

B.SC. ENGG. PROJECT

A Project on Shop Outlets Management System

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Submitted to

Department of Computer Science & Engineering

(In partial fulfillment of the requirements for the degree of
Bachelor of Science in Computer Science & Engineering)



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Acknowledgment

“When a task is completed successful” makes everyone happy. But the happiness will be gold without glitter if we didn’t state the persons who have supported us to make it a success. Success will be crowned to people who made it a reality but the people whose constant guidance and encouragement made it possible will be crowned first on the eve of success. This acknowledgment transcends the reality of formality when we would like to express deep gratitude and respect to all those people behind the screen who guided, inspired and helped me for the completion of our project work. We consider ourselves lucky enough to get such a good project. This project would add as an asset to our academic profile. We express our gratitude to the help of our supervisor Ali Azgar, for his constant supervision, guidance and co-operation throughout the project and for giving constant motivation and valuable help through the project work. We extend our sincere gratitude to our parents who have encouraged us with their blessings to do this project successfully. Finally, we would like to thank to all our friends, all the teaching and non-teaching staff members of the CSE Department, for all the timely help, ideas and encouragement which helped throughout in the completion of project.

Abstract

The "Shop Outlets Management" is a web-based project designed to simplify retail operations using HTML, CSS, Bootstrap, and MySQL. It consists of three panels: Admin, Store, and Distributor. Stores can log in, update profiles, manually record sales, and request inventory. Distributors handle orders and update shipment and payment status. Admins access sales reports and manage distributor and store details. The project enhances efficiency, communication, and decision-making in the retail ecosystem, making it a valuable tool for streamlined business management.

Shop Outlets Management System

We hereby declare that the Project on Shop Outlets Management System studies on software development submitted in partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering of Bangladesh University of Business and Technology (BUBT), under the guidance of our supervisor Ali Azgor, Assistant Professor, department of Computer Science and Engineering, is our own work and that it contains no material which has been accepted for the award to the candidate(s) of any other degree or diploma, except where due reference is made in the text of the project. To the best of our knowledge, it contains no materials previously published or written by any other person except where due reference is made in the project.

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Dedication

*Dedicated to our parents, teachers, friends and who loved us for all their love
and inspiration.*

Certificate

This is to certify that Imran Nazir (ID: 19202103248) Tunazzinur Rahman Kabbo (ID: 19202103268), Md. Zobayer Hasan Nayem (ID: 19202103274), Afsana Akter (ID: 19202103295), Afia Anzum Joati (ID: 1920103409) were belong to the department of Computer Science and Engineering, have completed their Project on Shop Outlets Management System satisfactorily in partial fulfillment for the requirement of Bachelor of Science in Computer Science and Engineering of Bangladesh University of Business and Technology in the year 2023.

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Acronyms List

SOMS Shop Outlets Management System

DDMS Distributed Database Management System

UI User Interface

ERD Entity Relationship Diagram

SQL Structure Query Language

GUI Graphical User Interface

SDLC Software Development Life Cycle

UML Unified Modeling Language

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Chapter 1

Introduction

A super shop, also known as superstore, it is a large retail establishment that offers a wide range of products, including groceries, household items, electronics, clothing, and more, all under one roof. It typically provides customers with a convenient one-stop shopping experience, often featuring competitive prices and various additional services. The Shop Outlets Management System using Distributed Database automates shop management processes for a chain of shops. It utilizes a distributed database system to enable real-time data access, improving efficiency and reducing human errors. Recent attention has been given to computerized systems in shop management. However, existing implementations face limitations such as lack of real-time data synchronization and inefficient data access. A more robust and integrated solution is needed to address these challenges effectively.

The proposed system offers a comprehensive solution. It interconnects all outlets using a distributed database system, enabling real-time data sharing. The system includes features like real-time inventory management, sales tracking, record management, customer management, and a dashboard for analysis. These functionalities improve decision-making and operational efficiency. The benefits of the proposed system are numerous. Real-time data access facilitates timely decision-making, enhancing inventory management. The database design reduces human errors and data inconsistency across outlets. The integrated system improves communication and collaboration among outlets. It provides an efficient and effective solution for managing shop outlets.

In conclusion, the proposed system modernizes shop management, addressing limitations of

manual methods and previous implementations. Leveraging a distributed database system enhances data synchronization, real-time access, and overall efficiency. This system has the potential to transform shop management processes, optimizing shop outlet performance.

1.1 Objectives

The objective of our project is to automate the management of shop outlets and provide real-time data access to enhance efficiency, reduce human errors, and improve decision-making for the super shop management team.

1.2 Usage

The Shop Outlets Management System using Distributed Database will be utilized by the super shop management team, including the head office and all outlets, to effectively manage their inventory, track sales and purchases, maintain customer records, and access real-time data for decision-making purposes. The system will organized the shop management process, improve communication and coordination among outlets, and provide a user-friendly interface for efficient data management and analysis.

1.3 Motivation

The motivation behind our project is driven by the need to provide a comprehensive solution to the management of super shops. Currently, the demand for efficient and automated shop management systems is high due to the increasing complexities of managing a super shop chain. The traditional manual methods are unable to keep up with the demands of the modern business environment, leading to inefficiencies, errors, and inconsistencies in data management. Our project aims to address these challenges by leveraging distributed database management to ensure real-time data access and inter-connectivity between all shop outlets.

By utilizing the resources available to us, including our expertise in SQL and the advancements in technology, we are determined to develop a system that enhances operational efficiency, reduces human errors, and enables prompt decision-making for the benefit of the entire super shop management team. Furthermore, the unsatisfactory results and limitations of previous shop management systems have highlighted the need for an improved solution. Previous methods often lacked real-time data synchronization, leading to delays in decision-making and difficulties in maintaining consistency across multiple outlets. This created inefficiencies and hindered the ability of the management team to respond promptly to changing market conditions. Moreover, the increasing competition in the retail industry necessitates the adoption of advanced technology to gain a competitive edge. By developing a Shop Outlets Management System using Distributed Database, we aim to address these concerns and provide a reliable, efficient, and user-friendly solution that meets the specific needs of super shop management. With the availability of resources such as our skilled team, technological advancements, and the support of relevant tools and frameworks, we are confident in our ability to deliver a robust system that brings tangible benefits to the entire super shop chain.

1.4 What is SDLC?

The systems development life cycle is a phased approach to solving business. Developed through the use of a specific cycle of analyst and user activities problems. Each phase has unique user activities. SDLC is a way to measure and improve the development process. It allows a fine-grain analysis of each step of the process. This, in turn, helps maximize efficiency at each stage. As computing power increases, it places a higher demand on software and developers. Companies must reduce costs, deliver software faster, and meet or exceed their customers' needs. SDLC helps achieve these goals by identifying inefficiencies and higher costs and fixing them to run smoothly. Software Development Life Cycle is the application of standard business practices to building software applications. It's typically divided into six to eight steps: Planning, Requirements, Design, Build, Document, Test, Deploy, Maintain. Some project managers will combine, split, or omit steps, depending on the project's scope. These are the core components recommended for all software development projects. SDLC or the Software Development Life

Cycle is a process that produces software with the highest quality and lowest cost in the shortest time possible. SDLC provides a well-structured flow of phases that help an organization to quickly produce high-quality software which is well-tested and ready for production use.

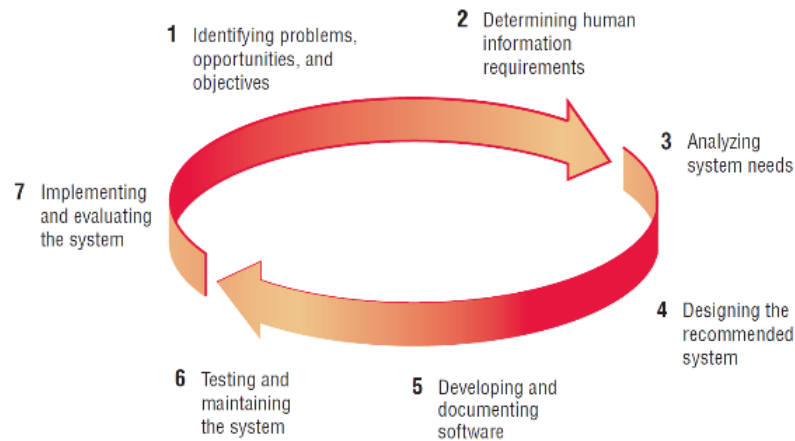


Figure 1.1: SDLC

1.5 SDLC of Our System

As we know, Systems Development Life Cycle is a systematic approach which explicitly breaks down the work into phases that are required to implement either new or modified Information System. so, in our system Development life cycle, we have included all of the following phases

- Requirements
- Implementation
- Testing
- Deployment
- Operations
- Maintenance

1.5.1 Identifying Problems, Opportunities and Objectives

- Current system is not well developed yet.
- Lot of paper work creating inefficiencies.
- Have to improve designed and interactive dashboard features.
- Finding necessary resources and features that need for a standard outlet management.
- Managing store orders are inefficient.
- Not focusing on inventory which causing stock out issues.
- System admin who can manage the whole management system.
- It's provide open source project for contribute all developers.

1.5.2 Determine Human Information Requirements

- Customers wants faster service.
- Have to improve sales and customer management.
- Have to financial management .
- Need to improve reporting and analytics.
- Passing control system to the various type of users to maintain their outlets.

1.5.3 Analysing System Needs

- Multiple admin to manage the system.
- Store wise accesibility.
- Top-Down management system.
- Store and Distribution profile.
- Secure the system

1.5.4 Designing the Recommended System

Use case diagram

A use case diagram is a visual representation of a system's details and the people who utilize it. It's usually depicted as a visual representation of the interactions between various parts in a system. Use case diagrams show how events in a system flow, but not how they are implemented. A use case is a system analysis approach for identifying, clarifying, and organizing system needs. The phrase "system" refers to something that is being produced or operated, such as a Web site for mail-order goods sales and servicing. In UML (Unified Representing Language), a standard notation for modeling real-world objects and systems, use case diagrams are used. A use case diagram has several advantages over other types of diagrams, such as flowcharts.

Class diagram

A static diagram is a class diagram. It depicts an application's static view. A class diagram is used not only for visualizing, describing, and documenting many parts of a system, but also for creating executable code for a software program. A class diagram depicts a class's properties and actions, as well as the system's limitations. Because class diagrams are the only UML diagrams that can be directly mapped with object-oriented languages, they are frequently utilized in the modeling of object-oriented systems. A collection of classes, interfaces, affiliations, collaborations, and restrictions are shown in a class diagram. A structural diagram is another name for it.

ER diagram

An ER diagram can help businesses document existing databases and thereby troubleshoot logic or deployment problems or spot inefficiencies and help improve processes when a business wants to undertake business process re-engineering. ERDs can also be used to design and model new databases and make sure that engineers can identify any logic or design flaws before they're implemented in production.

1.5.5 Developing and Documenting Software

Some very basic software is needed to create a Shop Outlets Management. We build shop outlets management based on HTML, CSS, JavaScript, PHP, AJAX, and mySQL. For code editor we need Sublime Text 3 or Visual Stdio or any other IDE and need a locale server software like XAMPP or WAMP SERVER for developing the system. The diagrams were taken with the help of the draw.io website. Also we have to documenting or system usages and working system. So, we used Latex for documenting our system.

Bootstrap

Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains HTML, CSS and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components.

We will use the CSS framework to design our system front-end and dashboard. This is a mobile-first front-end web development framework. So that it will help us to easily make the site responsive and more user friendly.

PHP

We used combination of PHP and MySQL programming language as our system server side language. PHP is a general-purpose scripting language geared toward web development. PHP is basically used for developing web based software applications. This is a server scripting language, and a powerful tool for making dynamic and interactive Web pages. It is a widely-used, free, and efficient alternative to competitors such as Microsoft's ASP.

MySQL

MySQL is a relational database management system (RDBMS) developed by Oracle that is based on structured query language (SQL). A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or a place to hold the vast amounts of information in a corporate network. MySQL is based on a client-server model. The core of MySQL is MySQL server, which handles all of the database instructions (or com-

mands). MySQL server is available as a separate program for use in a client-server networked environment and as a library that can be embedded (or linked) into separate applications.

Local/Web Server

As server we can use local or web based server. A local server is a server that is running in a local or a mounted folder and whose document root is NOT the parent of the project root. Basically we used local server for developing the system

A web server is a computer that runs websites. It's a computer program that distributes web pages as they are requisitioned. The basic objective of the web server is to store, process and deliver web pages to the users. This intercommunication is done using Hypertext Transfer Protocol (HTTP).

GitHub

We use GitHub as a version controller and store system code in online. GitHub, Inc. is a provider of Internet hosting for software development and version control using Git. It offers the distributed version control and source code management functionality of Git.

Latex

We used latex for documenting our system. LaTeX is a software system for document preparation. When writing, the writer uses plain text as opposed to the formatted text found in "What You See Is What You Get" word processors like Microsoft Word, LibreOffice Writer and Apple Pages

1.5.6 Testing and Maintaining the System

System Testing is a level of testing that validates the complete and fully integrated software. The purpose of a system test is to evaluate the end-to-end system specifications. Usually, the software is only one element of a larger computer-based system. Ultimately, the software is interfaced with other software/hardware systems. System Testing is actually a series of different tests whose sole purpose is to exercise the full computer-based system.

Unit Testing

A unit test is a way of testing a unit - the smallest piece of code that can be logically isolated in a system.

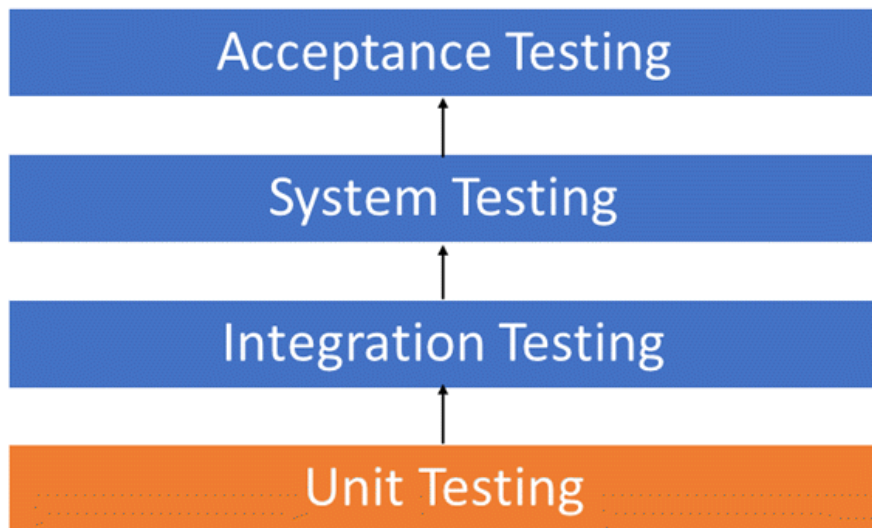


Figure 1.2: Unit Testing

Performance Testing: Performance testing is the practice of evaluating how a system performs in terms of responsiveness and stability under a particular workload.

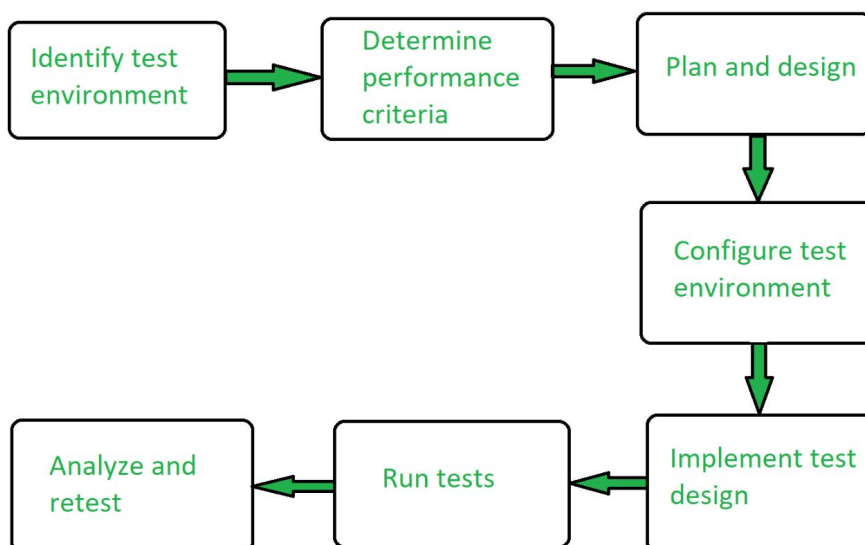


Figure 1.3: Performance Testing

Maintaining the System

- System's maintenance may also include the tracking and monitoring of the system's security
- Eliminating potential risks and threats
- Assembling a list of functionalities that need to be updated
- Adapting the system to environment changes and new system requirements and more.

1.5.7 Implementing and Evaluating the System

Implementing a shop outlet management system requires a systematic approach that includes defining project objectives and gathering requirements, selecting a suitable system, configuring it to match unique needs, providing comprehensive training, encouraging user adoption, deploying the system, and conducting thorough testing. Once implemented, continuous monitoring, feedback gathering, and evaluation of key metrics are crucial to assess the system's effectiveness. The first step in implementing a shop outlet management system is to define clear project objectives and gather requirements by understanding the specific needs of the shop outlets and stakeholders. This can be achieved through interviews, workshops, and analyzing existing processes. A project plan outlining the implementation timeline, resource allocation, and milestones is then developed. After defining the requirements, a suitable shop outlet management system is selected. The chosen system is configured to match the unique needs of the shop outlets by adjusting settings, user roles, workflows, and data fields. If necessary, existing data from legacy systems is migrated to the new system. Thorough training is provided to the shop outlet staff to familiarize them with the system's functionalities, workflows, and best practices. User manuals and documentation serve as references for ongoing system usage. Encouraging user adoption is critical for successful implementation. The benefits of the new system are highlighted, and concerns or resistance are addressed. Once everything is in place, the system is deployed across the shop outlets, and extensive testing is conducted to identify and resolve any issues or bugs before going live. This testing includes performance, functionality, and integration with other systems, if applicable.

After implementation, the system's performance is monitored, and feedback is gathered from

users. Key metrics, such as inventory accuracy, sales efficiency, customer satisfaction, and financial reporting accuracy, are assessed to evaluate the system's effectiveness in meeting objectives and addressing requirements. Based on the evaluation results and user feedback, necessary enhancements and improvements are identified and implemented. Regular updates are performed to ensure optimal performance and alignment with evolving business needs. Throughout the entire process, documentation is maintained, including the project plan, configuration details, training materials, and evaluation findings. A comprehensive report is prepared, outlining the system's implementation journey, challenges faced, lessons learned, and its impact on shop outlet management.

In conclusion, implementing and evaluating a shop outlet management system requires careful planning, execution, and assessment to ensure it meets the specific needs of the business and leads to improved shop outlet operations and overall performance.

Chapter 2

Methodology

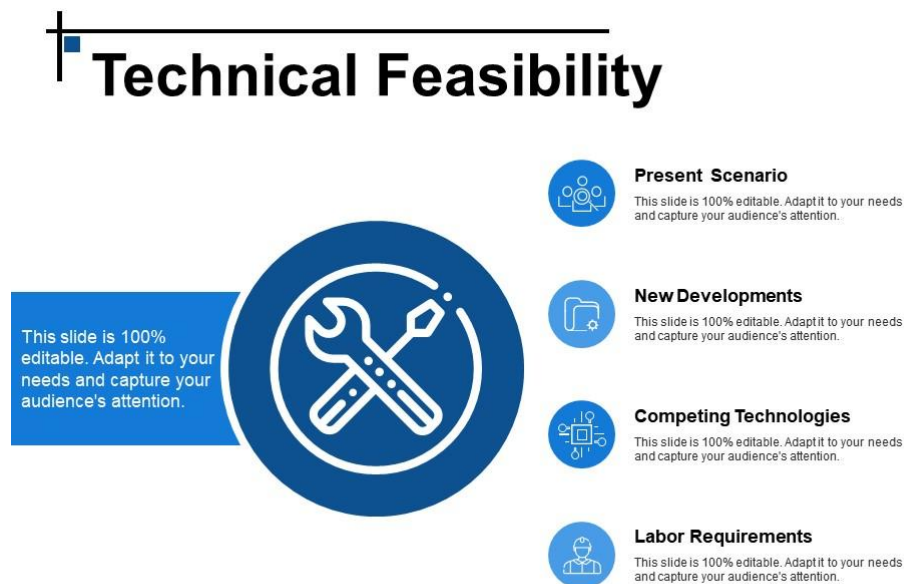
2.1 Feasibility Analysis

The "Shop Outlets Management" project demonstrates promising feasibility in terms of technical, operational, economic, and scheduling aspects.



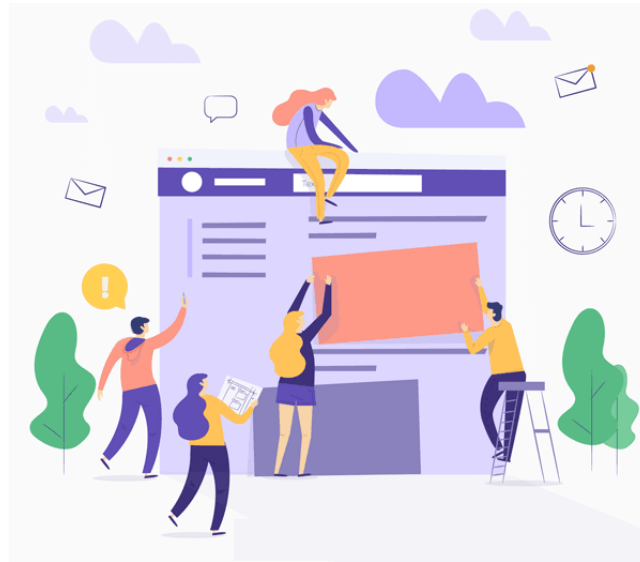
A feasibility study is an analysis that considers all of a project's relevant factors—including economic, technical, legal, and scheduling considerations to ascertain the likelihood of completing the project successfully.

2.1.1 Technical Feasibility



The project utilizes well-established web development technologies like HTML, CSS, Bootstrap, and MySQL, which are widely supported and have extensive documentation. The choice of Visual Studio Code and Xampp as development tools is appropriate for this type of web-based project. The technical requirements appear feasible, and the team should be able to implement and maintain the system without significant obstacles.

2.1.2 Operational Feasibility



The project utilizes well-established web development technologies like HTML, CSS, Bootstrap, and MySQL, which are widely supported and have extensive documentation. The choice of Visual Studio Code and Xampp as development tools is appropriate for this type of web-based project. The technical requirements appear feasible, and the team should be able to implement and maintain the system without significant obstacles.

2.1.3 Economical Feasibility



The project utilizes well-established web development technologies like HTML, CSS, Bootstrap, and MySQL, which are widely supported and have extensive documentation. The choice of Visual Studio Code and Xampp as development tools is appropriate for this type of web-based project. The technical requirements appear feasible, and the team should be able to implement and maintain the system without significant obstacles.

2.2 Context Level Diagram

A context diagram is a visual representation of the relationship between data and processes. This diagram has three main components which include external entities, system processes, and data flows.

1. **External Entity**- an element in the system diagram that inputs data into the information system and retrieves processed data.
2. **Process**- refers to the entire process of the system. This is responsible for processing and distributing information to the entities of the system context diagram.
3. **Data Flow**- this element depicts the flow of the data within the system. It is supported by text to show what type of data is being sent.

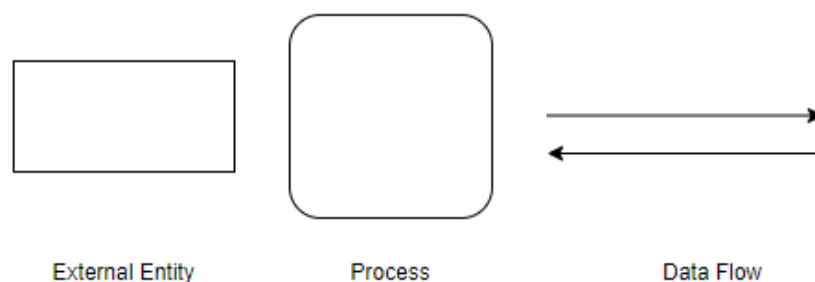


Figure 2.1: Symbols used in Context Diagram

2.3 Human Information Requirements

User Authentication and Access Control: The system should have robust user authentication mechanisms to ensure that only authorized individuals can access specific panels (Admin, Store,

and Distributor). It should provide an easy-to-use login and registration process with password security measures.

Store Profile Management: Stores should be able to update their profiles with accurate and relevant information. This includes store name, contact details, address, and other necessary data to maintain accurate records.

Sales Reporting and Tracking: The Store Panel must allow stores to manually input sales data, including sales date, item details, and sales amount. The system should then display this data in a clear and organized table for easy tracking and analysis of sales performance.

Inventory Request and Management: The Store Panel should enable stores to place inventory requests by selecting the desired category. The Distributor Panel should promptly receive and update the inventory status to reflect the request. Stores should also have access to view their recent orders.

Distributor Order Handling: The Distributor Panel should provide tools to manage orders efficiently. Distributors should be able to update shipment status, payment status, and shipment mode for each order received from different stores.

Admin Sales Report Generation: The Admin Panel should offer the capability to generate comprehensive sales reports based on selected categories such as branch or city. This feature should enable administrators to analyze sales data and make informed decisions.

Distributor and Store Details Management: The Admin Panel should allow administrators to view all distributor and store details. Additionally, it should provide an interface to add new distributors or stores to the system as needed.

User-Friendly Interface: The entire system should have an intuitive and user-friendly interface, ensuring easy navigation and interaction for all users. The interface design should be clean, consistent, and visually appealing.

Data Security and Privacy: The project must prioritize data security and privacy. Users' personal information, sales data, and inventory details should be stored securely with appropriate encryption measures to prevent unauthorized access.

Performance and Scalability: The system should be designed to handle a growing number of users and data entries effectively. It should be capable of providing a responsive and efficient user experience, even with increased usage.

Training and Support: Adequate training and support documentation should be provided to all users to ensure smooth onboarding and proper utilization of the system's features.

By addressing these Human Information Requirements, the "Shop Outlets Management" project will deliver a user-centric and functional solution that meets the needs of stores, distributors, and administrators, promoting efficient retail operations and decision-making.

2.4 UML Diagrams

UML, which stands for Unified Modeling Language, is a way to visually represent the architecture, design, and implementation of complex software systems.

2.4.1 Use case Diagram

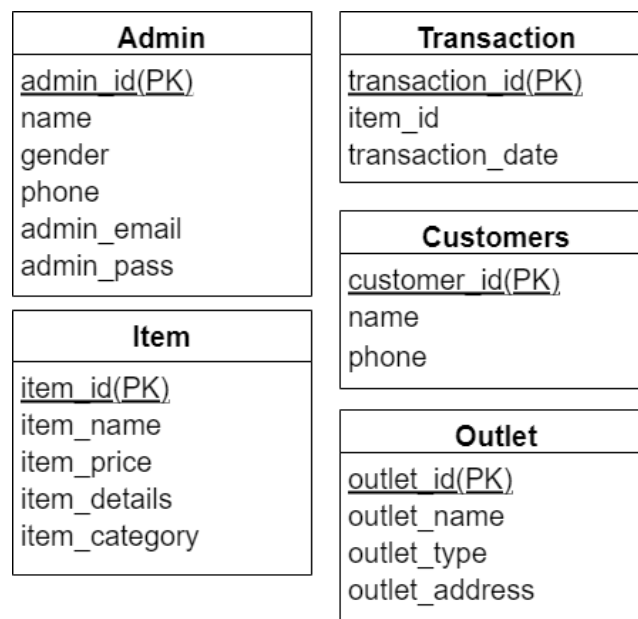


Figure 2.2: Use Case Diagram

2.4.2 Entity Relationship Diagram

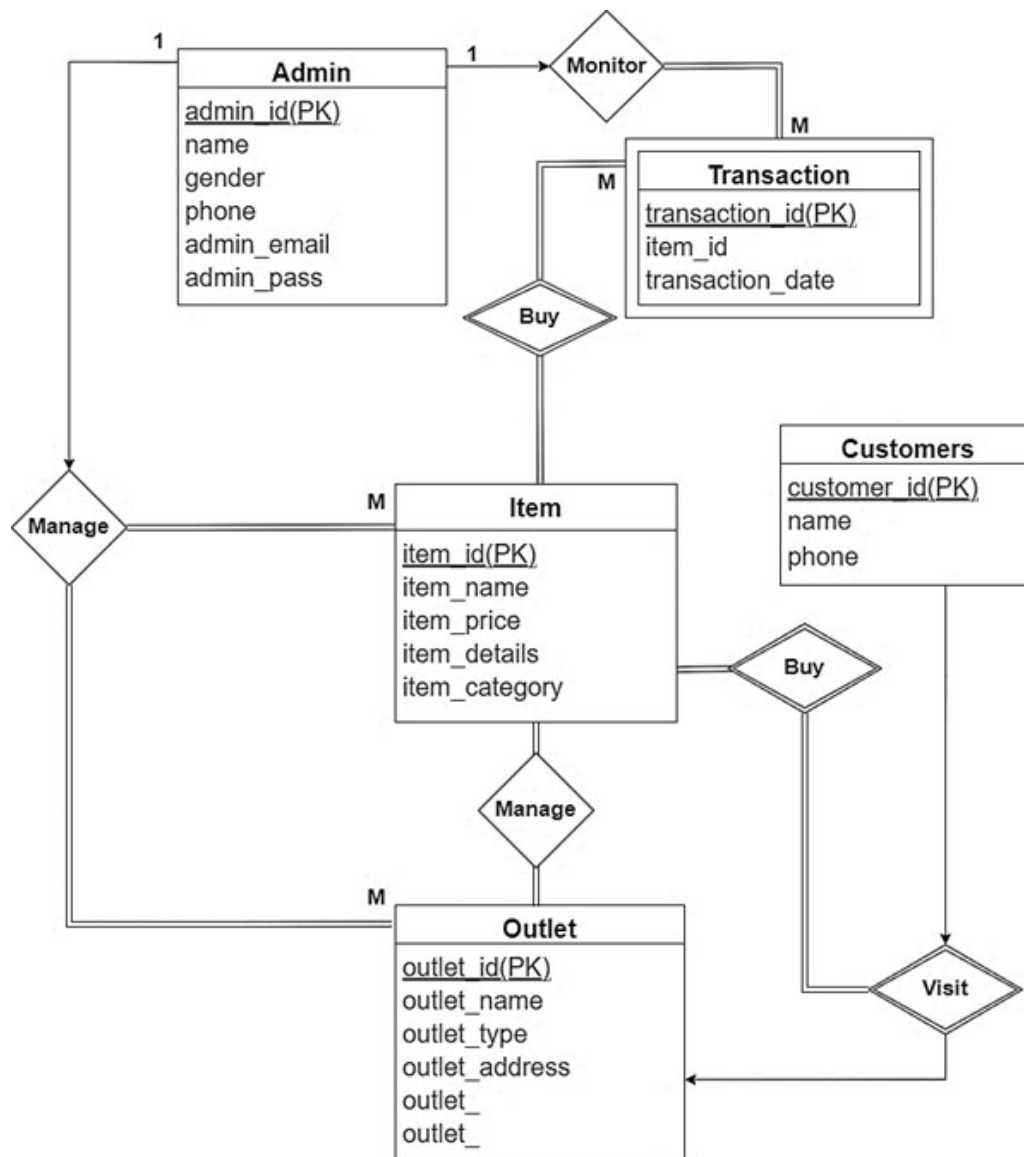


Figure 2.3: Entity Relationship Diagram

Chapter 3

Implementation

3.1 Software Tools

We developed a software "The Shop Outlets Management System" using Distributed Database automates shop management processes for a chain of shops. It utilizes a distributed database system to enable real-time data access, improving efficiency and reducing human errors. These will be utilized by the super shop management team, including the head office and all outlets, to effectively manage their inventory, track sales and purchases, maintain customer records, and access real-time data for decision-making purposes. The system will streamline the shop management process, improve communication and coordination among outlets, and provide a user-friendly interface for efficient data management and analysis.

3.1.1 Xampp

XAMPP is a cross-platform web server that is free and open-source. XAMPP is a short form for Cross-Platform, Apache, MySQL, PHP, and Perl. XAMPP is a popular cross-platform web server that allows programmers to write and test their code on a local web server. It was created by Apache Friends, and the public can revise or modify its native source code. It includes MariaDB, Apache HTTP Server, and interpreters for PHP and Perl, among other computer languages. Because of XAMPP's simplicity of deployment, a developer can quickly and easily install a WAMP or LAMP stack on an operating system, with the added benefit that common add-in apps like WordPress and Joomla can also be loaded.

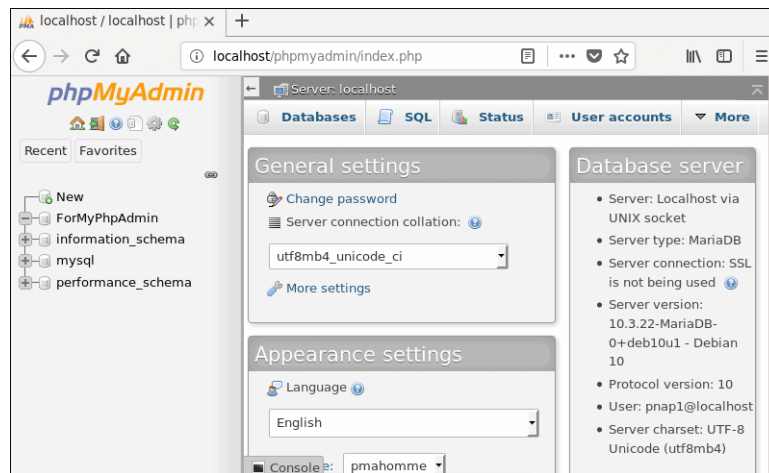


Figure 3.1: Xampp Interface

3.1.2 Sublime Text

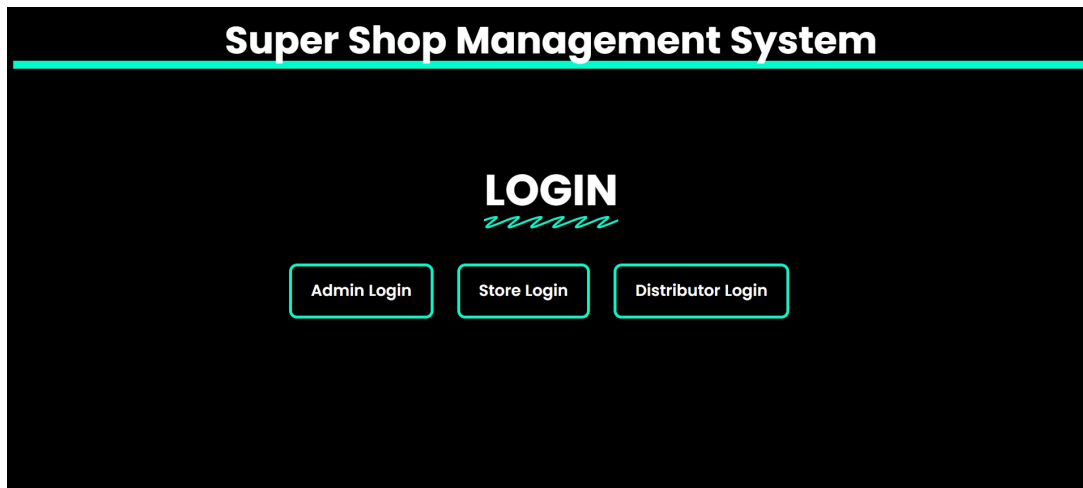
Sublime is an Integrated Development Environment (IDE) developed by Microsoft to develop GUI (Graphical User Interface), console, Web applications, web apps, cloud, and web services, etc. With the help of this IDE, you can create managed code as well as native code. It uses the various platforms of Microsoft software development software like Windows store, Microsoft Silver light, and Windows API, etc. It is not a language-specific IDE as you can use this to write code in HTML, CSS, PHP JavaScript, and many more languages. It provides support for 80 different programming languages. It is available for Windows as well as for mac OS.

3.1.3 MySQL Connector

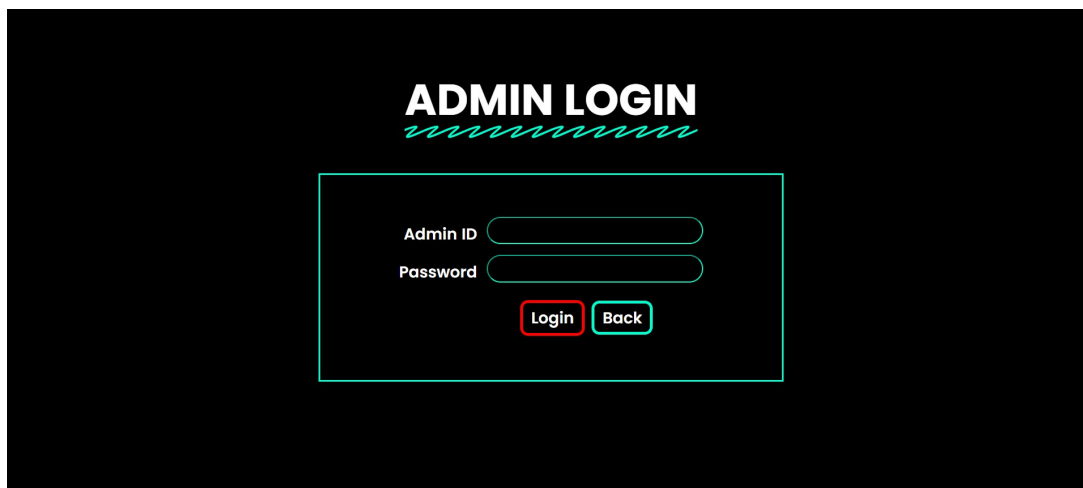
MySQL Connector/NET 8.0.23 is the latest General Availability release of the MySQL Connector NET 8.0 series. This version supports .NET 5.0 and the X Dev API, which enables application developers to write code that combines the strengths of the relational and document models using a modern, No SQL-like syntax that does not assume previous experience writing traditional SQL.

3.2 Software Review

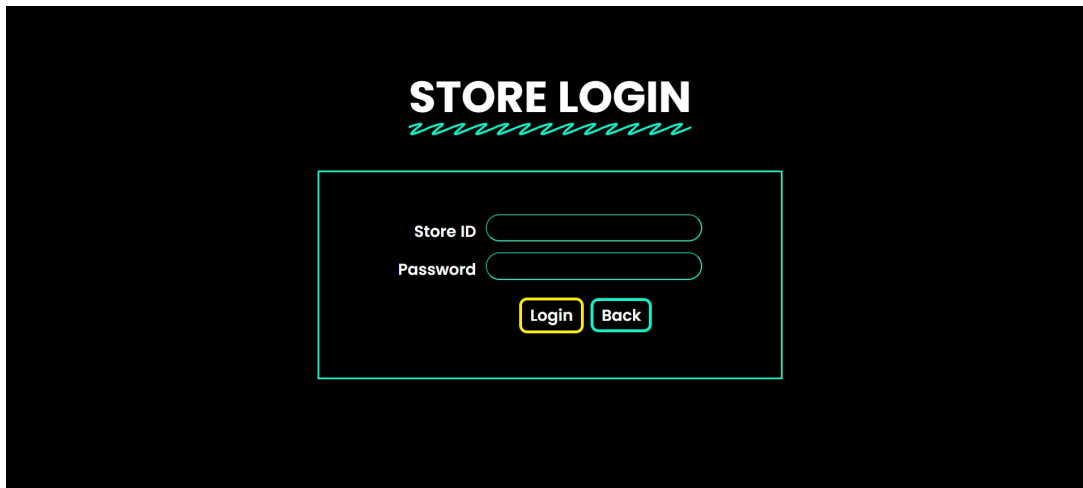
3.2.1 Super Shop Management System



3.2.2 Admin Login

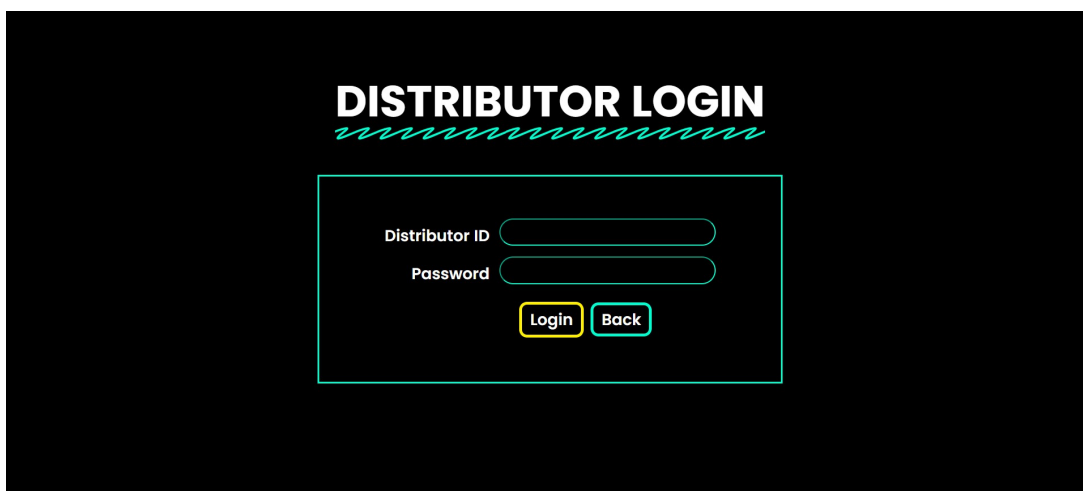


3.2.3 Store Login



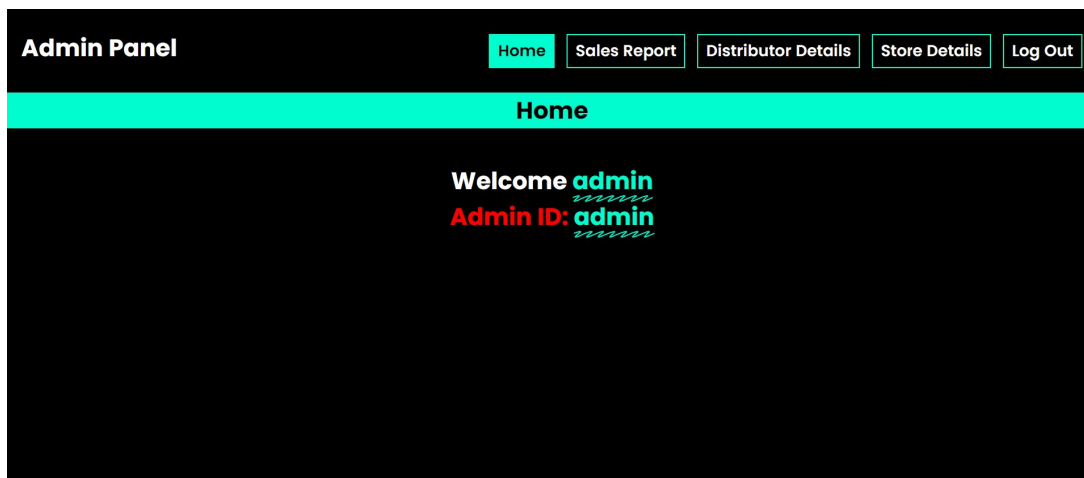
The image shows a 'STORE LOGIN' form on a black background. The title 'STORE LOGIN' is in white, bold, uppercase letters, with a green wavy underline. Below the title is a white rectangular box containing the login fields. Inside the box, 'Store ID' is followed by a white rounded rectangular input field. Below that, 'Password' is followed by another white rounded rectangular input field. At the bottom of the box are two buttons: a yellow 'Login' button and a green 'Back' button.

3.2.4 Distributor Login

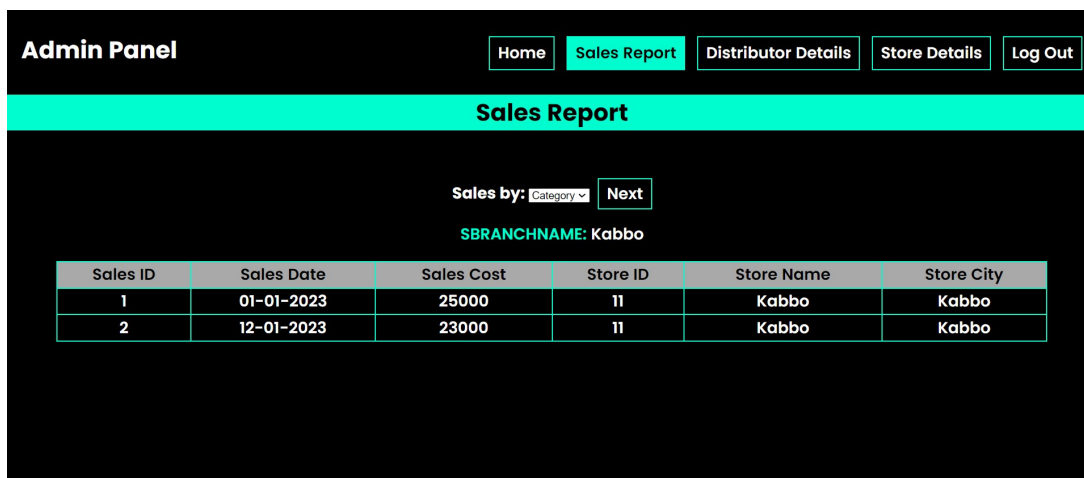


The image shows a 'DISTRIBUTOR LOGIN' form on a black background. The title 'DISTRIBUTOR LOGIN' is in white, bold, uppercase letters, with a green wavy underline. Below the title is a white rectangular box containing the login fields. Inside the box, 'Distributor ID' is followed by a white rounded rectangular input field. Below that, 'Password' is followed by another white rounded rectangular input field. At the bottom of the box are two buttons: a yellow 'Login' button and a green 'Back' button.

3.2.5 Admin Panel



3.2.6 Admin Sales Report



3.2.7 Distributor Details

Admin Panel

[Home](#)[Sales Report](#)[Distributor Details](#)[Store Details](#)[Log Out](#)

Distributor Details

Distributor ID	Distributor Name	Type	Warehouse Location
111	ABC	XYZ	B
113	d	d	d

Register New Distributor
~~~~~

Distributor Name

Distributor Type

Distributor Location

Register New Distributor

### 3.2.8 Store Details

**Admin Panel**

[Home](#)[Sales Report](#)[Distributor Details](#)[Store Details](#)[Log Out](#)

**Store Details**

| Store ID | Branch Name | Branch City | Branch Region | Branch State | Pincode |
|----------|-------------|-------------|---------------|--------------|---------|
| 11       | Kabbo       | Kabbo       | Z             | Z            | 1216    |
| 12       | a           | b           | c             | d            | 3       |
| 13       | Imran       | Mirpur      | x             | x            | 1212    |
| 14       | a           | b           | c             | d            | 12      |

**Register New Branch**  
~~~~~

Branch Name

City

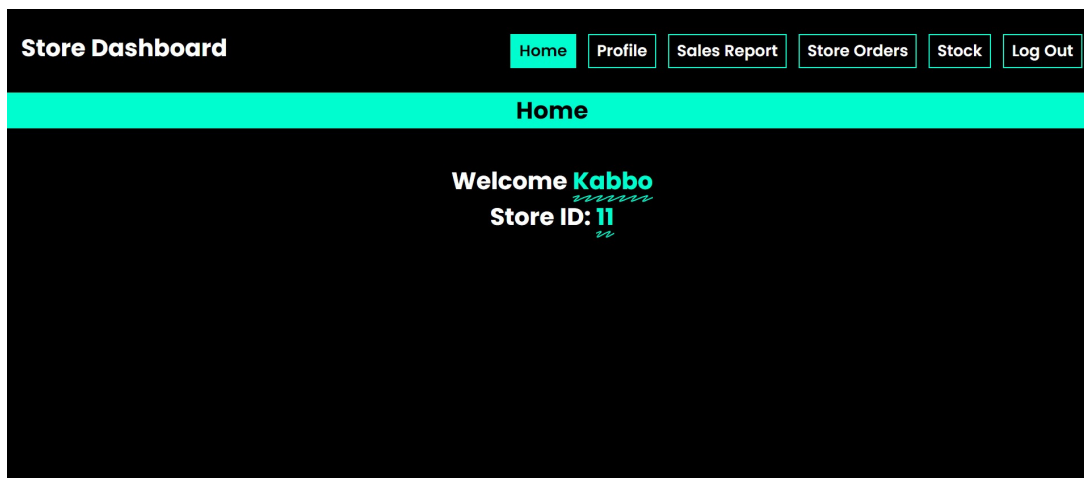
Region

State

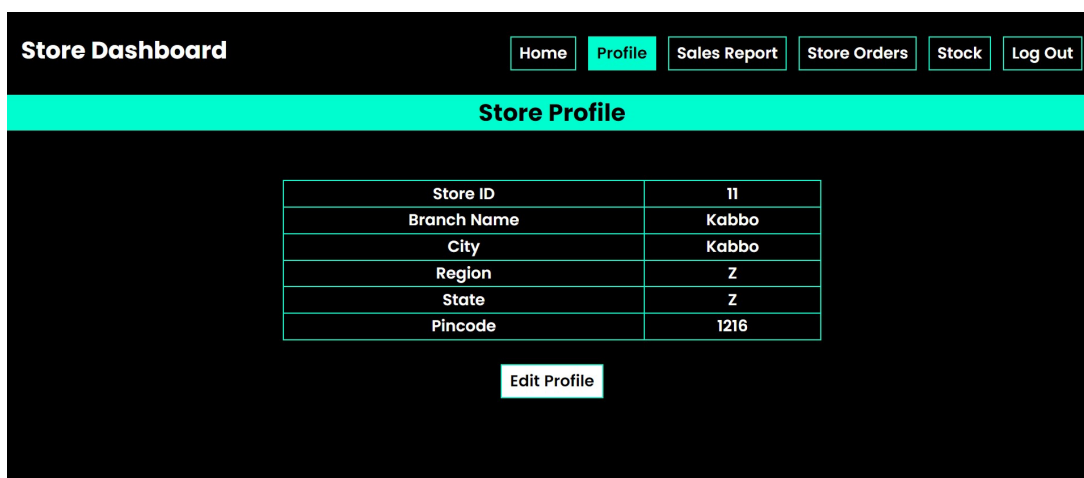
Pincode

Register New Branch

3.2.9 Store Dashboard



3.2.10 Store Profile



3.2.11 Store Profile Edit

Store Dashboard
Home
Profile
Sales Report
Store Orders
Stock
Log Out

Store Profile Edit

Store ID	11	Not Allowed
Branch Name	Kabbo	Submit
Branch City	Kabbo	Submit
Branch Region	Z	Submit
Branch State	Z	Submit
PINCODE	1216	Submit
Password	*****	Submit

3.2.12 Store Sales Report

Store Dashboard
Home
Profile
Sales Report
Store Orders
Stock
Log Out

Store Sales Report

Sales Entries

Sales ID	Sales Date	Sales Cost
1	01-01-2023	25000
2	12-01-2023	23000

New Sales Entry

Sales Date (dd/mm/yyyy)	
Sales Cost	

Enter

3.2.13 Store Orders

Store Dashboard

HomeProfileSales ReportStore OrdersStockLog Out

Store Orders

Recent Orders

Order ID	Distributor ID	Order Date	Category	Payment Status	Shipment Mode	Shipment Status
1	111	2023-06-18 21:43:23	XYZ	Paid	Premium	Shipped
2	111	2023-06-18 23:08:17	XYZ	Paid		
3	111	2023-06-19 09:12:37	XYZ	Unpaid	Premium	Shipped
5	111	2023-06-19 09:12:58	XYZ			
7	111	2023-06-19 10:41:35	XYZ			
8	111	2023-07-10 09:27:00	XYZ	Paid		
9	113	2023-07-17 09:00:28	d			
10	111	2023-07-17 09:00:57	XYZ			

Place New Order

Distributor ID

Enter

3.2.14 Distributor Dashboard

Distributor Dashboard

HomeProfileOrdersLog Out

Home

Welcome ABC
Distributor ID: 111

3.2.15 Distributor Profile

Distributor Dashboard

HomeProfileOrdersLog Out

Distributor Profile

Distributor ID	111
Distributor Name	ABC
Distribution Product Type	XYZ

Edit Profile

3.2.16 Distributor Profile Edit

Store Dashboard

HomeProfileOrdersLog Out

Distributor Profile Edit

Distributor ID	111	Not Allowed
Distributor Name	ABC	Submit
Distribution Product Type	XYZ	Submit

3.2.17 Distributor Orders

Distributor Dashboard							
				Home	Profile	Orders	Log Out
Orders							
Recent Orders							
Order ID	Store ID	Order Date	Category	Payment Status	Shipment Mode	Shipment Status	Order Details Update
1	11	2023-06-18 21:43:23	XYZ	Paid	Premium	Shipped	Update
2	11	2023-06-18 23:08:17	XYZ	Paid			Update
3	11	2023-06-19 09:12:37	XYZ	Unpaid	Premium	Shipped	Update
5	11	2023-06-19 09:12:58	XYZ				Update
7	11	2023-06-19 10:41:35	XYZ				Update
8	11	2023-07-10 09:27:00	XYZ	Paid			Update
10	11	2023-07-17 09:00:57	XYZ				Update

Chapter 4

Conclusion

4.1 Advantages of Our System



- Streamlined retail operations through automated sales recording and inventory management.
- Real-time sales tracking for better responsiveness to market trends and demands.
- Comprehensive sales reports enable informed decision-making for administrators.
- Efficient inventory management with seamless communication between stores and distributors.
- Enhanced order handling, leading to improved order fulfillment and customer satisfaction.
- Centralized database provides data visibility and facilitates data-driven analysis.

- User-friendly interface ensures easy navigation and minimal training requirements.
- Promotes collaboration and coordination among different stakeholders in the retail ecosystem.
- Data security measures protect sensitive information and user privacy.
- Scalable architecture to accommodate future growth and increased user demands.
- Cost-effective solution by reducing manual errors and optimizing inventory management.

4.2 Limitation

Internet Dependency: The system relies on a stable internet connection to function effectively. In the absence of internet access, users may experience disruptions in accessing critical data and performing essential tasks.

Initial Setup and Training: Implementing the system may require significant initial setup and configuration, including database setup and user training. This could pose challenges for small businesses with limited resources and technical expertise.

Data Input Accuracy: The system heavily depends on manual data input by store personnel, leaving room for human errors and inaccuracies in sales reporting and inventory management. Ensuring data accuracy may require regular monitoring and validation.

Security Vulnerabilities: Despite data security measures, no system is entirely immune to potential security breaches or cyber-attacks. Ongoing vigilance and periodic security updates are necessary to safeguard sensitive information and protect the system from potential threats.

4.3 Future Work



Mobile Application Development: Develop a mobile application version of the system to provide on-the-go access for store personnel, distributors, and administrators. This would increase the system's accessibility and usability, enabling users to manage retail operations from their smartphones or tablets.

Integration with E-commerce Platforms: Integrate the system with popular e-commerce platforms to enable seamless management of online sales and inventory. This expansion would cater to the growing trend of online retail and enhance the system's versatility.

Multi-Language Support: Extend the system's capabilities to support multiple languages, catering to diverse regions and facilitating global expansion for businesses.

Performance Optimization: Continuously optimize the system's performance to handle increased user loads and ensure quick response times, especially during peak hours of operation.

4.4 Developers contribution final words

As the developers of the "Shop Outlets Management" project, we are incredibly proud of our contribution to this innovative and impactful system. Our dedicated team has worked tirelessly to design, develop, and implement a robust solution that addresses the unique challenges faced by retail outlets, distributors, and administrators.

Throughout the development process, we prioritized user-centric design and functionality, ensuring that the system's interface is intuitive and accessible to all users. We meticulously crafted features such as real-time sales tracking, streamlined inventory management, and comprehen-

sive sales reporting to empower businesses with valuable insights and data-driven decision-making capabilities.

Our commitment to data security and privacy has been unwavering, implementing stringent measures to safeguard sensitive information and protect the system from potential threats. We understand the importance of trust and confidentiality in the retail industry and have taken every precaution to uphold these values.

As we hand over this project, we recognize that there is always room for improvement and growth. We envision a future where the system embraces emerging technologies, such as AI-driven sales forecasting, mobile application development, and geospatial analytics, to further elevate its functionality and impact.

We extend our gratitude to all stakeholders, including the clients, store personnel, distributors, and administrators, for their collaboration and valuable feedback throughout the development journey. Your insights have been invaluable in shaping the system into what it is today - a powerful tool for driving efficiency, collaboration, and growth within the retail ecosystem.

In conclusion, the "Shop Outlets Management" project holds immense potential for transforming retail operations and decision-making. As developers, we are humbled by the opportunity to contribute to this transformative journey and eagerly anticipate the continued success and positive impact of the system in the retail industry. Our dedication to excellence and innovation will remain unwavering as we embrace future opportunities to enhance this project even further.

Chapter 5

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