



INSTITUTE FOR ADVANCED COMPUTING
AND
SOFTWARE DEVELOPMENT AKURDI

“RationEase”- Booking With Ease!

PG-DAC MARCH 2023

Submitted By:

Group No: 34

**Roll No.
233195
233065**

**Name:
Rushikesh Suryawanshi
Pranav Mankar**

Mrs. Gauri Kadam
Project Guide

Mr. Rohit Puranik
Centre Coordinator

ABSTRACT

The report presents the comprehensive development and implementation of RationEase, an innovative web-based solution poised to modernize the realm of ration distribution management. The principal aim of this initiative is to optimize and streamline the processes associated with ration distribution through the utilization of a sophisticated web platform. RationEase represents a significant leap towards the integration of technological advancements into the realm of essential resource allocation.

RationEase reimagines traditional ration distribution paradigms by capitalizing on the capabilities of a web-based framework. By embracing the principles of online management and data storage, the system seeks to provide a myriad of advantages for both administrators overseeing the distribution process and citizens benefiting from it. The platform introduces an intuitive avenue for individuals to stay informed and efficiently manage ration distribution activities from any geographic location, facilitated seamlessly through a user-centric website interface.

In summation, the RationEase project stands as a testament to the confluence of technology and essential resource management. By redefining the contours of ration distribution practices through an easily accessible online portal, the project espouses principles of operational efficiency, transparency, and user-centric design. Its potential to transcend geographical limitations positions it as a transformative solution with the capacity to reshape ration distribution practices on a global scale.

ACKNOWLEDGEMENT

I would like to take this moment to express my gratitude to the divine Almighty for bestowing us with His blessings, guiding our efforts to a successful fruition. I extend my sincere and profound thanks to our esteemed mentor, **Mrs. Gauri Kadam Mam**, for her invaluable guidance and counsel during the critical junctures of this endeavour, steering us on the right path.

I am deeply appreciative of the unwavering support and guidance provided by our respected Centre Co-Ordinator, **Mr. Rohit Puranik**, who graciously permitted us to utilize the available facilities for the realization of our project. I extend my heartfelt appreciation to all the other esteemed faculty members who have contributed to our academic journey.

In this moment of reflection, I would be remiss not to acknowledge the unceasing encouragement and support I have received from my friends and family. Their unwavering belief in my capabilities has been a constant source of motivation throughout the course of this endeavour.

As we stand on the threshold of accomplishment, I recognize that this journey was made possible through the collective efforts of many individuals. Their contributions, whether large or small, have played an integral role in shaping this project. For that, I am sincerely thankful.

Thank you, one and all, for being an essential part of this journey.

Rushikesh Suryawanshi [233195]

Pranav Mankar [233065]

INDEX

Table of Contents

ABSTRACT.....	1
ACKNOWLEDGEMENT.....	2
INTRODUCTIONS.....	6
LIST OF FEATURES	6
1.1PROJECT OBJECTIVE.....	7
1.2PROJECTOVERVIEW.....	8
1.3PROJECTSCOPE	9
1.4 STUDY OF THE SYSTEM	10
SYSTEM ANALYSIS.....	10
2.1 EXISTING SYSTEM	10
2.2 PROPOSED SYSTEM	10
2.3 SYSTEM REQUIREMENT SPECIFICATION.....	12
2.3.1 GENERAL DESCRIPTION.....	12
2.3.2 SYSTEM OBJECTIVES	12
2.3.3 SYSTEM REQUIREMENTS.....	12
SYSTEM DESIGN.....	15
3.1 INPUT AND OUTPUT DESIGN	15
3.1.1 INPUT DESIGN	15
3.1.2 OUTPUT DESIGN	15
DATABASE DESIGN	16
3.2 DATABASE.....	16
3.3 SYSTEM TOOLS	16
3.3.1 FRONT END.....	16
3.3.2 BACKEND	16
0 LEVEL DFD.....	17
1 LEVEL DFD FOR CUSTOMER.....	17
1 LEVEL DFD FOR VENDOR.....	18
E-R DIAGRAM.....	19
CLASS DIAGRAM.....	20
TABLE STRUCTURE	21
PROJECT SCREENSHOTS.....	29
CONCLUSIONS	30

LIST OF FIGURES

FIGURE 1: 0 LEVEL DFD -----	17
FIGURE 2: 1 LEVEL DFD FOR CUSTOMER-----	17
FIGURE 3: 1 LEVEL DFD FOR VENDOR -----	18
FIGURE 4: E-R DIAGRAM-----	19
FIGURE 5: CLASS DIAGRAM -----	20
FIGURE 6: TABLE STRUCTURE-----	21
FIGURE 7: PROJECT SCREENSHOTS -----	29

INTRODUCTION

The "rationEase" project report outlines the conceptualization, development, and implementation of a dynamic web application aimed at simplifying the process of slot booking and communication between customers and vendors. In an increasingly digital landscape, the demand for streamlined interactions between service providers and consumers has grown substantially. The rationEase project emerged as a response to this need, striving to create a user-friendly platform that enhances convenience, efficiency, and transparency for both customers and vendors.

This report offers an in-depth exploration of the rationEase project's journey, from its initial ideation to the comprehensive application that has been realized. The report will delve into the project's objectives, its scope, the technologies employed, the methodologies utilized for development, and the key functional and non-functional features that constitute the application's core.

By detailing the project's progression, challenges encountered, and solutions devised, this report aims to provide a holistic view of the rationEase application's development process. Additionally, it underscores the practical knowledge gained in terms of software development, user experience design, security considerations, and adherence to best practices.

As we delve into the various sections of this report, we will uncover the meticulous planning, creative design, and rigorous testing that have culminated in the creation of an application with the potential to revolutionize the way customers and vendors interact in various industries. Through this report, we invite readers to journey alongside us in understanding the inception, evolution, and realization of the rationEase project.

1.1 PROJECT OBJECTIVE

The primary objective of the rationEase project is to develop a robust and user-friendly web application that facilitates efficient slot booking and communication between customers and vendors. The project aims to address the challenges faced by both customers and vendors in the process of scheduling appointments or services, ensuring a seamless and transparent experience for all parties involved.

Key Objectives:

1. Streamlined Slot Booking: The project aims to create an intuitive platform that allows customers to effortlessly view available slots, select preferred timings, and book appointments or services according to their convenience.

2. Vendor Visibility: The application will provide vendors with a comprehensive dashboard where they can easily access and manage the bookings made by customers, thereby enhancing their operational efficiency.

3. Enhanced Communication: By sending automated email notifications to customers upon successful booking and to vendors upon new bookings, the project seeks to establish a clear and timely communication channel between the two parties.

4. User-Friendly Interface: The project intends to create a user-friendly interface that ensures a positive user experience for both customers and vendors, promoting ease of navigation, interaction, and utilization.

5. Security and Privacy: Ensuring the security of user data and privacy is a core objective. The application will implement robust security measures to safeguard user information and comply with data protection regulations.

6. Scalability and Performance: The project aims to design an application architecture that can handle a growing number of users and bookings without compromising on performance. Scalability will be a key consideration throughout development.

7. Comprehensive Testing: Rigorous testing practices will be employed to ensure the functionality, usability, and stability of the application. This includes unit testing, integration testing, and user acceptance testing.

8. Future Expansion: The project aims to build a foundation that allows for future enhancements, such as adding features like payment gateways, additional user profiles, and expanded reporting capabilities.

Overall, the rationEase project seeks to provide a comprehensive solution that transforms the way customers and vendors interact and schedule appointments. By meeting these objectives, the project aims to contribute to improved efficiency, convenience, and user satisfaction for all stakeholders involved.

1.2 PROJECT OVERVIEW

The rationEase project centers around the development of a dynamic web application designed to streamline the process of slot booking and communication between customers and vendors. In a world where convenience and efficient interactions are paramount, rationEase emerges as a digital solution

that bridges the gap between service providers and consumers. By offering a user-centric platform, the project aims to enhance convenience, transparency, and operational effectiveness for both customers and vendors.

The project's primary goal is to create an intuitive and efficient system that revolutionizes the way customers and vendors schedule appointments and services. Through meticulous planning, innovative design, and robust development, rationEase seeks to achieve the following:

1. **Simplified Slot Booking:** Enable customers to effortlessly view available slots, select preferred timings, and book appointments or services.
2. **Vendor Management:** Empower vendors with a dedicated dashboard for managing bookings, thereby optimizing their workflow.
3. **Enhanced Communication:** Establish seamless communication channels through automated email notifications, keeping both customers and vendors informed.
4. **User-Centric Design:** Craft a user interface that ensures a smooth, enjoyable experience, promoting ease of use and efficient interactions.
5. **Security and Privacy:** Implement stringent security measures to protect user data and uphold privacy standards.
6. **Scalability and Performance:** Design an architecture capable of accommodating increasing user demand without compromising performance.
7. **Comprehensive Testing:** Employ thorough testing methodologies to ensure the application's functionality, reliability, and user satisfaction.
8. **Future-Ready Foundation:** Build a platform that can be expanded upon, accommodating potential future features and enhancements.

The rationEase application will boast key features designed to fulfil the project's objectives, including:

- User authentication and differentiated access for customers and vendors.
- Real-time slot availability display based on predefined schedules.
- Seamless booking process with confirmation emails and cancellation options.
- Vendor dashboard for managing bookings, status updates, and customer details.
- Email notifications for customers and vendors to stay informed about booking activities.
- Intuitive user profiles for easy updates of personal information.

1.3 PROJECT SCOPE

RationEase is positioned to deliver a range of paramount attributes, collectively defining its comprehensive scope. With a resolute focus on user-centricity, the application endeavours to furnish a user-friendly interface, ensuring a frictionless experience for all members of the society, regardless of their technical proficiency. This commitment to accessibility extends to cross-browser compatibility, ensuring a consistent user experience across diverse web browsers.

Moreover, RationEase underscores its commitment to inclusivity by offering multilingual support, catering to a linguistically diverse user base and fostering an environment of global engagement. This extends to society members on the move, as the application's design accounts for global accessibility, accommodating travellers and remote users alike.

In addressing the exigencies of modern society management, RationEase fosters enhanced visibility and proficient task management. It ushers in an era of digital efficiency, facilitating the transition from labour-intensive manual operations to a streamlined online ecosystem, thereby amplifying operational efficiency and accuracy.

Central to Ration Ease's design philosophy are principles of feasibility, flexibility, and adaptability. This ensures that the application resonates with evolving needs and technological advancements, all while upholding a professional standard that aligns with the demands of modern society management.

Furthermore, RationEase pledges uninterrupted availability, minimizing server-related downtimes and ensuring constant access for society members, fostering a seamless experience that aligns with their dynamic schedules and requirements.

In summary, the scope of RationEase encompasses a meticulously designed array of attributes, all intricately woven together to construct a professional and accessible platform that caters to the diverse needs of modern society management.

SYSTEM ANALYSIS

System analysis is a critical phase in the development process of RationEase, involving the meticulous gathering, interpretation, and diagnosis of information to drive system enhancements. This problem-solving endeavour entails seamless communication between system users and developers, ensuring the project's alignment with practical needs.

2.1 EXISTING SYSTEM

Before the advent of rationEase, the prevailing approach to slot booking and communication within society management systems was predominantly manual and paper-based. Society members were often required to physically visit offices or communicate via telephone to book slots for various services, such as facility usage or appointments. This manual process was marred by inefficiencies, inconsistencies, and a lack of real-time visibility.

In the absence of a digital solution, the existing system suffered from several limitations. The reliance on manual records led to errors in data entry, miscommunication, and difficulty in tracking and managing multiple bookings simultaneously. Furthermore, the lack of an integrated platform hindered effective coordination between customers and vendors, resulting in disjointed interactions and potential scheduling conflicts.

Moreover, the absence of automated notifications left both customers and vendors in the dark about booking confirmations, updates, or cancellations, leading to frustration and mismanaged expectations. The lack of cross-device accessibility and global availability further restricted the system's usability, particularly for remote members or individuals on the move.

In essence, the existing system's inefficiencies and limitations underscored the critical need for a transformative solution like rationEase. The project recognized the need for an intelligent, automated, and user-friendly platform that could transcend the shortcomings of the existing manual process, fostering efficiency, transparency, and enhanced communication among society members.

2.2 PROPOSED SYSTEM

The proposed system, rationEase, presents a comprehensive and innovative solution to address the limitations and inefficiencies of the existing manual slot booking and communication processes within society management systems. By leveraging advanced technology and modern design principles, rationEase aims to revolutionize the way society members interact, schedule appointments, and communicate with vendors.

Key Features of the Proposed System:

1. Digital Slot Booking: rationEase introduces a user-friendly digital interface that allows society members to view available slots and seamlessly book appointments or services of their choice. This feature eradicates the need for physical visits or telephonic interactions.

2. Real-time Availability: The proposed system displays real-time availability of slots, ensuring accurate and up-to-date information for both customers and vendors. This feature minimizes scheduling conflicts and enhances user satisfaction.

3. Automated Notifications: rationEase incorporates automated email notifications to notify customers about successful slot bookings and to alert vendors about new bookings. This streamlined communication eliminates ambiguity and keeps all stakeholders well-informed.

4. Vendor Dashboard: The system offers a dedicated dashboard for vendors to monitor and manage their bookings effectively. Vendors can update booking statuses, view customer details, and enhance their operational efficiency.

5. Global Accessibility: The proposed system embraces the modern need for global access. It ensures that society members can interact with the application from any location and across various devices, catering to both travellers and remote members.

6. Multilingual Support: In line with the diverse linguistic landscape, rationEase provides multilingual support, enabling users from different language backgrounds to navigate the application seamlessly.

7. Enhanced User Profiles: The system offers comprehensive user profiles, enabling members to easily manage their personal information and preferences, thereby enhancing the user experience.

8. Security and Data Privacy: Security features are integrated to safeguard user data and ensure compliance with data protection regulations. This instils confidence among users regarding the confidentiality of their information.

9. Scalability and Future-Readiness: rationEase is designed with scalability in mind, capable of accommodating a growing user base and future feature enhancements.

10. Efficiency and Accuracy: By eliminating manual processes, rationEase significantly reduces the risk of errors associated with data entry and communication, thus enhancing overall efficiency and accuracy.

The proposed rationEase system embodies a transformative approach that addresses the drawbacks of the existing manual system. Through an amalgamation of advanced technology, user-centric design, and enhanced functionality, rationEase seeks to establish itself as a pioneering solution that optimizes communication, efficiency, and convenience within society management systems.

2.3 SYSTEM REQUIREMENT SPECIFICATION

2.3.1 GENERAL DESCRIPTION

Product Description:

RationEase is a comprehensive web-based system designed to revolutionize the management of ration distribution within a society. The system provides a robust platform for society members to engage seamlessly, facilitating efficient and transparent ration distribution processes. RationEase addresses conflicts among members by automating key functions and delivering real-time updates.

The system's core features include:

- Member Login and Updates: RationEase empowers society members to log in using their unique accounts, granting them access to up-to-date information and notifications regarding ration distribution activities.
- Automated Maintenance Bill Calculation: RationEase features an automated mechanism for calculating monthly maintenance bills. This functionality ensures accuracy and streamlines the billing process for both society members and administrators.
- Bill Status Visibility: Society members can conveniently view the status of their monthly maintenance bills directly from their accounts. This real-time insight enhances transparency and helps members stay informed.

RationEase embodies a user-centric approach, aiming to optimize ration distribution management and foster harmonious interactions among society members. The system's automation capabilities contribute to minimizing conflicts, enhancing efficiency, and promoting a more transparent and accountable process.

2.3.2 SYSTEM OBJECTIVES

- To establish a comprehensive web platform for efficient ration distribution management within an existing society.

2.3.3 SYSTEM REQUIREMENTS

2.3.3.1 NON-FUNCTIONAL REQUIREMENTS

i. EFFICIENCY REQUIREMENT

- The system should ensure efficient access for the secretary, flat owner, and security guard when interacting with the platform.

ii. RELIABILITY REQUIREMENT

- RationEase must provide a robust and dependable environment for the secretary and flat owners. All data interactions should be securely stored on the server to ensure data integrity.

iii. USABILITY REQUIREMENT

- The Web application should offer a user-friendly interface, prioritizing ease of use and a seamless experience for all users interacting with the system.

iv. IMPLEMENTATION REQUIREMENT

The implementation of the RationEase system will be carried out utilizing the following technologies:

- Front-end Development: The system's user interface will be developed using React, ensuring a dynamic and user-friendly interaction experience.
- Back-end Development: The back-end of the system will be powered by Spring Boot, enabling efficient handling of user interactions, business logic, and system operations.
- Database Connectivity: MySQL will serve as the database management system, ensuring secure and organized storage of data.
- Responsive Web Design: The website will be designed with responsive principles, guaranteeing compatibility across a diverse range of screen sizes and devices.

v. DELIVERY REQUIREMENT

The completion and delivery of the entire RationEase system are anticipated within a four-month timeframe. During this period, regular evaluations will be conducted on a weekly basis under the guidance of the project supervisor. This iterative evaluation process aims to ensure the steady progress and quality of the project, ultimately leading to the successful delivery of the system.

1. User Authentication and Authorization:

- Customers and vendors can create accounts and log in.
- Differentiated access: Customers can only book slots, while vendors can view booked slots.
- Secure authentication mechanisms to ensure data privacy.

2. Customer Functions:

- View available slots for booking.
- Select preferred slot timings and dates.
- Provide necessary information for booking (name, contact details, etc.).
- Receive a confirmation email upon successful slot booking.
- Cancel a booked slot within a certain time frame.

3. Vendor Functions:

- Access a dashboard displaying all booked slots.
- See customer details associated with each booked slot.
- Update the status of booked slots (accepted, rejected, pending).
- Receive email notifications when a new slot is booked.

4. Slot Management:

- Display available slots based on predefined time slots and dates.
- Prevent double booking of the same slot.
- Allow vendors to set maximum booking limits per slot.

5. Email Notifications:

- Send customers confirmation emails upon successful slot booking.
- Notify vendors when a new slot is booked, including customer details.
- Provide options to unsubscribe from email notifications.

6. Booking Confirmation:

- Generate a unique booking ID for each successful slot booking.

- Display booking details including date, time, and vendor information.
7. Slot Cancellation:
- Allow customers to cancel their booked slots within a defined cancellation period.
 - Notify vendors when a customer cancels a booked slot.
8. User Profiles:
- Allow users to update their profile information, including contact details.
9. Availability Calendar:
- Show a visual representation of available slots in a calendar view.
 - Indicate booked and available slots clearly.
10. Data Security and Privacy:
- Implement data encryption to protect user information.
 - Comply with relevant data protection regulations (e.g., GDPR).
11. User-Friendly Interface:
- Intuitive design for ease of use by both customers and vendors.
 - Mobile responsiveness for accessibility across devices.
12. Error Handling and Logging:
- Proper error messages and feedback for users during unsuccessful actions.
 - Comprehensive logging of system activities for troubleshooting and auditing.
13. Scalability:
- Design the application to handle a growing number of users, vendors, and bookings.
14. Performance:
- Ensure quick loading times and responsiveness for a smooth user experience.
15. Testing:
- Rigorous testing, including unit, integration, and user acceptance testing, to ensure application functionality and stability.

SYSTEM DESIGN

System design is the solution for the creation of a new system. This phase focuses on the detailed implementation of the feasible system. Its emphasis on translating design. Specifications to performance specification. System design has two phases of development.

- 1. Logical Design**
- 2. Physical Design**

During the logical design phase, the analyst describes inputs (sources), outputs(destinations), databases (data sores) and procedures (data flows) all in a format that meets the user requirements. The analyst also specifies the needs of the user at a level that virtually determines the information flow in and out of the system and the data resources. Here the logical design is done through data flow diagrams and database design. The physical design is followed by physical design or coding. Physical design produces the working system by defining the design specifications, which specify exactly what the candidate system must do. The programmers write the necessary programs that accept input from the user, perform necessary processing on accepted data and produce the required report on a hard copy or display it on the screen.

3.1 INPUT AND OUTPUT DESIGN

3.1.1 INPUT DESIGN:

Input design is the link that ties the information system into the world of its users. The input design involves determining the inputs, validating the data, minimizing the data entry and provides a multi-user facility. Inaccurate inputs are the most common cause of errors in data processing. Errors entered by the data entry operators can be controlled by input design.

The user-originated inputs are converted to a computer-based format in the input design. Input data are collected and organized into groups of similar data. Once identified, the appropriate input media are selected for processing. All the input data are validated and if any data violates any conditions, the user is warned by a message. If the data satisfies all the conditions, it is transferred to the appropriate tables in the database. In this project the student details are to be entered at the time of registration.

A page is designed for this purpose which is user friendly and easy to use. The design is done such that users get appropriate messages when exceptions occur.

3.1.2 OUTPUT DESIGN:

Computer output is the most important and direct source of information to the user. Output design is a very important phase since the output needs to be in an efficient manner. Efficient and intelligible output design improves the system relationship with the user and helps in decision making. Allowing the user to view the sample screen is important because the user is the ultimate judge of the quality of output. The output module of this system is the selected notifications.

DATABASE DESIGN

3.2 DATABASE

Databases are the storehouses of data used in the software systems. The data is stored in tables inside the database. Several tables are created for the manipulation of the data for the system. Two essential settings for a database are Primary key - the field that is unique for all the record occurrences foreign key - the field used to set relation between tables

Normalization is a technique to avoid redundancy in the tables.

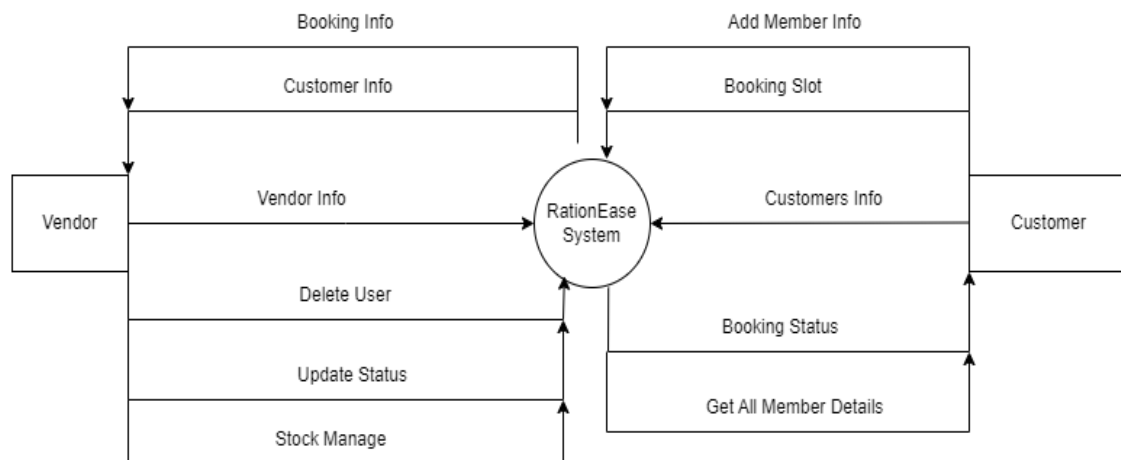
3.3 SYSTEM TOOLS The various system tools that have been used in developing both the front end and the back end of the project are being discussed in this chapter.

3.3.1 FRONT END: React is a library which is developed by Facebook are utilized to implement the frontend. React (also known as React.js or ReactJS) is a free and open-source front-end JavaScript library for building user interfaces or UI components. It is maintained by Facebook and a community of individual developers and companies. React can be used as a base in the development of single page or mobile applications. However, React is only concerned with state management and rendering that state to the DOM, so creating React applications usually requires the use of additional libraries for routing, as well as certain client-side functionality.

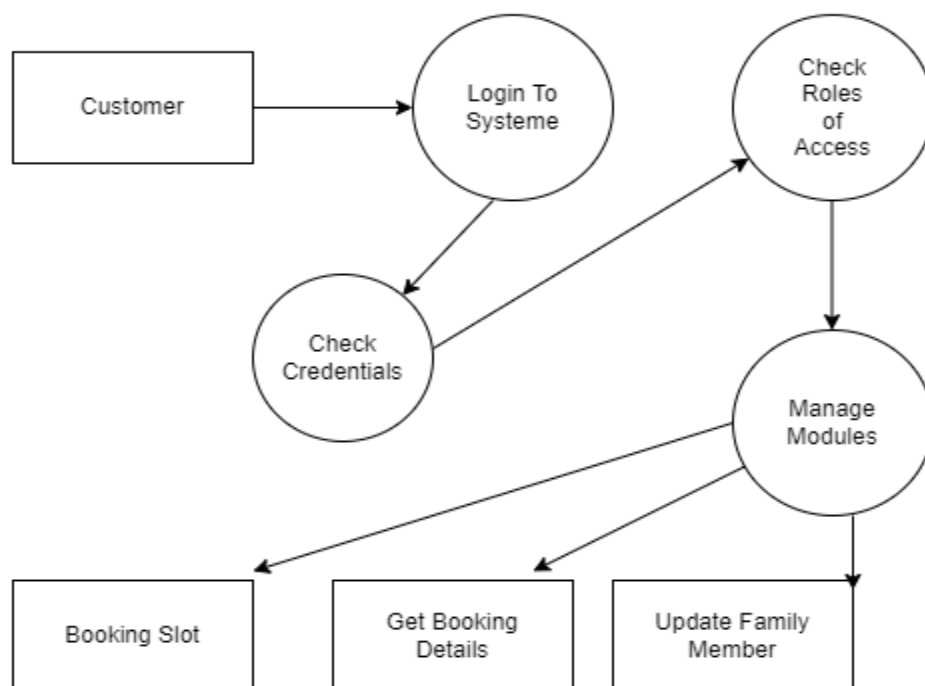
3.3.2 BACKEND: The back end is implemented using MySQL which is used to design databases. MySQL: MySQL is the world's second most widely used open-source relational database management system (RDBMS). The SQL phrase stands for Structured Query Language. Spring-Boot This is used to connect MYSQL and fetch data from database and store the data in database. The Spring Framework is an application framework and inversion of control container for the Java platform. The framework's core features can be used by any Java application, but there are extensions for building web applications on top of the Java EE (Enterprise Edition) platform. Although the framework does not impose any specific programming model, it has become popular in the Java community as an addition to the Enterprise JavaBeans (EJB) model. The Spring Framework is Open-source Framework.

This is used to connect MYSQL and fetch data from database and store the data in database. The Spring Framework is an application framework and inversion of control container for the Java platform. The framework's core features can be used by any Java application, but there are extensions for building web applications on top of the Java EE (Enterprise Edition) platform. Although the framework does not impose any specific programming model, it has become popular in the Java community as an addition to the Enterprise JavaBeans (EJB) model. The Spring Framework is Open-source Framework.

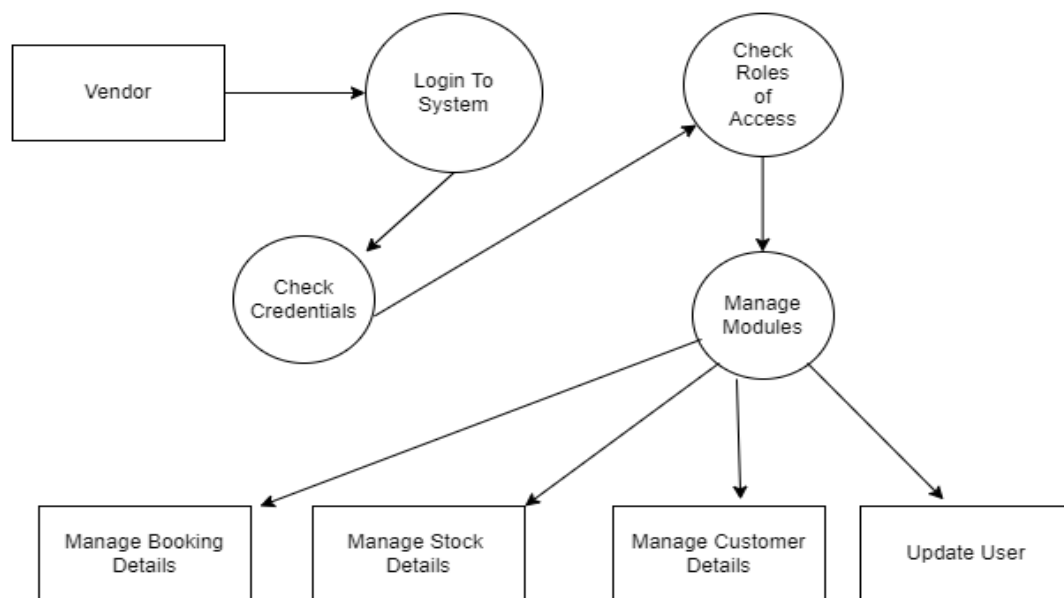
0 - level DF



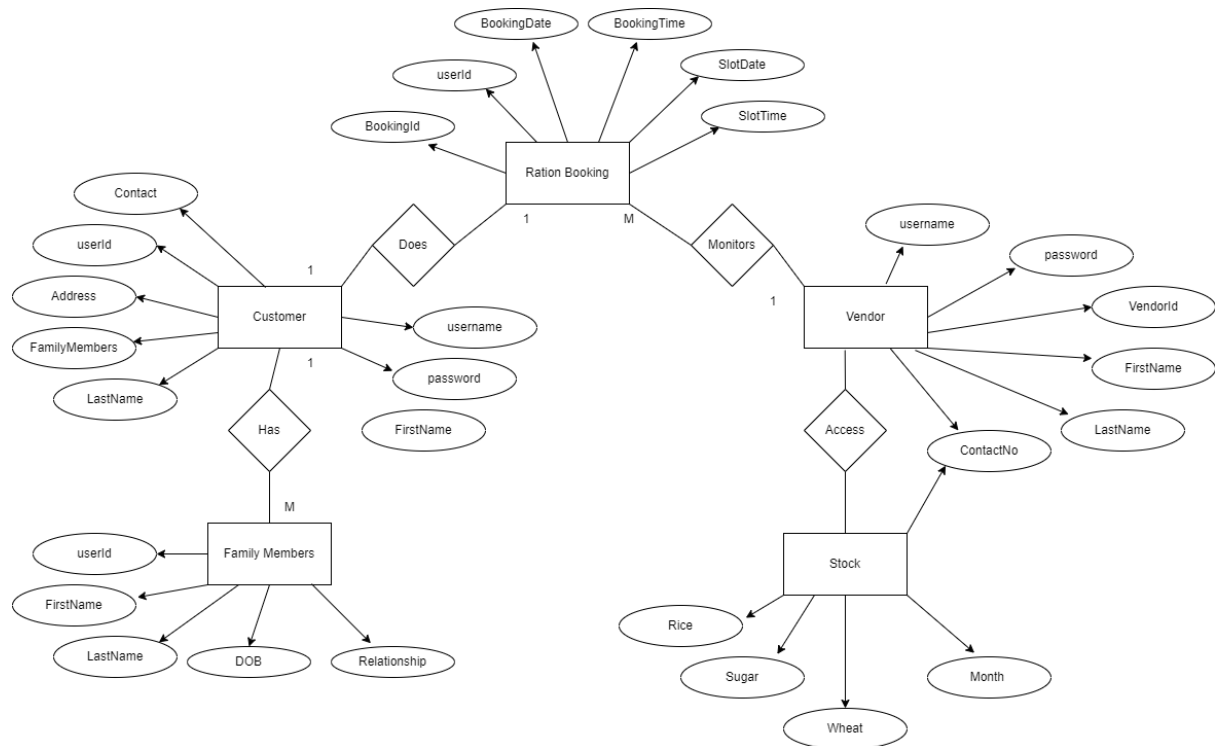
1 - Level DFD for customer(user)



1 - Level DFD for vendor



ER Diagram



Class Diagram

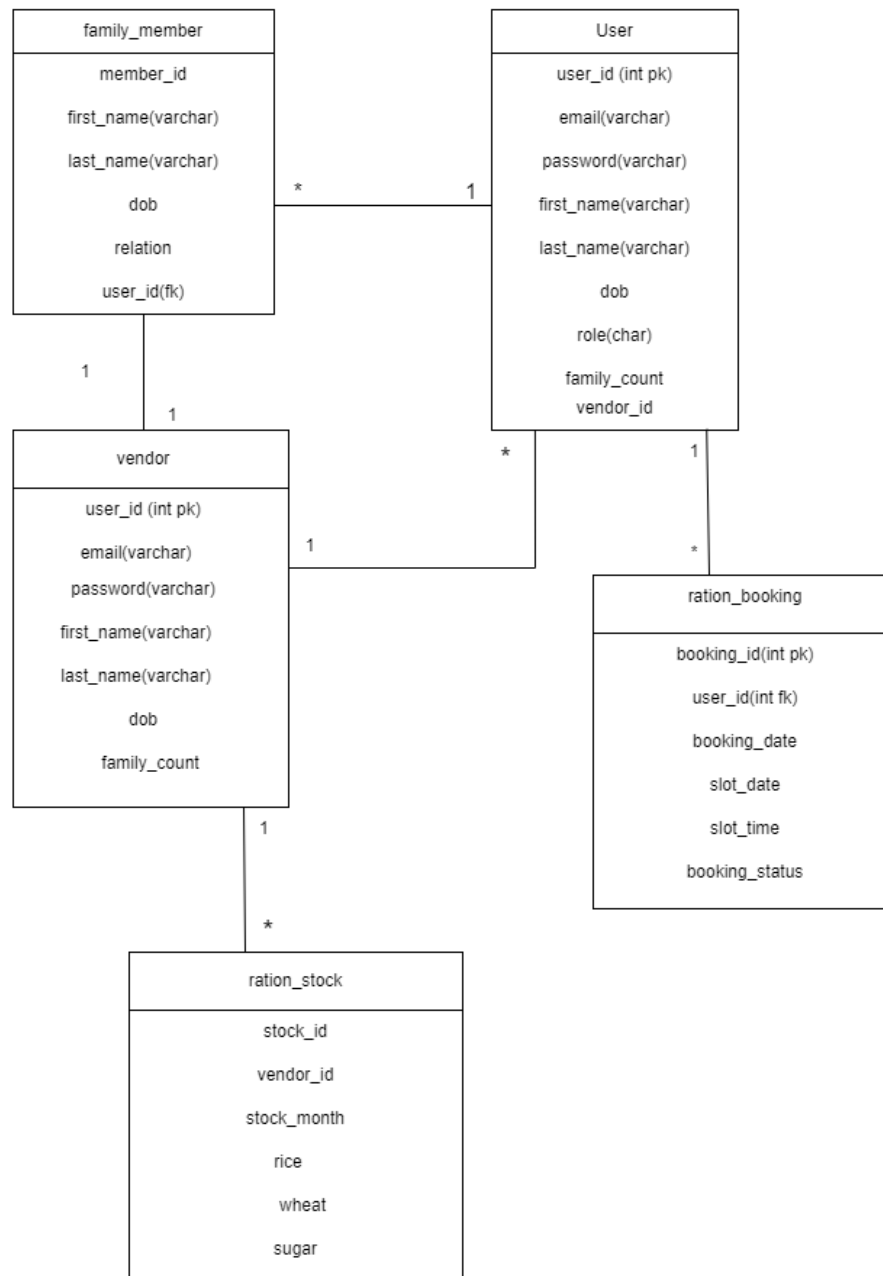


Table Structure

Booking Table

Field	Type	Null	Key	Default	Extra
booking_id	bigint	NO	PRI	NULL	auto_increment
booking_date	date	YES		NULL	
slot	varchar(255)	YES		NULL	
slot_date	date	YES		NULL	
baying_status	varchar(255)	YES		NULL	
user_id	bigint	NO	MUL	NULL	

Family_members Table

Field	Type	Null	Key	Default	Extra
ration_id	bigint	NO	PRI	NULL	auto_increment
dob	date	YES		NULL	
first_name	varchar(20)	YES		NULL	
last_name	varchar(20)	YES		NULL	
relation	varchar(10)	YES		NULL	
user_id	bigint	NO	MUL	NULL	

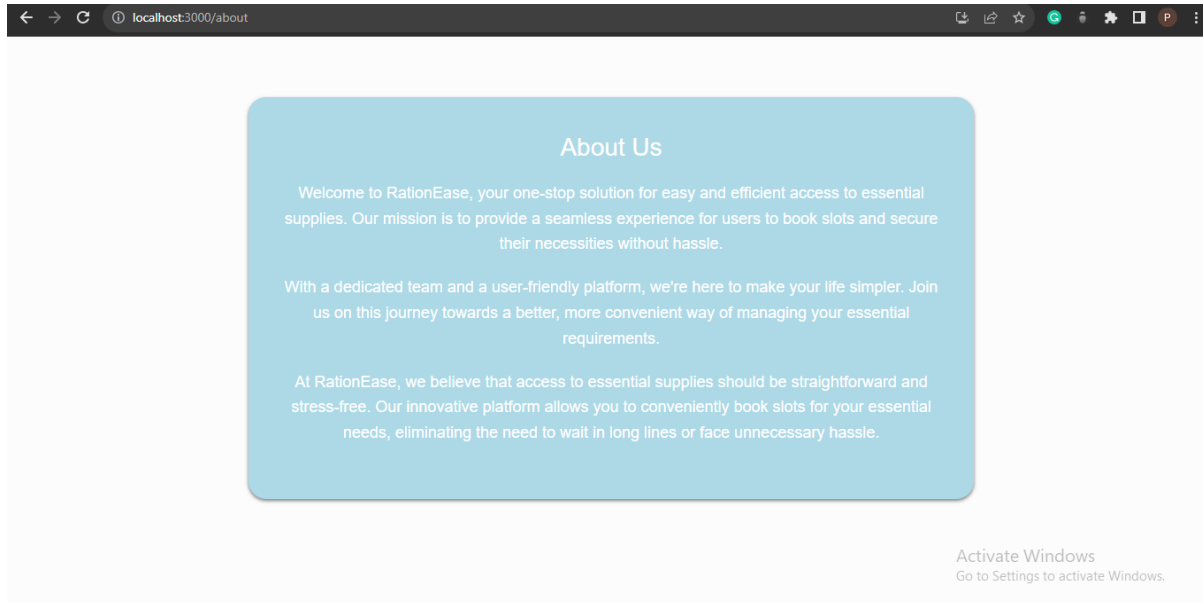
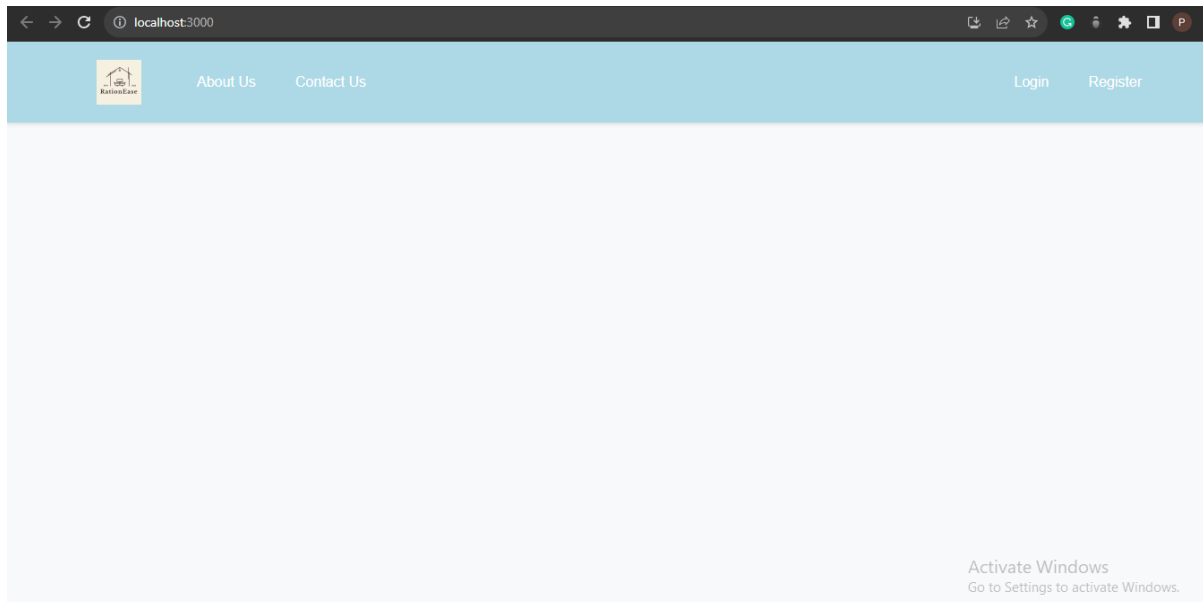
Secure_users Table

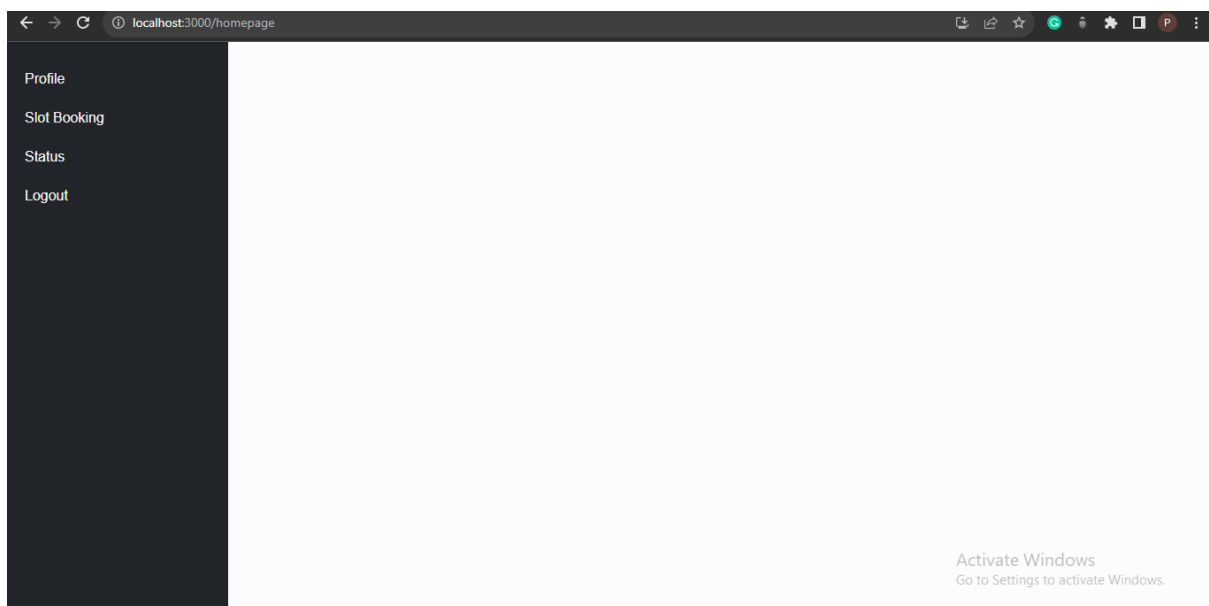
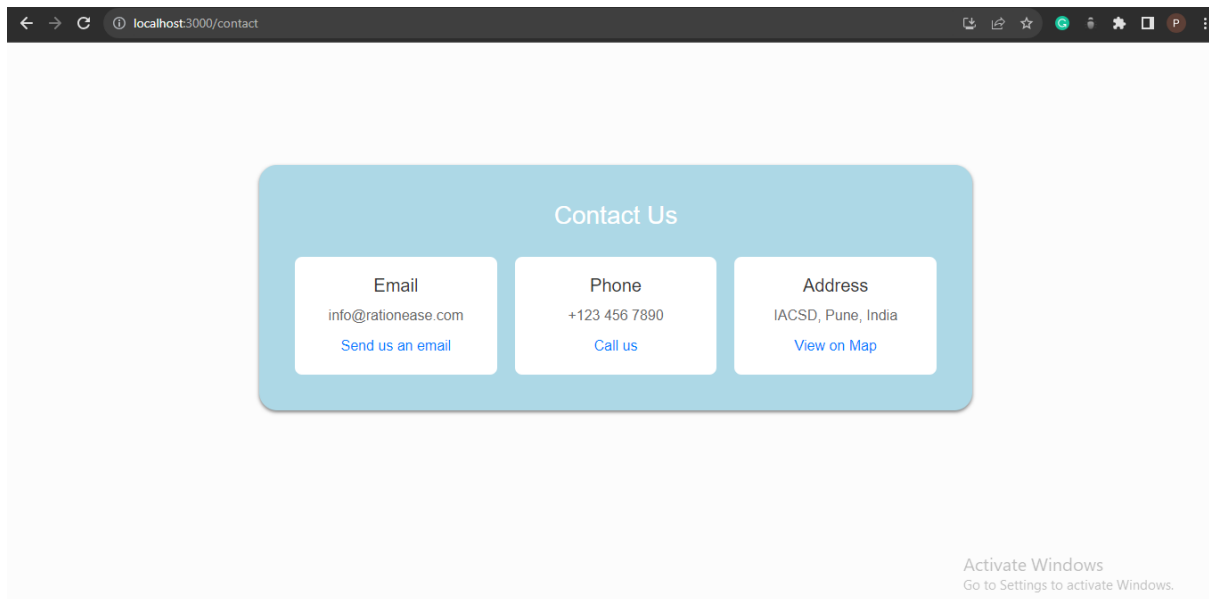
Field	Type	Null	Key	Default	Extra
ration_id	bigint	NO	PRI	NULL	auto_increment
dob	date	YES		NULL	
email	varchar(30)	YES	UNI	NULL	
first_name	varchar(20)	YES		NULL	
last_name	varchar(20)	YES		NULL	
no_of_family_member	bigint	NO		NULL	
password	varchar(300)	NO		NULL	
role	varchar(30)	YES		NULL	

stock

Field	Type	Null	Key	Default	Extra
sugar	int	YES		NULL	
wheat	int	YES		NULL	
rice	int	YES		NULL	
month	varchar(20)	YES		NULL	

PROJECT SCREENSHOTS





[Profile](#)[Slot Booking](#)[Status](#)[Logout](#)

Book Slot

Booking ID:
12345

User ID:

Select Date:

August 2023						
MON	TUE	WED	THU	FRI	SAT	SUN
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3

Select Slot:

Activate Windows
Go to Settings to activate Windows.

[Profile](#)[Slot Booking](#)[Status](#)[Logout](#)

Booking ID:
12345

User ID:

Select Date:

August 2023						
MON	TUE	WED	THU	FRI	SAT	SUN
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3

Select Slot:

Activate Windows
Go to Settings to activate Windows.

The screenshot shows a web browser window at `localhost:3000/slot-booking`. On the left is a dark sidebar with links: Profile, Slot Booking, Status, and Logout. The main content area has the following fields:

- Booking ID:** 12345
- User ID:** A text input field containing "BF1234".
- Select Date:** A calendar for August 2023. The date 30 is highlighted in green.
- Select Slot:** A dropdown menu with the following options:
 - Select a slot
 - 10:00AM - 12:30PM
 - 2:00PM - 4:00PM
 - 4:00PM - 5:00PM

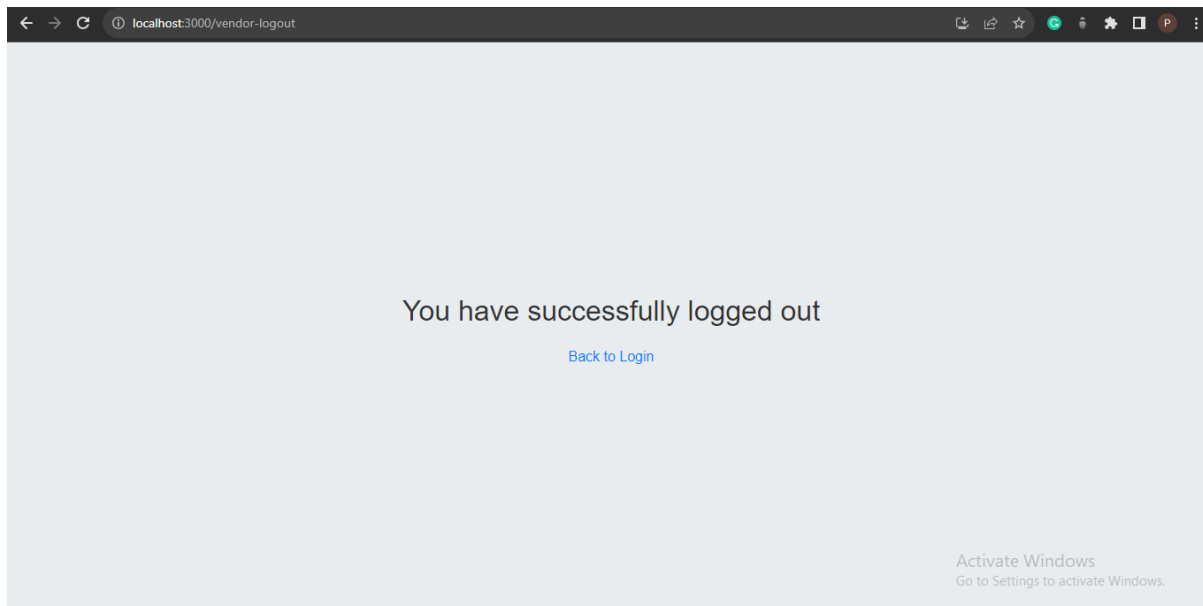
An "Activate Windows" watermark is visible in the bottom right corner.

The screenshot shows a web browser window at `localhost:3000/status`. The sidebar is the same as in the previous screenshot, with "Status" now selected. The main content area displays:

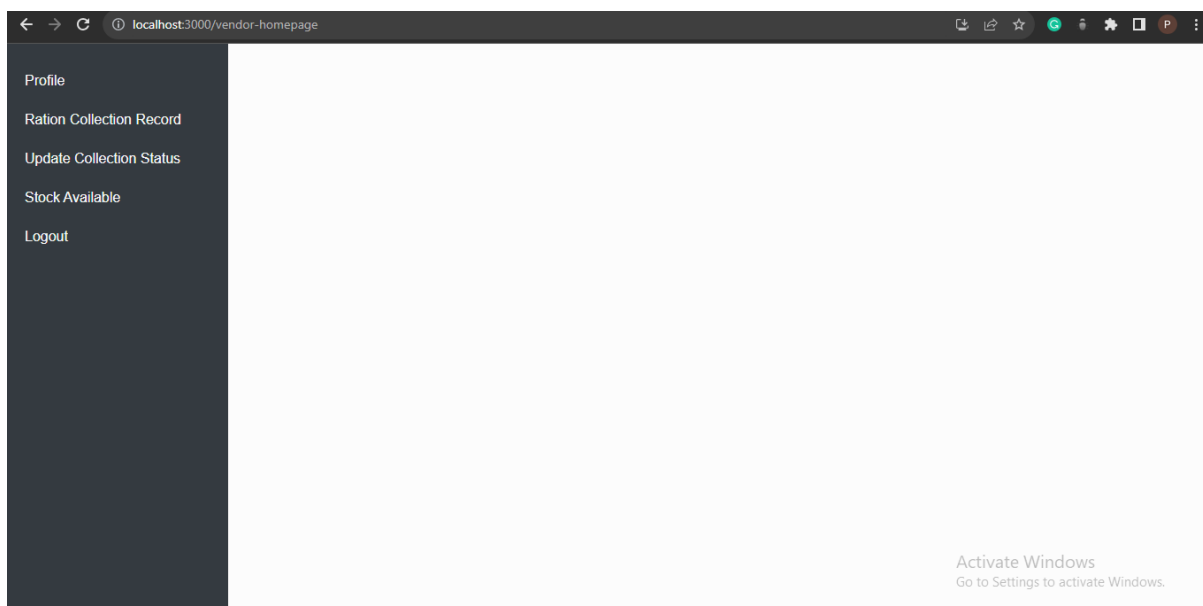
Slot Booking Status

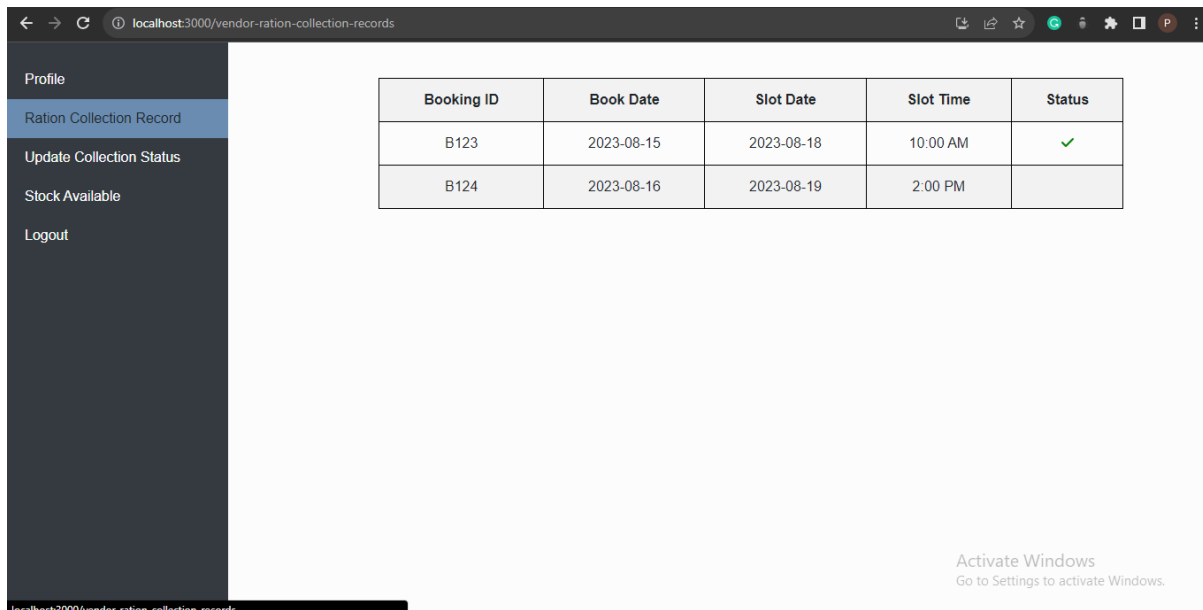
Loading...

An "Activate Windows" watermark is visible in the bottom right corner.



Vendor Screenshots ->

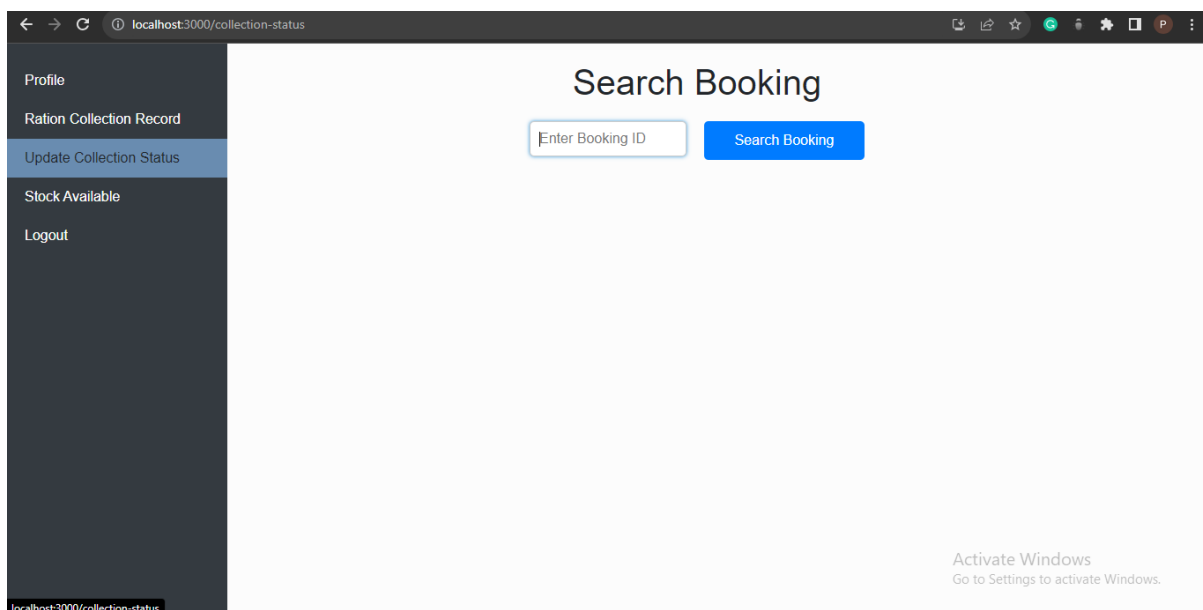




The screenshot shows a web browser window with the address bar displaying 'localhost:3000/vendor-ration-collection-records'. The page features a dark sidebar on the left with the following menu items: Profile, Ration Collection Record (highlighted), Update Collection Status, Stock Available, and Logout. The main content area displays a table with the following data:

Booking ID	Book Date	Slot Date	Slot Time	Status
B123	2023-08-15	2023-08-18	10:00 AM	✓
B124	2023-08-16	2023-08-19	2:00 PM	

An 'Activate Windows' watermark is visible in the bottom right corner of the page.



The screenshot shows a web browser window with the address bar displaying 'localhost:3000/collection-status'. The page features a dark sidebar on the left with the following menu items: Profile, Ration Collection Record, Update Collection Status (highlighted), Stock Available, and Logout. The main content area displays a 'Search Booking' section with a text input field labeled 'Enter Booking ID' and a blue 'Search Booking' button.

An 'Activate Windows' watermark is visible in the bottom right corner of the page.

The screenshot shows a web browser window with the address bar displaying 'localhost:3000/collection-status'. The application has a dark sidebar on the left with the following menu items: Profile, Ration Collection Record, Update Collection Status (highlighted in blue), Stock Available, and Logout. The main content area is titled 'Search Booking' and features a search input field containing the number '123' and a blue 'Search Booking' button. Below the search bar is a table with the following data:

Booking ID	Booking Date	Slot Date	Slot Time	Status	Update Status
123	2023-08-15	2023-08-20	10:00 AM	Not Collected	Update

At the bottom right of the main content area, there is a message: 'Activate Windows Go to Settings to activate Windows.' The Windows taskbar is visible at the bottom of the screen, showing the search bar, taskbar icons, and system tray with a temperature of 28°C and the date 30-08-2023.

The screenshot shows a web browser window with the address bar displaying 'localhost:3000/vendor-stock-available'. The application has a dark sidebar on the left with the following menu items: Profile, Ration Collection Record, Update Collection Status, Stock Available (highlighted in blue), and Logout. The main content area displays a table with the following data:

Sugar (in KG)	Rice (in KG)	Wheat (in KG)	Month
100	200	150	January
120	220	160	February
110	210	170	March

At the bottom right of the main content area, there is a message: 'Activate Windows Go to Settings to activate Windows.' The Windows taskbar is visible at the bottom of the screen, showing the search bar, taskbar icons, and system tray with a temperature of 28°C and the date 30-08-2023.

Search Booking

123 [Search Booking](#)

Booking ID	Booking Date	Slot Date	Slot Time	Status	Update Status
123	2023-08-15	2023-08-20	10:00 AM	Collected	Update

Activate Windows
Go to Settings to activate Windows.

You have successfully logged out

[Back to Login](#)

Activate Windows
Go to Settings to activate Windows.

CONCLUSION

The rationEase project has reached a successful completion, delivering a comprehensive web application that fulfils its intended purposes with efficiency and minimal errors. The primary objective was to develop a platform for streamlined slot booking and communication between customers and vendors. This project has enabled us to amass valuable insights and practical experiences across multiple domains, including web design using React.js, mobile application development, database management utilizing MySQL, and the intricate details of project development and software lifecycle management.

Throughout the development process, a strong emphasis was placed on security and data integrity. The application has been designed to ensure user privacy and data protection, in compliance with established regulations. This project has also provided an educational opportunity to familiarize ourselves with the various phases of project development and the intricacies of the software development life cycle. Rigorous testing methods were employed to validate the diverse features of the application.

As a testament to its success, the rationEase application provides a valuable tool that can be readily adapted for use in various contexts, whether it's local vendors or larger businesses selling different types of products. The satisfaction derived from this accomplishment is substantial, as we have designed an application that can be seamlessly tailored to meet the requirements of nearby shops or well-established brands with only minor modifications.

The project's potential for future development is extensive. Numerous additional features could enhance its utility, such as integrating a payment gateway for maintenance payments and maintaining records on a dashboard. We also envision incorporating a notice board accessible without requiring user login, presenting essential information on the "know about society" page. Furthermore, expanding the system to include individual member profiles with images and comprehensive details for flat owners and their family members could further augment the platform's capabilities. These potential enhancements are within the realm of possibility, given more time and resources.

In conclusion, the rationEase project has been a fruitful journey, fostering knowledge, skill development, and a practical understanding of real-world application development. The successful realization of the application's core functionalities, coupled with its potential for future expansion, showcases the efficacy of our efforts and the potential value it holds for users.