Tribhuvan University

Faculty of Humanities and Social Sciences

A PROJECT REPORT

"ONLINE SHOES STORE"

Submitted to

Department of Computer Application

Hetauda School of Management and Social Science

In partial fulfillment of the requirements for the Bachelor's in Computer Application

Submitted by

Sabin Silwal

Under the Supervision of

Mr. Sameer Gautam

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Supervisor's Recommendation

We hereby recommend that this project prepared under supervision by **Mr. Sabin Silwal** entitled "**Siuu Store"** in partial fulfillment of the requirements of Fourth Semester (Project I) for the degree of Bachelor of Computer Application is recommended for the final evaluation.

…………………….

 SIGNATURE

Mr. Sameer Gautam

SUPERVISOR

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Tribhuvan University

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LETTER OF APPROVAL

This is to certify that this project prepared by **Mr. Sabin Silwal** entitled "**Siuu Store(Online Shoes Ordering System)**" in partial fulfillment of the requirements of Fourth Semester (Project I) for the degree of Bachelor in Computer Application has been evaluated. In our opinion it is satisfactory in the scope and quality as a project for the required degree.

SIGNATURE of Supervisor Mr. Sameer Gautam Department of Computer Application Hetauda-4, Makwanpur, Nepal	**SIGNATURE of Coordinator**
SIGNATURE of Internal Examiner	**SIGNATURE of External Examiner**

Acknowledgement

We are grateful to everyone who contributed to the completion of this project. Firstly, we extend our heartfelt thanks to Hetauda School of Management and Social Science for providing us with invaluable resources, unparalleled guidance, and an enriching learning environment. It is through their unwavering support that we were able to delve into our research and acquire knowledge that shaped the project's outcomes.

Our gratitude extends to our esteemed project coordinator, Mr. Sameer Gautam, whose constant support and insightful guidance played a pivotal role in steering this project towards success. His wisdom and astute feedback significantly influenced the direction and development of our work, for which we are deeply thankful.

We owe a profound debt of gratitude to our instructors and mentors. Without their tireless efforts and encouragement, navigating through the complexities of this project would have been an insurmountable challenge. Their steadfast support fueled our determination to strive for excellence.

We also thank our friends for their understanding, encouragement, and belief in us, making the project's challenges easier to overcome.

Lastly, we express our deepest gratitude to our families. Their love, patience, and support sustained us through every stage of this project, giving us the strength to persevere.

In conclusion, we sincerely thank everyone who contributed to this project. Your help and encouragement have been invaluable, and we are truly grateful for this opportunity.

Your sincerely,

Sabin Silwal

Abstract

Shoes are an integral part of our lives, contributing not only to our comfort but also to our personal style. However, finding the perfect pair of shoes can often be a challenge, especially when local stores have limited styles, sizes, or options. The main aim of this web development project is to create an online shoe store, Online Shoes Store, that offers a vast array of footwear for all preferences and occasions, available for easy purchase and doorstep delivery.

This comprehensive web application is designed to provide shoe enthusiasts with an extensive selection of styles, brands, and sizes to ensure they find exactly what they're looking for. From casual sneakers and elegant formal shoes to durable sports footwear, Online Shoes Store caters to every need.

In addition to offering a wide variety of shoes, the website includes detailed product descriptions, sizing guides, and customer reviews to help buyers make well-informed decisions. Online Shoes Store also features a unique tool that suggests complementary accessories for each purchase, such as socks, insoles, or shoe care kits, enhancing the overall shopping experience.

Owning high-quality shoes brings confidence, style, and comfort, and ensuring they last long is equally important. This platform simplifies shoe shopping by providing a one-stop-shop for all footwear-related needs. By combining a diverse collection of shoes with valuable resources and care products, Online Shoes Store aims to be the ultimate destination for shoe lovers.

Whether you're a casual shopper or a footwear enthusiast, Online Shoes Store promises to make the process of buying and maintaining your favorite shoes enjoyable, convenient, and stress-free.

Table of Contents

List of Figures

List of Tables

List of Abbreviations

Keywords	Full Form
CSS	Cascading Stylesheet
DFD	Data Flow Diagram
ER	Entity Relationship
HTML	Hyper Text Markup Language
JS	Java Script
OS	Operating System
PHP	Hyper Text Preprocessor
RAM	Random Access Memory
SQL	Structured Query Language
UI	User Interface
VS	Visual Studio
XAMPP	X-operating system, Apache, MySQL, PHP, Perl

Chapter 1: Introduction

1.1 Introduction:

Our project, the Online Shoe Store, is a digital platform designed to redefine how individuals shop for footwear. This innovative system offers a seamless online experience, enabling users to browse, select, and purchase their desired shoes with the utmost convenience. By integrating advanced features and user-friendly navigation, the Online Shoe Store ensures that finding the perfect pair of shoes is both enjoyable and straightforward.

Users can explore an extensive range of footwear styles, each accompanied by detailed profiles that provide comprehensive information. These profiles include essential details such as material, size options, colors, and reviews from other buyers, helping customers make informed decisions. Whether a user is looking for a trendy sneaker, a durable hiking boot, or elegant formal shoes, the system caters to diverse preferences and needs. The platform's intuitive search and filter options allow users to refine their choices and discover the perfect pair that matches their style and requirements.

1.2 Problem Statement:

Ordering shoes and shoe-related products often proves challenging due to outdated systems. Existing platforms are inconvenient, struggle with inventory management, and lack coordination with additional services.

- Lack of proper specifications for shoes.
- Limited filtering system.
- Inadequate product information.

1.3 Objectives:

The main objectives of our system include:

- To categorize shoes based on various criteria like brand, size, type, style, and price range.

- To facilitate users to compare multiple shoes side-by-side based on attributes such as price, size availability, material, and customer ratings.

- To provide detailed product descriptions, including materials used, comfort level, and durability.

- To implement advanced filtering and search options, enabling users to quickly find shoes that meet their preferences.

1.4 Scope and Limitations:

1.4.1 Scopes:

- Inventory Showcase: Local stores can use your platform to display their products, complete with detailed descriptions, sizes, colors, and availability.

- In-Store Pickup: Customers could browse online and reserve shoes to pick up at the physical store.

- Exclusive Deals: Provide store-specific promotions and discounts to encourage local shopping.

- Direct-to-Customer Sales: Manufacturers can list products directly on your platform, bypassing third-party retailers.

- Customization Options: Offer services like shoe personalization (e.g., custom colors, initials, or unique designs).

- Bulk Orders: Facilitate bulk purchasing for wholesalers or corporate customers.

1.4.2 Limitations:

- **User Authentication Problems**: These issues can prevent users from accessing their accounts and unable to retrieve passwords if forgot leading to frustration and

  decreased engagement with the platform.

1.5 Report Organization:

- **Chapter 1: "Introduction"** - In this chapter we have introduced the problem statement, objectives and the scopes of the project.

- **Chapter 2: "Background Study and Literature Review" -** In this chapter, we have described the background of the study and literature reviews done.

- **Chapter 3: "System Design"** - In this chapter, we have described about the functional and non-functional requirements, and system feasibility.

- **Chapter 4: "Implementation and Testing"** — In this chapter we've illustrated the methods and tools used to implement the project.

- **Chapter 5: "Conclusion and Future Works"** - In this concluding chapter, we have successfully completed the project and discussed our future endeavors and plans for its expansion.

Chapter 2: Background Study and Literature Review

Background Study

In its current state, many online shoe stores fail to meet modern shopper expectations due to disorganized catalogs and limited product details, making it difficult to find the ideal footwear. The proposed system addresses these gaps with a comprehensive inventory featuring detailed profiles, including high-quality images, size guides, material descriptions, and advanced filters for occasion, foot type, and weather. Sellers will benefit from an intuitive dashboard for managing listings and real-time updates, ensuring accuracy. Buyers will enjoy features like AR-powered virtual try-ons, a smart fit guide based on foot measurements, and real-time chat for queries. Standardized product details and a dedicated eco-friendly section enhance consistency and appeal. With these improvements, the platform promises a seamless, engaging, and efficient shopping experience for all users.

2.1 Literature Review

Through the study of existing literature and related systems, we identified gaps in the functionality and usability of current online shoe stores. Many platforms lack detailed product profiles, including size, material, and style specifications, which are essential for informed decision-making. Features such as AR-powered virtual try-ons, review/rating systems for customer trust, and advanced search filters based on preferences like foot type, occasion, and weather are also missing. Additionally, limited payment options and inconsistent inventory updates hinder the overall shopping experience.

The proposed online shoe store addresses these challenges by offering a well-organized catalog with intuitive navigation. Each shoe profile will feature high-resolution images, size charts, and detailed descriptions, ensuring customers have all the information they need. The platform integrates technologies such

as MySQL for robust database management and HTML, CSS, and JavaScript to create a responsive and user-friendly interface. Features like personalized recommendations, real-time stock updates, and secure checkout options enhance usability.

To streamline operations for sellers, the platform includes a dashboard for managing listings, inventory, and orders. For customers, advanced search filters, seamless cart functionality, and multiple payment options will ensure a smooth shopping experience. By bridging the gaps in current systems, this online shoe store aims to deliver a convenient, reliable, and engaging platform tailored to the modern shopper's needs.

Chapter 3: System Analysis and Design

3.1 System Analysis

3.1.1 Requirement Analysis

i. Functional Requirements:

- Shoe Catalog: Browse shoes with details like brand, size, material, price, and customer ratings.

- Shopping Cart and Order Management: Add shoes to the cart, manage quantities, and track orders.

- System Access:

- User: Browse, filter, and purchase shoes.

- Administrator: Manage inventory, update products, and
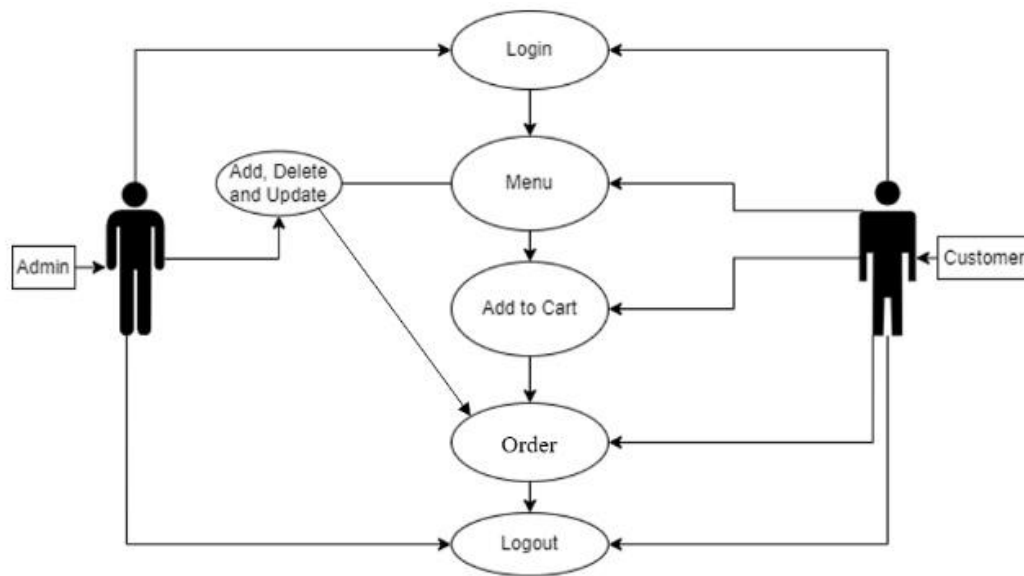
track sales.

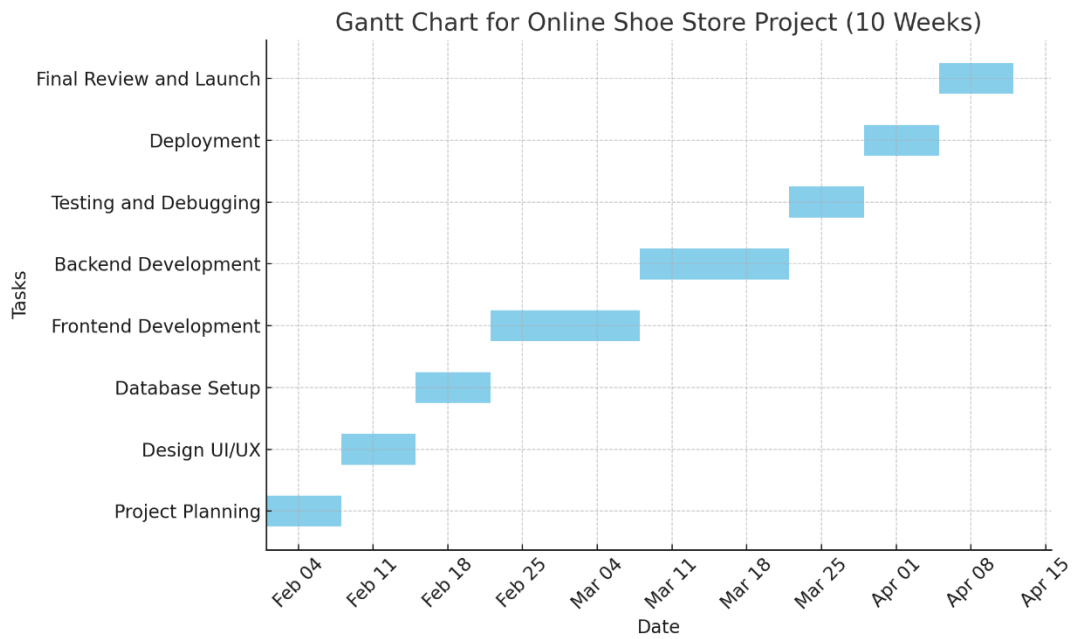**Fig 3.1: Use Case Diagram of Online Shoes Store**

ii. **Non-Functional Requirements:**

- Security: User login is secured with a unique ID and password for safe access.

- Performance: Ensure minimal response times for critical actions, such as adding items to the cart.

- Compatibility: Ensure the website works seamlessly across different operating systems, browsers, and devices.

3.1.2   Feasibility Analysis

i. **Technical Feasibility:** Using PHP and MySQL for the backend, and HTML, CSS, and JavaScript for the frontend ensures a reliable, scalable system. As a web-based app, it's compatible with standard devices and browsers, ensuring wide accessibility.

ii. **Operational Feasibility:** The system's intuitive design makes it easy for users and administrators to navigate. Admins can manage inventory and update items without extensive training. The simplicity of the platform ensures quick user acceptance.

iii. **Economic Feasibility:** Leveraging open-source technologies minimizes development and operational costs. Being a web app, it's accessible on any device, reducing the need for additional hardware or software investments. The ease of use leads to fast implementation and low training costs.

iv. **Schedule Feasibility:** A clear project timeline, broken into phases, ensures structured progress. A Gantt chart will be used to monitor tasks and coordinate efforts effectively.

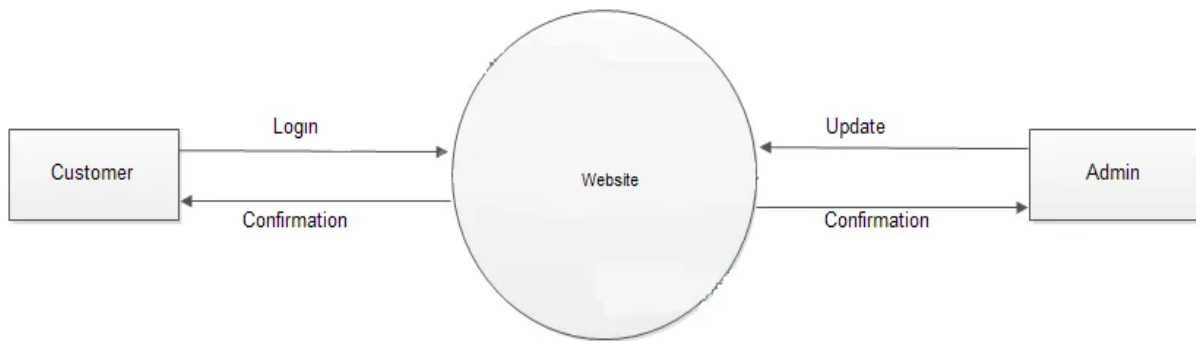**Fig 3.2: Grant Chart of Online Shoes Store**

3.1.3 Data Modeling
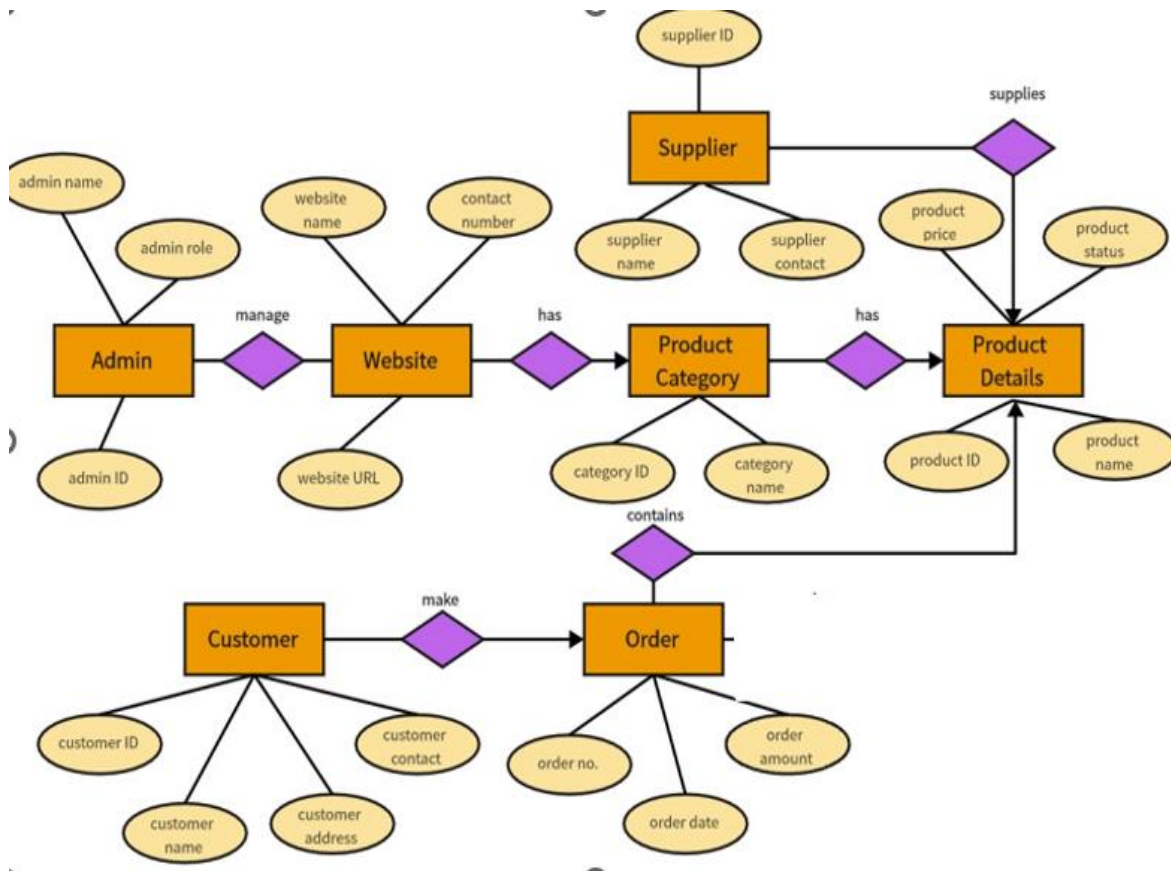
Fig 3.3: ER Diagram of Online Shoes Store

3.1.4 Process Modeling

i. Context Level Diagram/ Level 0 DFD:

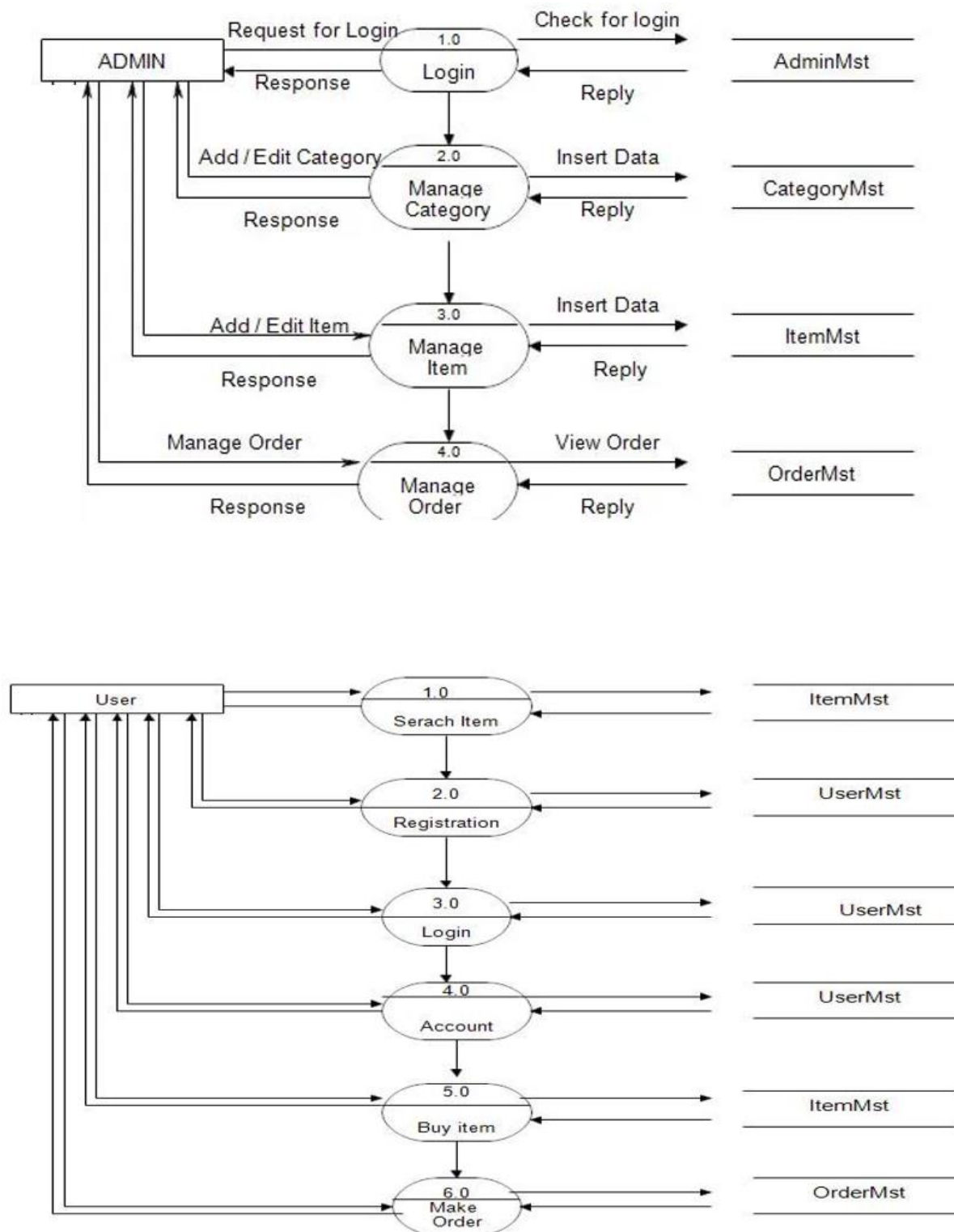**Fig 3.4: Context Level Diagram of Online Shoes Store**

ii.   Level 1 DFD:

Fig 3.5: Level 1 DFD of Online Shoes Store
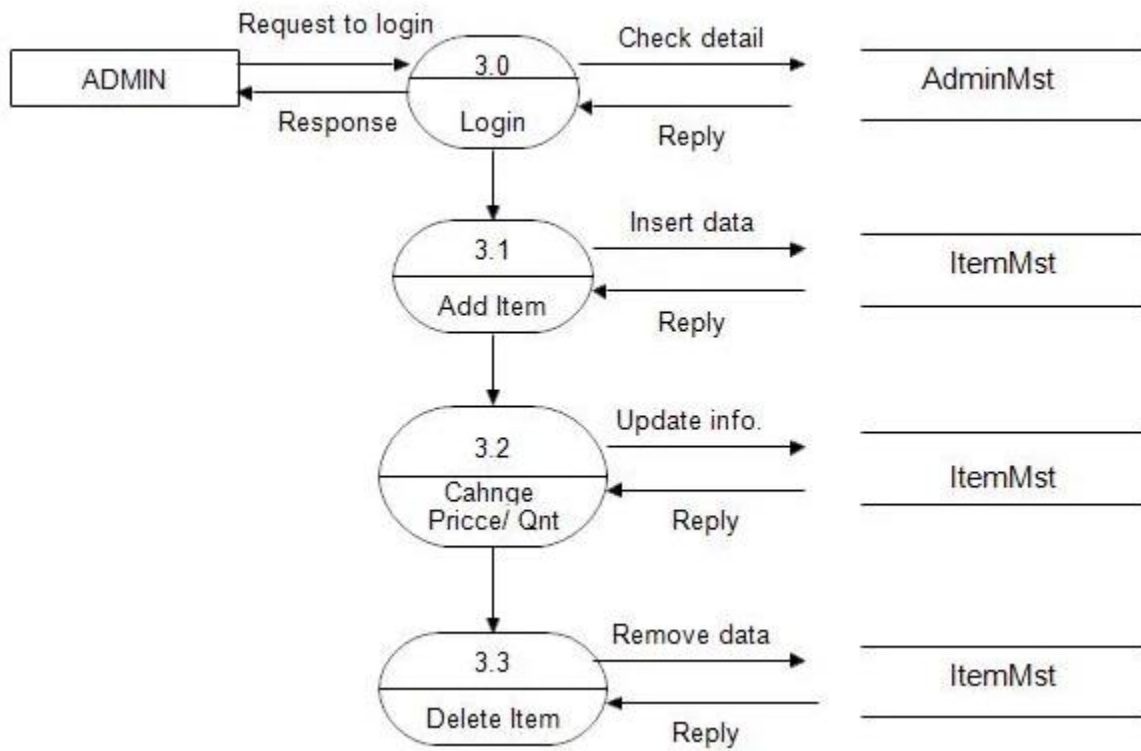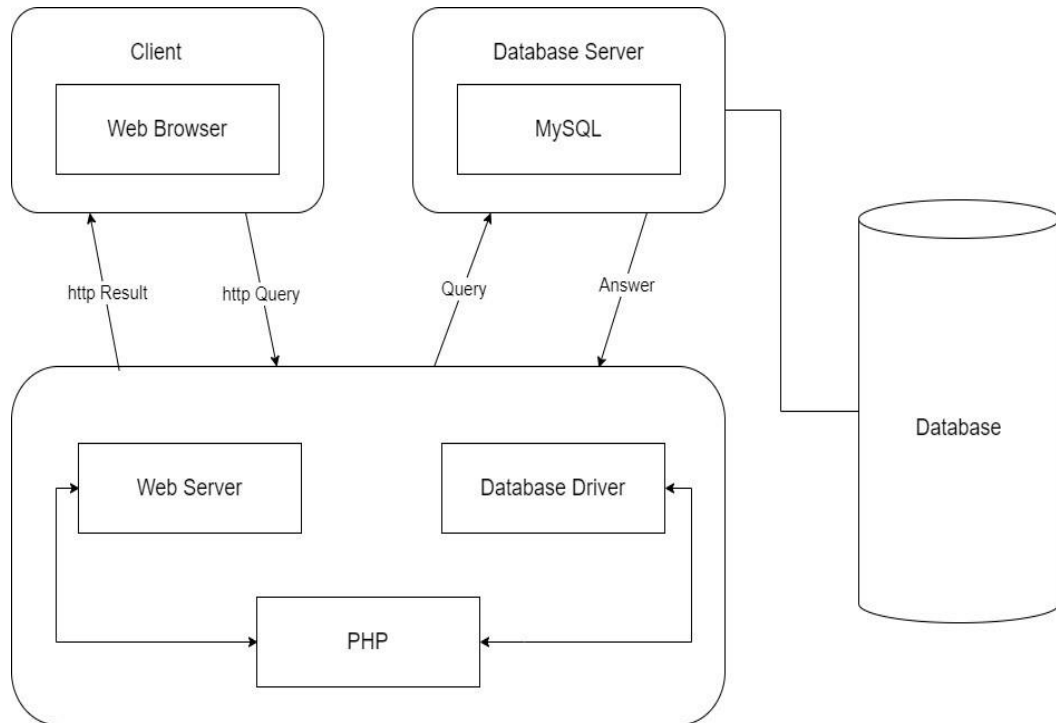
11

iii.   Level 2 DFD:

Fig 3.6: Level 2 DFD of Online shoes Store
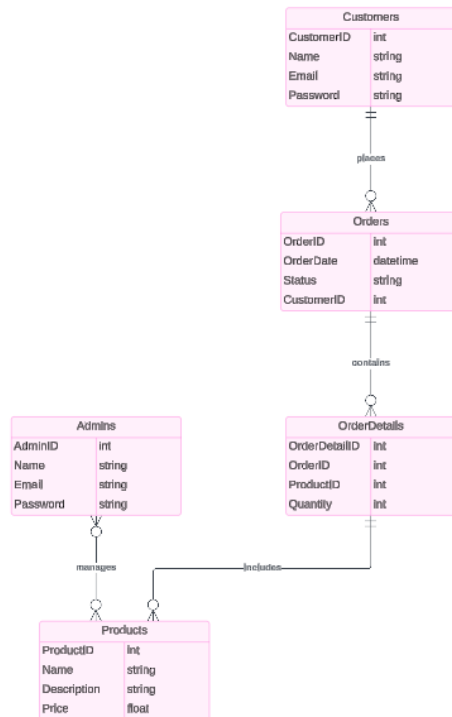
3.2   System Design

3.2.1   Architectural Design

Architectural Design entails the systematic identification of a system's constituent sub- systems and the establishment of a framework governing the control and communication among these sub-systems.

Fig 3.7: Architectural Design

Database Schema Design

Customers

CustomerID	int
Name	string
Email	string
Password	string

places

Orders

OrderID	int
OrderDate	datetime
Status	string
CustomerID	int

contains

Admins

AdminID	int
Name	string
Email	string
Password	string

OrderDetails

OrderDetailID	int
OrderID	int
ProductID	int
Quantity	int

manages

includes

Products

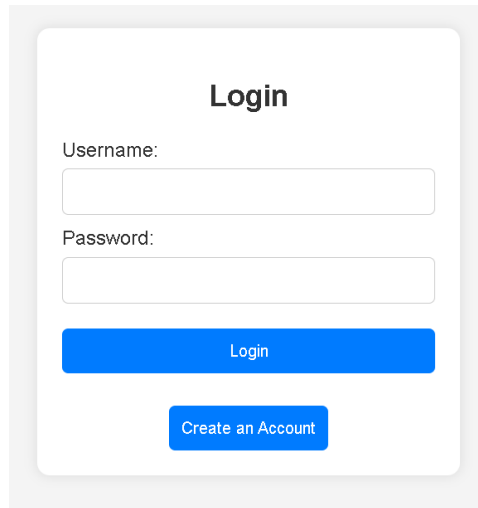| ProductID | int |
Name	string
Description	string
Price	float

**Fig 3.8 : Database Schema Diagram of Online Shoes Store**

3.2.2　Interface Design

Interface design, commonly known as user interface (UI) design, involves creating the visual layout and interactive elements of digital products such as websites, mobile apps, and

software applications. The aim is to optimize the user experience by making interactions with the product intuitive, efficient, and enjoyable.

Fig 3.9: User Login Page
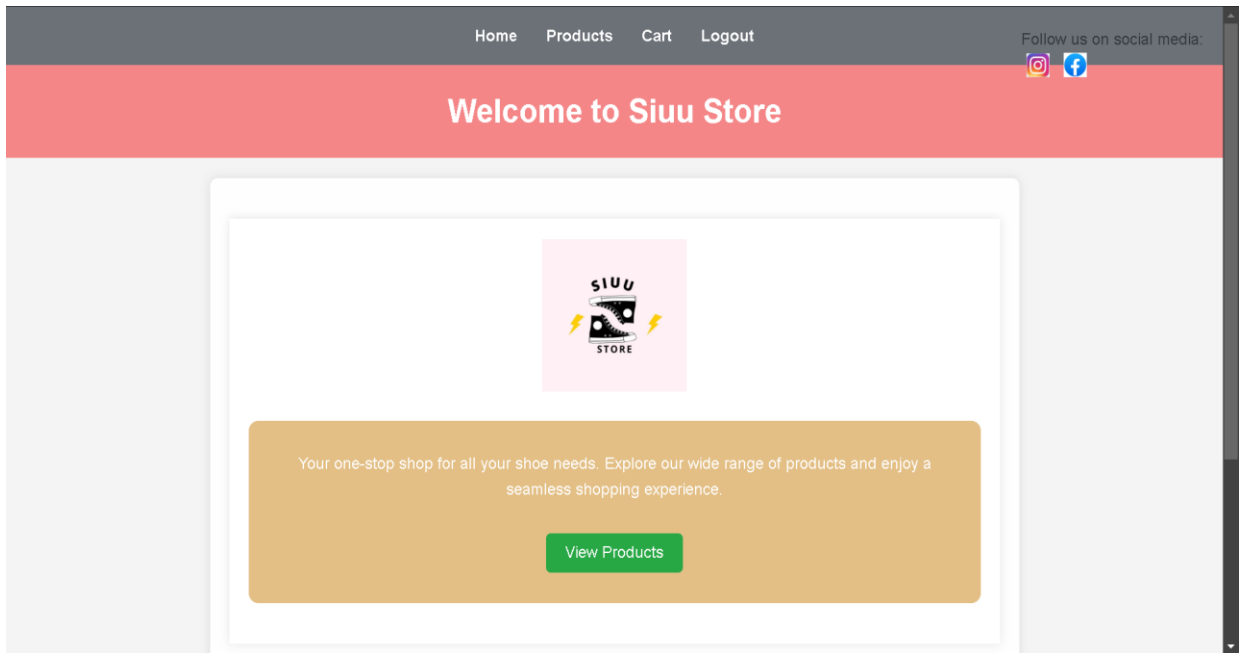
Fig 3.10: Customer Home

Chapter 4: Implementation and Testing

4.2 Implementation

The implementation phase is a crucial stage in the waterfall method, where the planned system or software solution is transformed from a conceptual design into a tangible reality.

4.2.1 Tools Used

A variety system tools have been used in developing both the front-end and back-end of the system. The tools and technologies that we used for developing the system are mentioned below:

i. **Programming Languages:**

- **HTML (Hyper-Text Markup Language):** HTML is used in out project as HTML is universally supported by all web browsers, ensuring consistent rendering of web pages across different devices and platforms.

- **CSS (Cascading Style Sheets):** CSS is used in our project as CSS enhances the visual appeal and user experience of the web pages by providing a consistent and attractive design.

- **JavaScript (JS):** JS is used in our project because JavaScript improves the user experience by making web pages more interactive and responsive to user actions.

- **PHP:** We have used PHP for server-side scripting because PHP allows for the creation of dynamic web pages that can display different content based on user interactions or other inputs and can easily integrate with various databases, making it ideal for developing data-driven applications and websites.

ii. **Integrated Development Environment (IDE):**

- **VS Code (Visual Studio Code):** VS Code is used as text-editor in our project because it is a free source code editor with robust features, extensions and a powerful debugger for coding in HTML, CSS, JS and PHP.

iii. **Database:**

- **MySQL:** We have used MySQL for database as it is an open-source relational database management system used for storing and managing structured data and it is also reliable, scalable and easy to use.

iv. **UI/UX Design:**

- **Figma:** To design UI/UX of our project we have used Figma as it is a cloud-based designing tool that allows collaborative designs, prototyping and it also allows designers to work together in real-time, creating visually appealing and user- friendly designs.

v. **Diagrams:**

- **Draw.io:** To create various diagram for documentation we have used darw.io which is a free online diagramming tool with wide ranges of templates, shapes for creating diagrams like ER and DFD diagrams.

4.2.2 Implementation of Module

Incorporating a module into the web application entails the process of designing and seamlessly integrating distinct features and capabilities into the digital platform. This section outlines various modules of our project:

i. **Users Module:** The user module is essential to deliver a streamlined experience for user to engage in various features of ecommerce through our web application. It includes features such as:

- **Registration Process:** Users when first try to buy or sell products they have to create an account with personal credentials which are later used to log in to the system. Users can sign up using sign up page with the right credentials.

18

- **Login Process:** Uses user's credentials like username and password to authenticate the user or they can simply login from their google-account and redirect to the home page.

- **Cart Process:** User can add the desired product to cart, delete the products from the cart.

- **Checkout Process:** Provide a "Checkout" button that leads to a checkout page/form.

- **Cancel Order Process:** Allows users to cancel their order if they decide not to proceed with the purchase.

- **Logout Process:** On the navbar, there is a logout button when clicked it destroys the session and then redirect the user to the home page.

ii. **Admin Module:** The admin module focuses on providing a seamless experience and functionality to the admin.

- **Login Process:** Uses credentials like username and password to authenticate the admin and redirect them to the Home.

- **Shoes Process**: In this module the admin can manage operation related to the Shoes.

- **Order Process:** In this module operation related to the order like accepting or rejecting the order or delivered takes place.

- **Logout Process:** On the navbar, there is a logout button when clicked it destroys the session and redirects to the login page

4.3 Testing

Testing is an essential phase in software development that entails the assessment and verification of a software application to guarantee it aligns with its specified requirements, operates as intended, and remains devoid of defects or glitches.

4.3.1   Test Case for Unit Testing

Unit testing is a foundational practice within software development, focusing on the examination of discrete code components or units in isolation to confirm their proper operation.

Table 4.1: User Registration and Authentication Test Cases

S.no	Test case	Input	Expected result	Actual result	Status
1.	User Registration	User provides valid registration details (username, email, password)	User account is created successfully, and they are redirected to the login page.	User account is created successfully, and they are redirected to the login page.	PASS
2.	User Login	User provides valid login credentials (username and Password).	User is successfully authenticated and redirected to the user dashboard.	User is successfully authenticated and redirected to the user dashboard.	PASS
3.	Authentication Failure	User provides incorrect login credentials.	Authentication fails, and an error message is displayed.	Authentication fails, and an error message is displayed.	PASS

Table 4.2: Add to cart Test Cases

S.no	Test case	Input	Expected result	Actual result	Status
1.	Add to cart	User clicks on add to cart button.	The item is added to the cart.	The item is added to the cart.	PASS
2.	View Cart	User clicks on cart button.	User cart's items are displayed.	User cart's items are displayed.	PASS
3.	Delete cart	User clicks on delete button.	User cart item is deleted.	User cart item is deleted.	PASS

Table 4.3: Order Test Cases

S.no	Test case	Input	Expected result	Actual result	Status
1.	Create an order	User clicks on proceed to checkout button.	An order is created and the user is redirected to home page.	An order is created and the user is redirected to home page.	PASS
2.	View order	Users click on orders button.	User is redirected to order page with list of all orders.	User is redirected to order page with list of all orders.	PASS
3.	Cancel order	Users click on cancel order button.	User is redirected to order page with list of all orders.	User is redirected to order page with list of all orders.	PASS

Table 4.4: Admin Order-Management Test Cases

S.no	Test case	Input	Expected result	Actual result	Status
1.	View Approving a pending order	Admin clicks on pending order inside order button.	List of all pending orders are displayed.	List of all pending orders are displayed.	PASS
2.	Complete the orders	Admin clicks on Completed order inside order button.	List of all completed orders are displayed.	List of all completed orders are displayed.	PASS
3.	Cancel the orders	Admin clicks on Cancelled order inside order button.	List of all cancelled orders are displayed.	List of all cancelled orders are displayed.	PASS
4	Delete the order	Admin clicks on Delete order inside order button.	Delete the order	Delete the order	PASS

Table 4.5: Shoes-Management Test Cases

S.no	Test case	Input	Expected result	Actual result	Status
1.	Add Shoes	Admin clicks on add Shoes button.	Admin is redirected to add Shoes page.	Admin is redirected to add Shoes page	PASS
2.	List Shoes	Admin redirects to dashboard with a list of all Shoes	Admin is displayed with list of all Shoes.	Admin is displayed with list of all Shoes	PASS
4.	Delete Shoes	Admin clicks on Delete Shoes button.	Admin is redirected to delete Shoes page	Admin is redirected to delete Shoes page	PASS
5.	Update Shoes	Admin clicks on Update Shoes button.	Admin is redirected to Update Shoes page	Admin is redirected to Update Shoes page	PASS

4.3.2   Test Case for System Testing

System testing is a type of software testing that evaluates the overall functionality and performance of a complete and fully integrated software solution.

Table 4.6: Session Test Cases

S.N.	Test Case Description	Input	Expected Result	Actual Result	Pass / Fail
1	Verify user registration with valid details.	Valid details	User is registered successfully.	User is registered successfully.	PASS
2	Verify that valid credentials allow the user to log in	Valid credentials	User is logged in	User is logged in	PASS
3	Verify that invalid credentials result in an error message	Invalid credentials	Error message is displayed	Error message is displayed	PASS
4	Verify that all the buttons on the home page work as expected	N/A	All the buttons work as expected	All the buttons work as expected	PASS
5	Verify that the user can add the number of chosen shoes in to their cart and place order.	shoes name: Jordan	Item added and order placed	The item is added and order is placed	PASS
6	Verify that order can be Cancelled.	User presses cancel button.	The order is cancelled.	The order is cancelled.	PASS
7	Verify that a new Shoes can be added.	New shoes details.	shoes added successfully.	shoes added successfully.	PASS
8	Verify that a shoes can be edited.	New Shoes details.	shoes is Edited.	Shoes is Edited.	PASS
9	Verify that a Shoes can be deleted.	N/A	The Shoes is removed from the database.	The shoes is removed from the database.	PASS

10	Verify that order can be completed.	Admin presses complete button.	The order is completed.	The order is completed.	PASS

11	Verify that order can be Cancelled.	User presses cancel button.	The order is cancelled.	The order is cancelled.	PASS

Chapter 5: Conclusion and Future Recommendation

5.1 Lesson Learnt and Outcome

Lesson Learnt:

- Acquire proficiency in full-stack web development.
- Gain expertise in using JavaScript, HTML and CSS for crafting website's frontend.
- Explore the significance of PHP as a programming language and its role in database connectivity.

Outcome:

The "Online Shoes Store" project successfully developed an online platform that efficiently facilitates the purchase of shoes and supports store management. Admins can manage shoe listings by adding, deleting, and viewing products, as well as overseeing user accounts and purchase orders. The admin panel provides an overview of available products, sales rates, and store announcements, along with graphs categorizing shoes by type, size, and availability. Users can browse available shoes, add items to their cart, and complete the purchase process online. They can also monitor the status of their order and cancel the order if needed.

5.2 Conclusion

The "Online Shoes Store" is more than just a platform for purchasing footwear; it's a transformative experience that brings comfort, style, and confidence to every step. Beyond the immediate benefits for customers, it plays a crucial role in promoting sustainable shopping and providing high-quality products that cater to diverse needs. Shopping at the Online Shoes Store means gaining access to a wide variety of footwear that combines fashion and functionality, ensuring a perfect fit for every occasion. Furthermore, by choosing this platform, you support ethical business practices, enhance convenience with a seamless online experience, and contribute to a community that values quality and customer
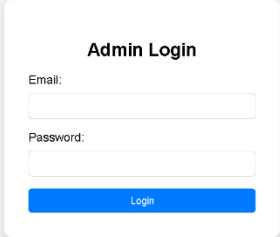
satisfaction.

5.3 Future Recommendations

- Multiple payment options

- Market Expansion

- Order Tracking

Appendices

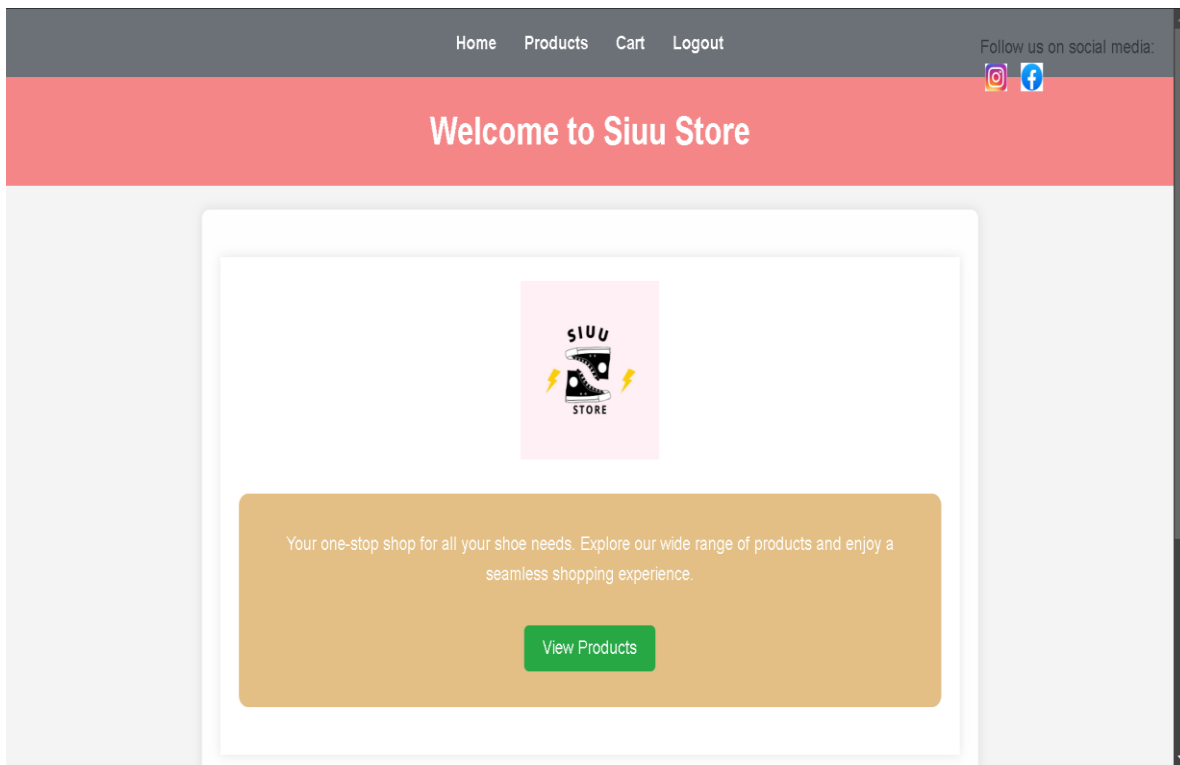**Figure 1: Admin Login**

Figure 2: Admin Manage Product
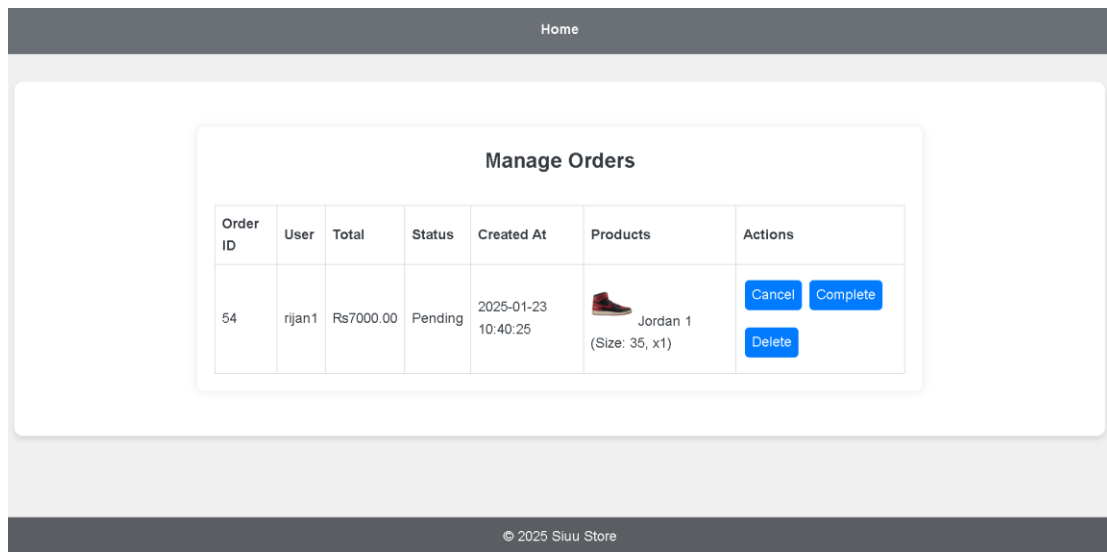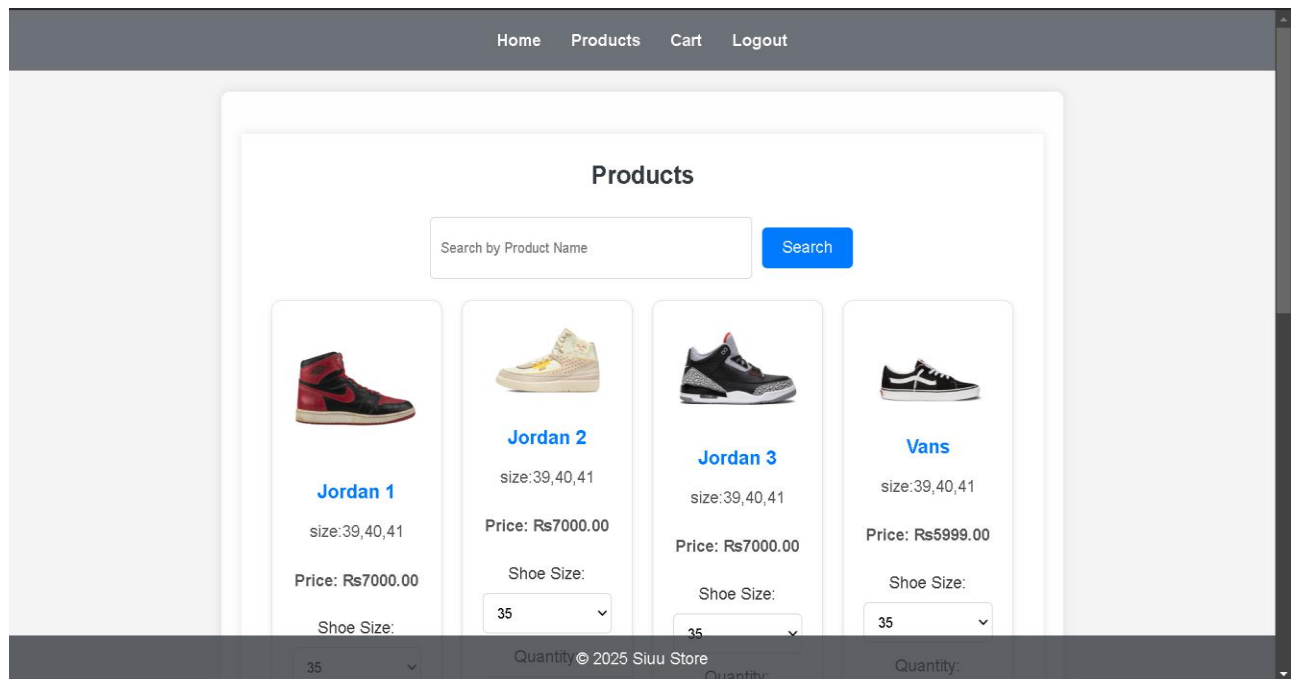
Figure 3: Admin Manage Order
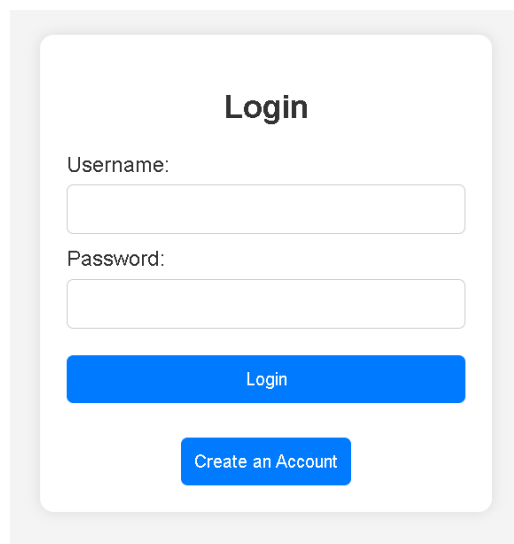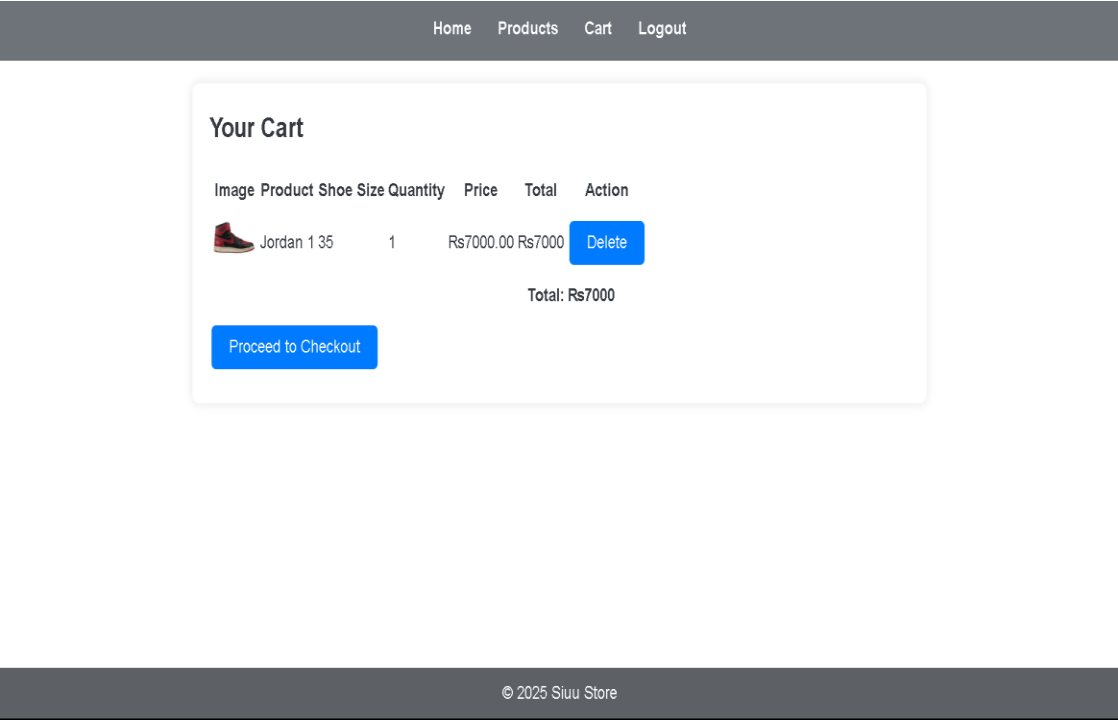

Figure 9: User Login Page

Figure 10: User Home Page

Figure 12: product page

Figure 13: Cart page

Order Confirmation

Your order has been placed successfully!

Thank you for shopping with us.

Continue Shopping
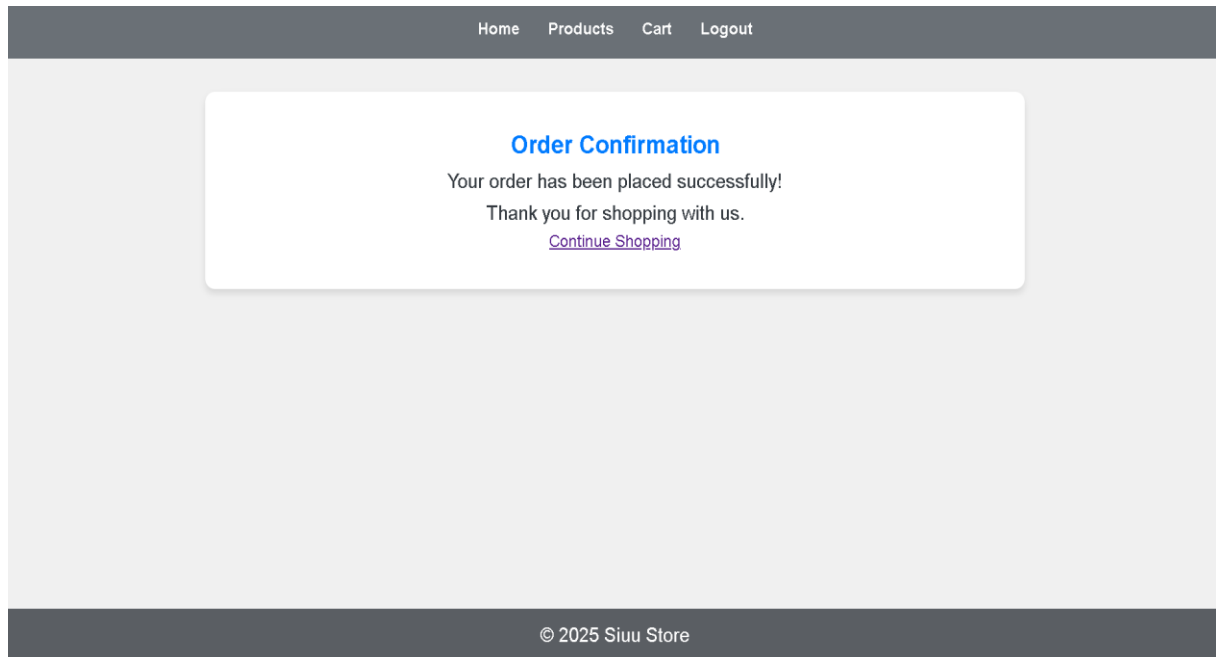
Figure 15: Checkout page

References

1. E. Meydani, T. B. Kurtoglu, and L. Zhang, "SHOPIFY - An Interactive Online Shoe Shop System."

2. N. I. Sautan and N. Hassan, "Preloved Shoes E-Store," Applied Information Technology and Computer Science, vol. 5, no. 1, pp. 1275–1291, 2024.

3. G. Purnama and W. Suprapto, "Shopping Enjoyment, in-Store Browsing and Impulse Buying on Sport Shoes Among the Generation Y," M.S. thesis, Petra Christian University, 2022.