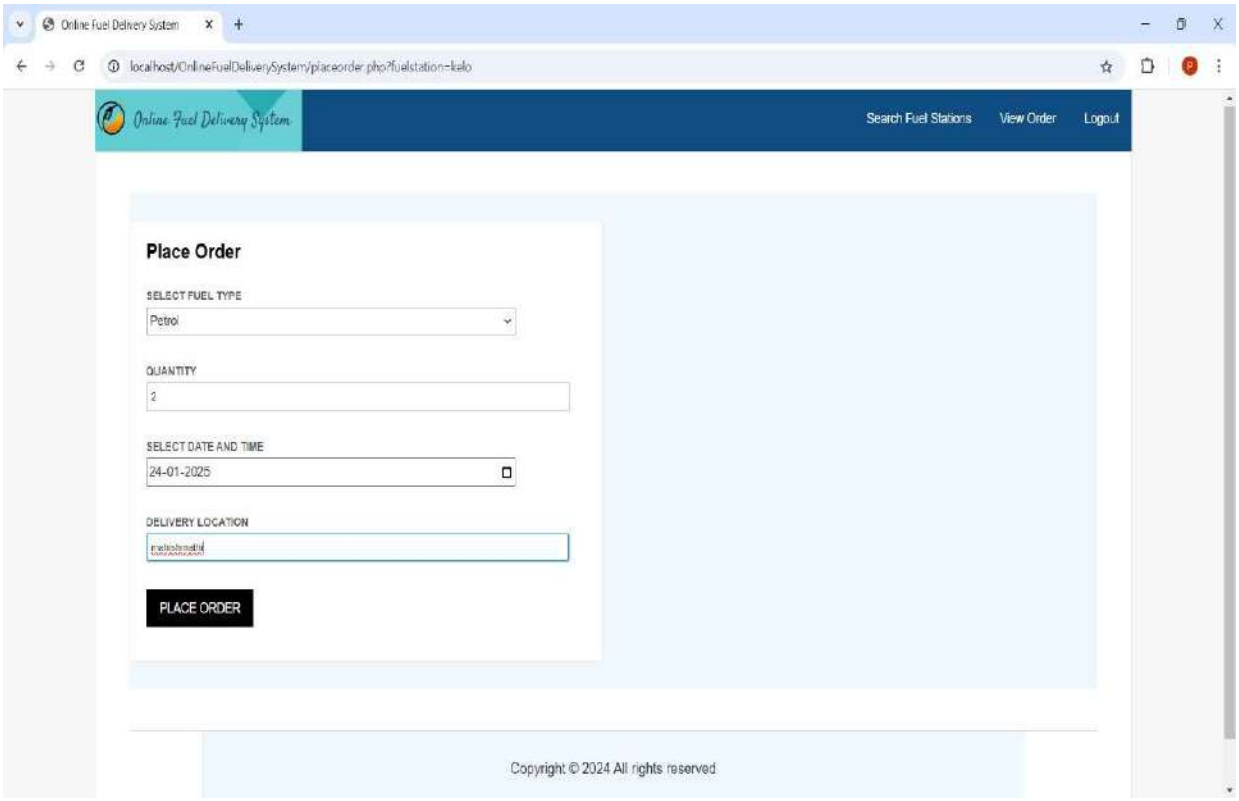
Screenshot 6 Fuel Station Registration Page



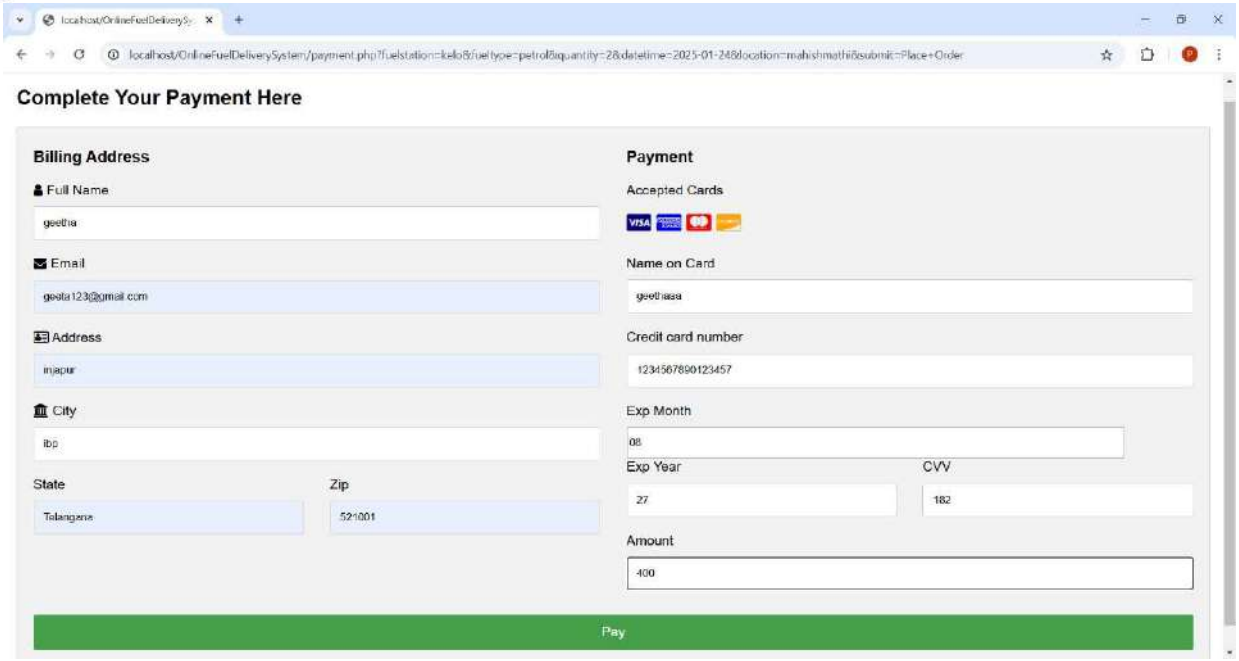
Screenshot 7 Fuel Station Price Update Page



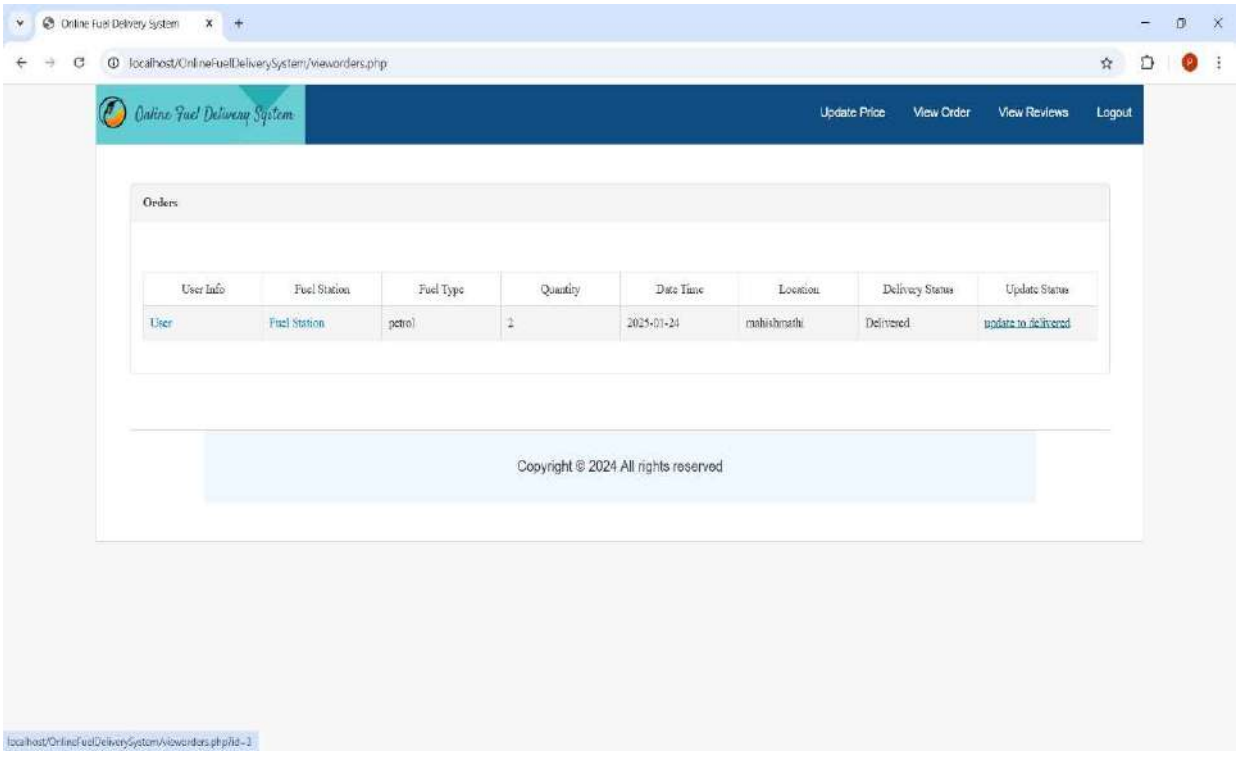
Screenshot 8 Search Fuel Station Page



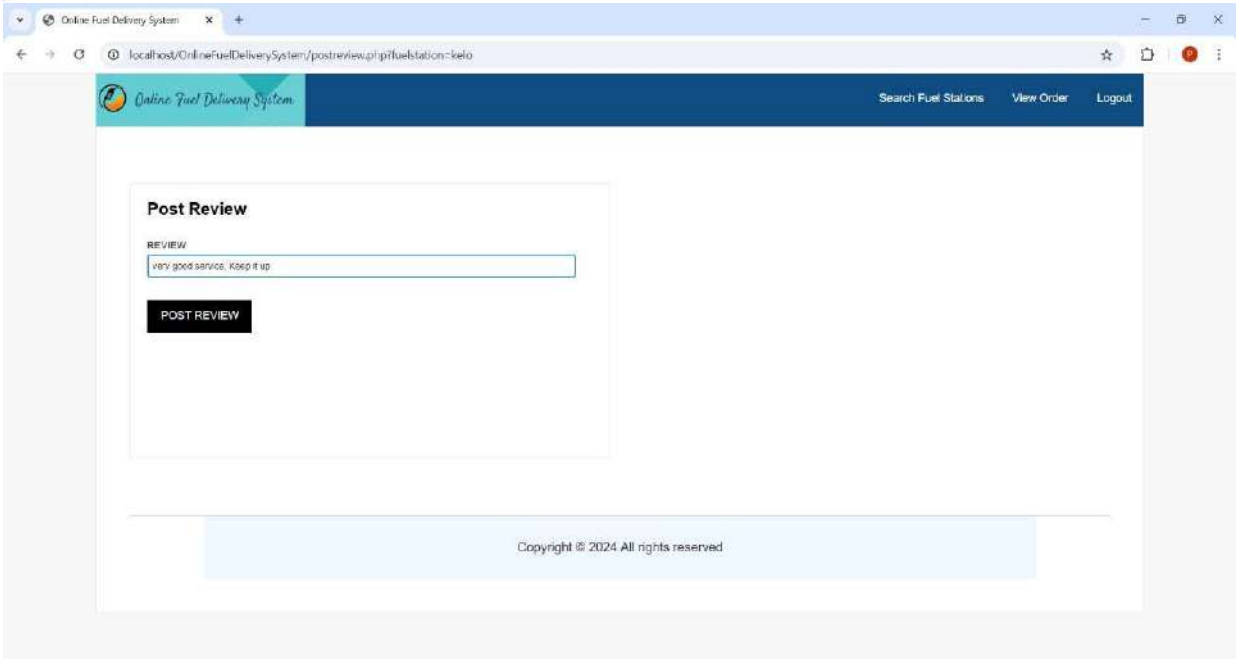
Screenshot 9 Place Order Page



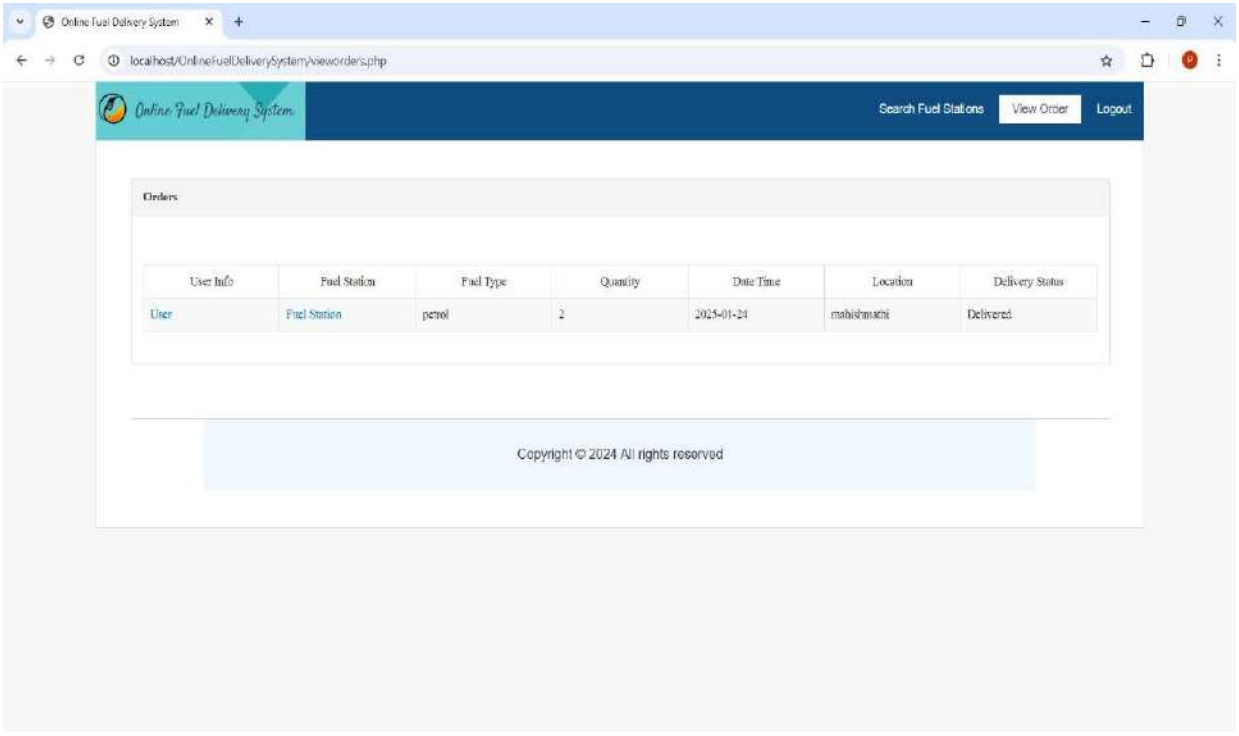
Screenshot 10 Payement Page



Screenshot 11 Order Status Page



Screenshot 12 Post Review Page



Screenshot 13 Order Delivered Page

CONCLUSION AND FUTURE SCOPE

Conclusion

Campus Recruitment System is a platform that provide interface between students and company. System provides the list of suitable companies to the students, according to their educational qualification, experience and their preferences. Project can be updated in near future as and when requirement for the same arises, as it is very flexible in terms of expansion. The System streamlines the process of hiring candidates from educational institutions. It allows students to create profiles, upload academic records, and apply for job opportunities. Similarly, companies can access student profiles, review resumes, and conduct recruitment drives efficiently. Overall, the system enhances the interaction between students and recruiters, making the recruitment process more organized and effective.

Future Scope

- Enhanced Data Analytics: Implementing advanced analytics can provide insights into recruitment trends, candidate preferences, and hiring success rates, enabling better decision-making.
- Integration with AI and Machine Learning: Integrating AI and machine learning algorithms can automate candidate screening, analyse resumes, and predict candidate suitability for specific roles.
- Expansion of Features: Continuously adding features such as chatbots for candidate queries, interview scheduling tools, and virtual job fairs can enrich the user experience and attract more stakeholders.
- Partnerships with Industry: Collaborating with industry partners can facilitate internships, mentorship programs, and skill development initiatives, enriching the overall recruitment ecosystem.

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