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An Interactive Platform for Personalized Fashion Shopping

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CHAPTER 1

INTRODUCTION

1. Introduction

The introduction of the Software Requirements Specification (SRS) document defines the requirements for the development of an online clothes shop, which will be designed to sell clothes and shoes for men and women. The aim of this document is to gather and analyze and give an in-depth insight of the complete Online Shopping software system by defining the problem statement in detail. The detailed requirements of the Online Shopping System are provided in this document.

1.1 Purpose

The purpose of this SRS is to provide a comprehensive overview of the online clothes shop, its requirements, and its features. The document will outline the goals and objectives of the system and provide a detailed description of its functional and non-functional requirements. The SRS will also describe the target audience, user interface, hardware and software requirements, and overall functionality of the online shop.

1.2 Scope

The scope of this SRS covers the requirements for an online clothes shop designed to sell clothes and shoes for men and women. The main features of the online shop include the ability for customers to create an account, browse products, add products to a shopping cart, and make payments using a Visa card. The constraints of the online shop include that delivery is only available within the borders of the country.

1.3 Definitions, Acronyms, and Abbreviations

There are no specific definitions, acronyms, or abbreviations used in this document.

1.4 References

- Business of Fashion (BoF)d in this document.
- Vogue Business
- WooCommerce Documentation
- The Rise of Social Commerce in Fashion
- E-commerce Trends 2025

1.5 Overview

The remaining sections of this document provide a general description of the online clothes shop, including its characteristics and the functional and data requirements of the system. Section 2 provides a general description of the system and its users, while Section 3 outlines the functional requirements, data requirements, and constraints of the system. Section 4 describes the external interface requirements, and Section 5 provides supporting

CHAPTER TWO
OVERALL DESCRIPTION

2. Overall Description

The online clothing store is a web-based platform that enables users to explore, search for, and purchase clothing and footwear for both men and women. Accessible through any web browser, the store provides convenient shopping from any location with an internet connection. Customers have the option to create an account on the platform, where their personal details such as name, email address, and shipping information are securely stored.
This account enhances the shopping experience by offering faster checkouts and a more personalized approach.
The store features a diverse selection of products categorized for easy navigation. Customers can search for items by name or description, view detailed product information, and add desired products to their shopping cart.
The shopping cart allows them to review, modify, or update their order before proceeding to checkout.
At the checkout stage, customers provide their shipping and payment information, including credit card details, to finalize their purchase. The platform is equipped with robust security protocols to protect customer data and prevent unauthorized access. In addition, users can access their order history and track the status of their purchases, ensuring transparency throughout the shopping process. The platform is designed to be user-friendly, featuring an intuitive interface that accommodates users with disabilities and supports various web browsers and operating systems. It is also important to note that the delivery service is restricted to addresses within thecountry.

CHAPTER THREE
SPECIFIC REQUIREMENTS

3. Specific Requirements

3.1 Functionality

This section of the SRS outlines the various features and functionalities of the online clothing store. It encompasses key capabilities such as product browsing, searching, and purchasing. Additionally, customers can maintain personalized profiles, access customer support, view detailed invoices, and enjoy other services. The section also covers requirements for implementing online promotions, offering rewards, and providing options to modify orders or complete purchases seamlessly.

3.1.1 Sell Configured to Ordered Products

The system must provide customers with the flexibility to either purchase pre-designed products or customize items to their specifications before placing an order. For instance, customers can choose a product, adjust its features according to their preferences, and then finalize their order for the customized product.

3.1.2 Provide Comprehensive Product Details

The platform should ensure that customers can access detailed product information, including images, descriptions, pricing, available sizes, colors, and stock availability. This information must be presented clearly and organized in a way that allows for easy understanding.

3.1.3 Detailed Product Categorizations

The system should effectively organize products into main categories and subcategories to enhance browsing and searching. Categories may include gender, age group, product type, brand, price range, and other relevant classifications, ensuring a streamlined shopping experience for users.

3.1.4 Maintain Customer Profile

The system should maintain individual customer profiles that store personal information, such as name, address, email, and phone number. This data is essential for offering personalized services and support.

3.1.5 Provide Personalized Profile

Customers should have access to a personalized dashboard where they can view their order history, monitor the status of their orders, and manage their account details and preferences.

3.1.6 Provide Customer Support

The system should offer multi-channel customer support, including options like email, phone, and live chat. Support representatives should be available to assist customers, resolve inquiries, and address any issues.

3.1.7 Detailed Invoice for Customer

The system must provide each customer with a detailed invoice listing the purchased products, prices, taxes, shipping fees, and any applicable discounts or promotions.

3.1.8 Provide Shopping Cart Facility

The platform should include a shopping cart that enables customers to add products, review their selections, and complete their purchase in one transaction. The cart should display the total cost, applicable discounts, and shipping charges.

3.1.9 Allow Online Change of Order

Customers should have the ability to modify their orders before finalizing them, including adding or removing items, changing shipping addresses, or selecting a different payment method. These changes should be manageable through their profile.

3.1.10 Offer Online Promotions and Rewards

The system should offer various online promotions, discounts, coupons, and loyalty points. These rewards should be prominently displayed and easy for customers to access and redeem.

3.1.11 Online Purchase of Products

The system should provide customers with the ability to securely purchase products online through a trusted payment gateway. The payment process should be user-friendly and support multiple payment options, including credit cards, debit cards, and digital wallets.

3.2 Non-Functional Requirements

3.2.1 Performance

The system must be capable of supporting a minimum of 1,000 concurrent users without experiencing significant performance degradation.

3.2.2 Security

The system should implement robust authentication and authorization mechanisms, ensuring that only authorized users have access to sensitive data.

3.2.3 Availability

The system should maintain an operational uptime of at least 99.9% each month, ensuring consistent access for users

3.2.4 Reliability

The system must be able to quickly recover from hardware or software failures within 5 minutes, minimizing data loss and maintaining user trust.

3.2.5 Usability

The platform should offer an intuitive and user-friendly interface that is easy to navigate, with clear instructions and helpful feedback for users.

3.2.6 Scalability

The system must be designed to accommodate increasing user traffic or data volume without requiring significant architectural changes.

3.2.7 Maintainability

The system should be built in a modular and extensible structure, simplifying future maintenance, updates, and enhancements.

3.2.8 Compatibility

The system must ensure compatibility with the latest versions of popular web browsers, operating systems, and hardware platforms.

3.2.9 Portability

The platform should be designed using technology that is independent of any specific hardware or software, allowing it to be easily deployed across various environments.

3.2.10 Performance Efficiency

The system should be optimized to minimize the use of system resources, such as CPU and memory, ensuring high performance without unnecessary overhead.

3.3 Usability

3.3.1 Graphical User Interface

The platform must offer a user-friendly and intuitive graphical interface that is visually appealing, allowing customers to easily access and use all features.

3.3.2 Accessibility

The system must be accessible to all users, including individuals with disabilities. It should comply with accessibility standards, such as the Web Content Accessibility Guidelines (WCAG), providing features like alternative text, descriptive labels, and keyboard navigation options.

3.4 Reliability & Availability

3.4.1 Back-end Internal Computers

The system's backend infrastructure should be consistently reliable, ensuring continuous availability for users. To achieve this, both hardware and software should be configured to minimize downtime, prevent data loss, and maintain data integrity. Regular backups must be performed, and a disaster recovery plan should be in place for quick restoration in case of any system failure.

3.4.2 Internet Service Provider

The system's connectivity relies on a dependable Internet Service Provider (ISP) that must guarantee constant availability. The ISP should offer redundant internet connections, ensuring the system remains online even if one connection fails. Additionally, the system must be capable of scaling to accommodate increased traffic without compromising performance.

3.5 Performance

The online clothing shop is a web-based platform hosted on a web server. The system's performance depends on various factors, including the user's internet speed and the device's hardware specifications (such as CPU, RAM, and graphics card). To ensure optimal performance across all devices, the system must be efficiently optimized to minimize resource consumption. Although performance may vary based on user devices, the platform should deliver a fast and responsive experience for all users.

3.6 Security

The online clothing shop must prioritize the protection of customer data and transactions through robust security measures. Secure Sockets Layer (SSL) encryption should be used to secure data transmission between the customer's device and the server, preventing unauthorized access to sensitive information.

To mitigate security threats, the system must implement measures to prevent attacks such as SQL injection and Cross-Site Scripting (XSS). This should include input validation, output encoding, and sanitization of user inputs to prevent malicious code execution.

Customer data, including names and addresses, should be securely stored in a database accessible only to authorized personnel. Regular data backups and disaster recovery procedures should be in place to ensure data integrity.

User accounts must be protected by a secure login system that employs password hashing and salting techniques. Additionally, strong password policies should be enforced, including minimum length requirements and complexity rules, to further safeguard customer accounts.

3.7 Supportability

3.7.1 Configuration Management Tool

The system must be maintained using a configuration management tool that tracks all changes to the product, ensuring they are properly documented and managed. This tool should enable version control, change management, and collaboration among developers.

It should also provide developers with the ability to track changes in source code, documentation, and other project components. Additionally, the tool should support the management of code branches and merging changes from different developers, ensuring the product remains consistently updated, secure, and well-documented

3.8 Design Constraints

3.8.1 Standard Development Tools

The system must be developed using widely recognized development tools that ensure maintainability and compatibility with various environments. These tools may include a text editor, a version control system, and a web server. By adhering to standard tools, the system can be easily updated, maintained, and enhanced over time.

3.8.2 Web-Based Product

The online clothing shop should function as a web-based platform, accessible through any web browser on any internet-connected device. It should be developed using standard web technologies, such as HTML, CSS, JavaScript, and PHP. The platform must be responsive and compatible with various web browsers, ensuring optimal performance and user accessibility. Fast loading times and a smooth user experience should be prioritized.

3.9 On-line User Documentation and Help System Requirements

The system should provide clear and accessible online documentation, guiding users in navigating and using the platform effectively. This documentation must cover essential processes, such as creating an account, browsing products, making purchases, and resolving common issues. In addition, a help system should be available, allowing users to access on-demand assistance. This may include a search function for quick answers and step-by-step instructions for specific tasks.

3.10 Purchased Components

The online clothing shop may integrate third-party components, such as payment gateways and shipping services, to enhance functionality and offer additional features. The use of these components should be properly documented, reviewed, and approved by the development team, ensuring compliance with industry standards like PCI-DSS.Any required licenses or agreements for using these third-party services should be acquired and maintained by the development team.

3.11 Interfaces

3.11.1 User Interfaces

The platform should feature a user-friendly and visually appealing interface, allowing customers to easily search, browse, and purchase products. The interface must include intuitive navigation, search and filter options, product descriptions with images, shopping cart functionality, and a smooth checkout process.

3.11.2 Hardware Interfaces

The system must be compatible with standard hardware devices, including personal computers, laptops, tablets, and smartphones. It should not require any specialized hardware components and must be accessible through standard web browsers.

3.11.3 Software Interfaces

The online store should be built using standard web development technologies, ensuring compatibility with commonly used web browsers. It should not require any additional software installation or plugins, providing a seamless experience for users.

3.11.4 Communications Interfaces

The platform should communicate securely with external services, such as payment gateways, shipping providers, and email service providers. This should be achieved using secure communication protocols, including HTTPS for secure data transmission, SMTP for email services, and REST APIs for interacting with external systems.

3.12 Licensing Requirements

The online clothing store must be distributed under a commercial license, granting customers the right to use the product for personal or commercial purposes. The license should clearly outline the terms and conditions of use, including any restrictions on distribution, modification, or resale of the product.

3.13 Legal, Copyright, and Other Notices

The product must display clear legal notices, including information on ownership, copyright, trademarks, and any associated legal disclaimers. These notices should also specify limitations of liability, warranty terms, and any other relevant legal information, ensuring compliance with intellectual property laws.

3.14 Applicable Standards

The system must comply with all relevant industry standards and best practices, including web development guidelines, accessibility standards, and data privacy regulations. Additionally, it should adhere to any other applicable industry-specific standards, ensuring the product is secure, user-friendly, and legally compliant.

CHAPTER FOUR
SUPPORTING INFORMATION

4. Supporting Information

Please refer the following document:

1. Use case analysis.

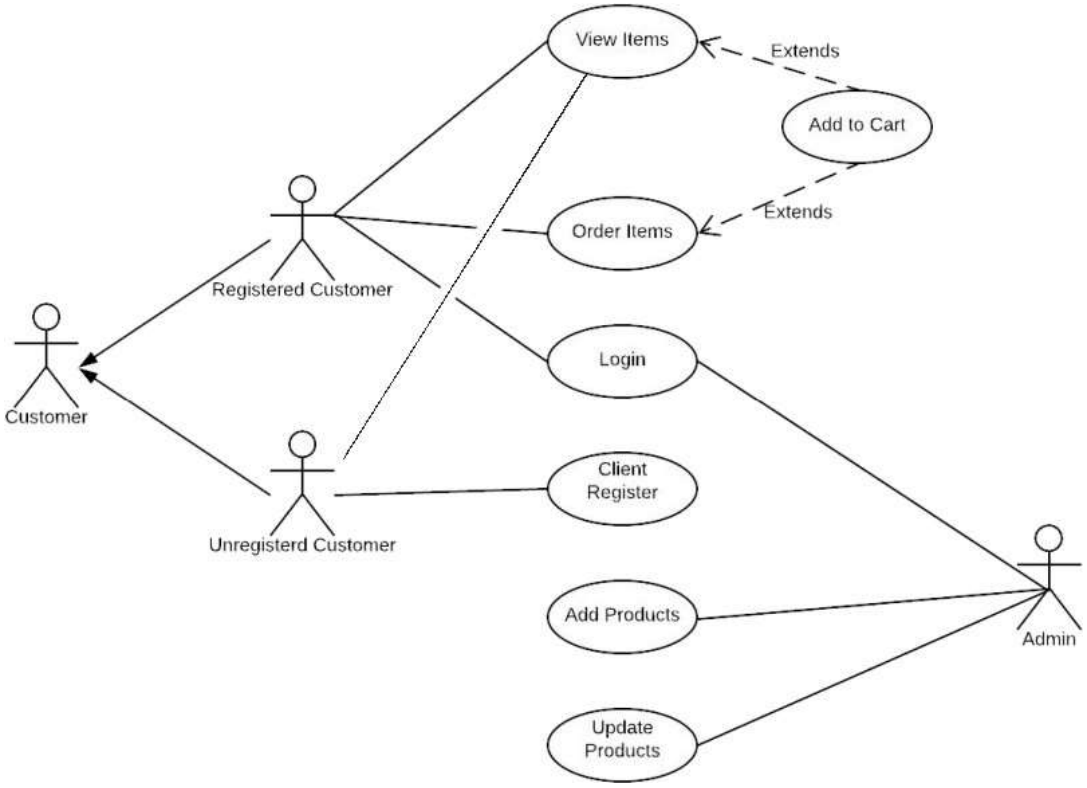
2. Activity Diagram

3. Sequence Diagram

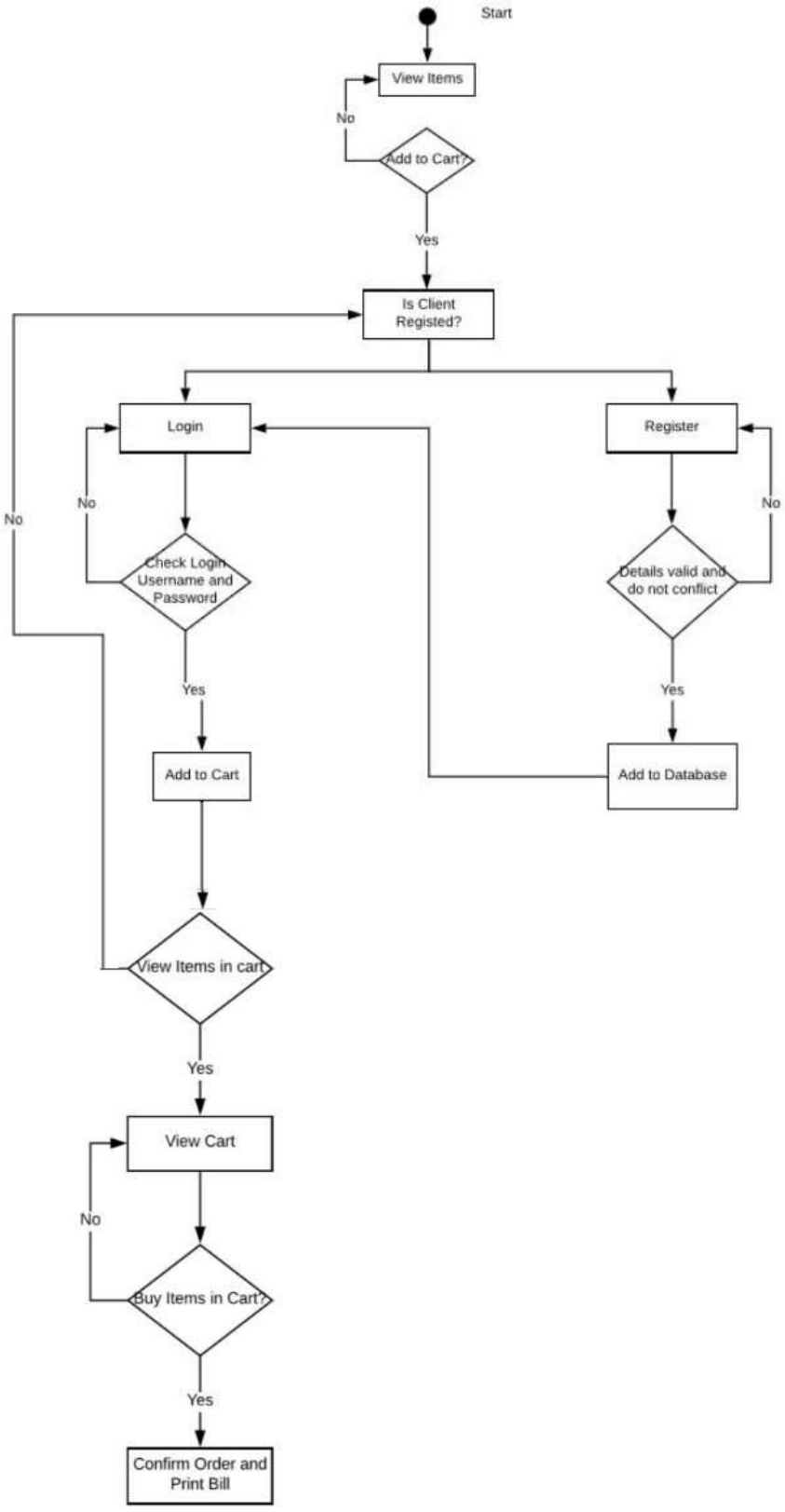
4. Class Diagram

5. ER Diagram

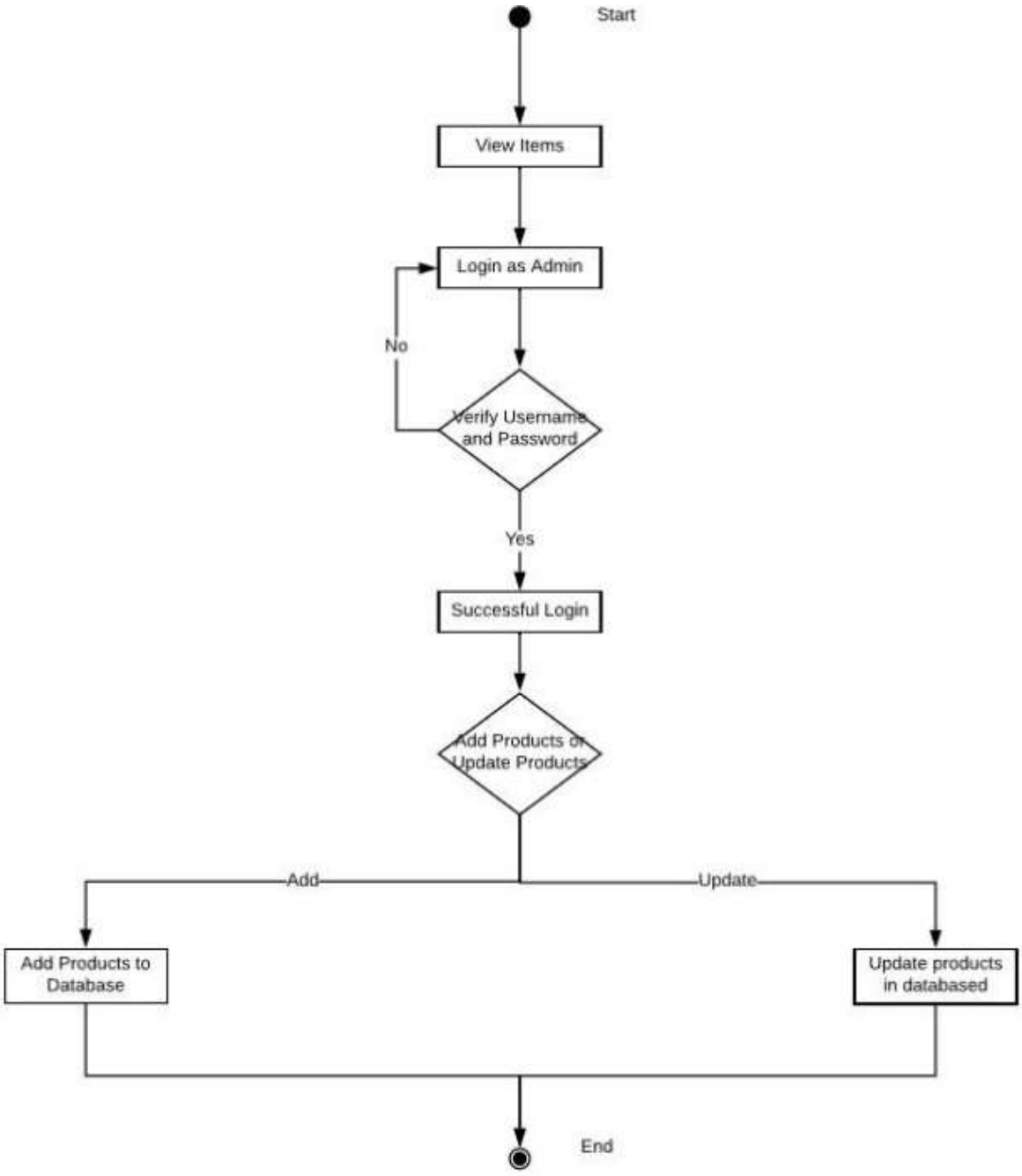
1. Use Case Diagram



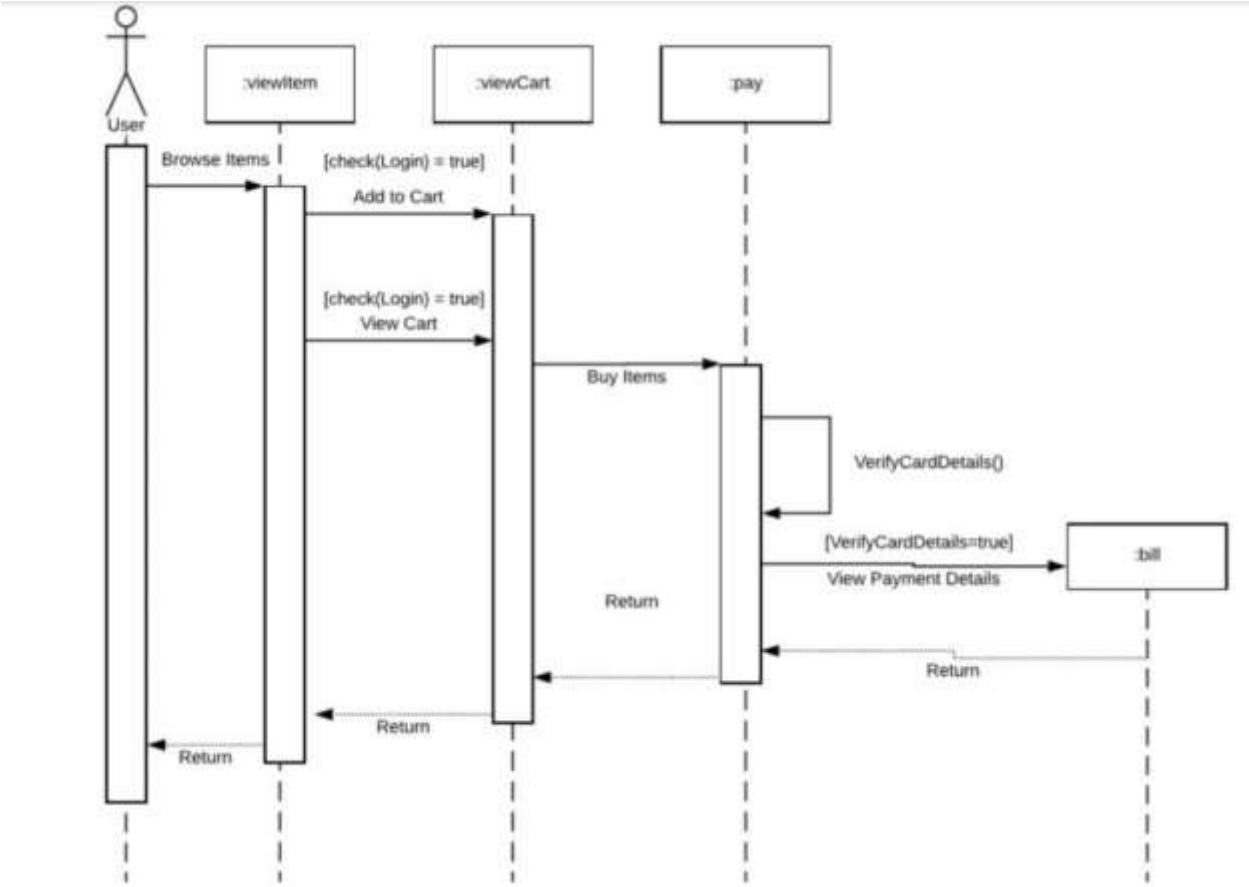
2. Activity Diagram(For user)

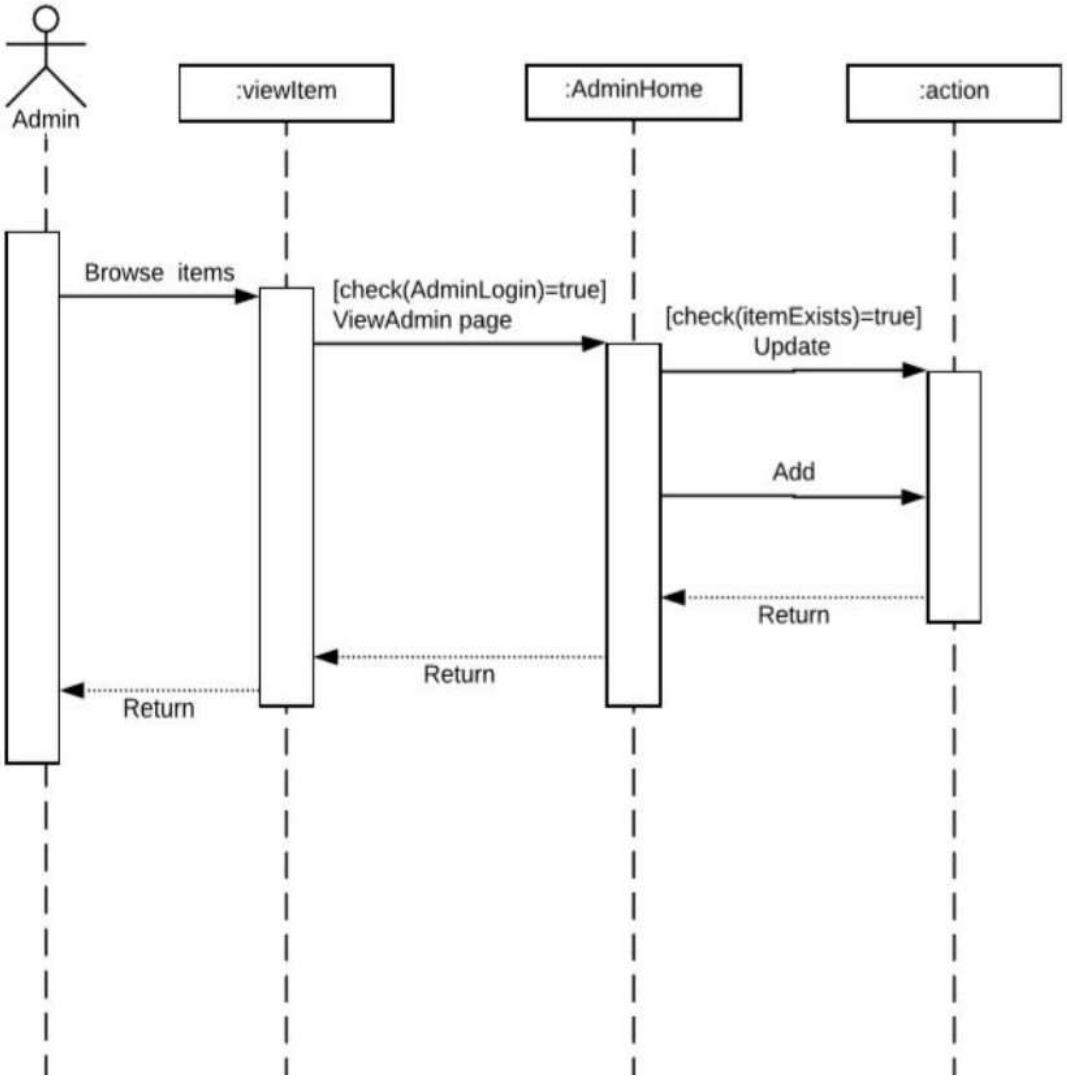


Activity Diagram (for Admin)



3. Sequence Diagram




Admin
:viewItem
:AdminHome
:action
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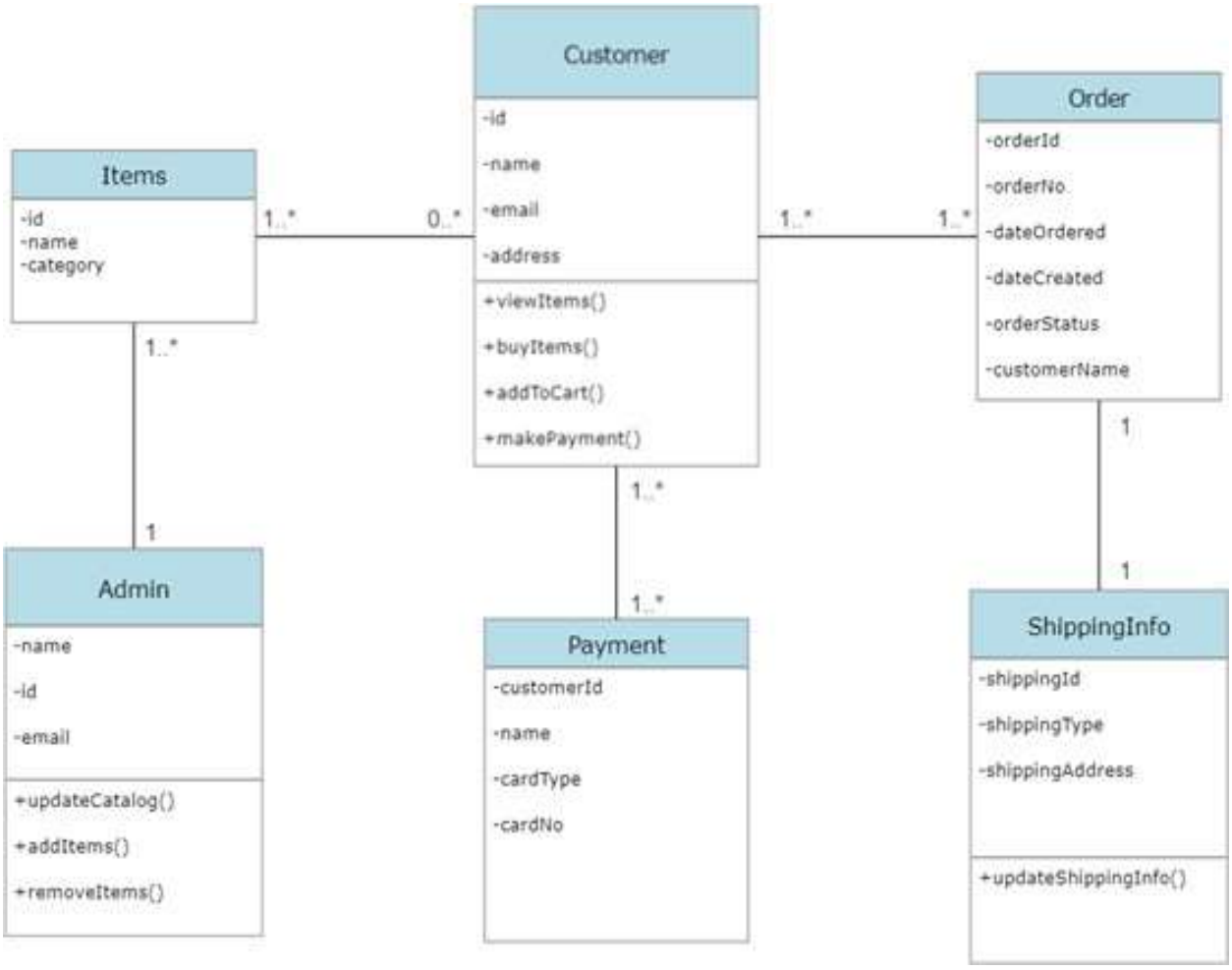
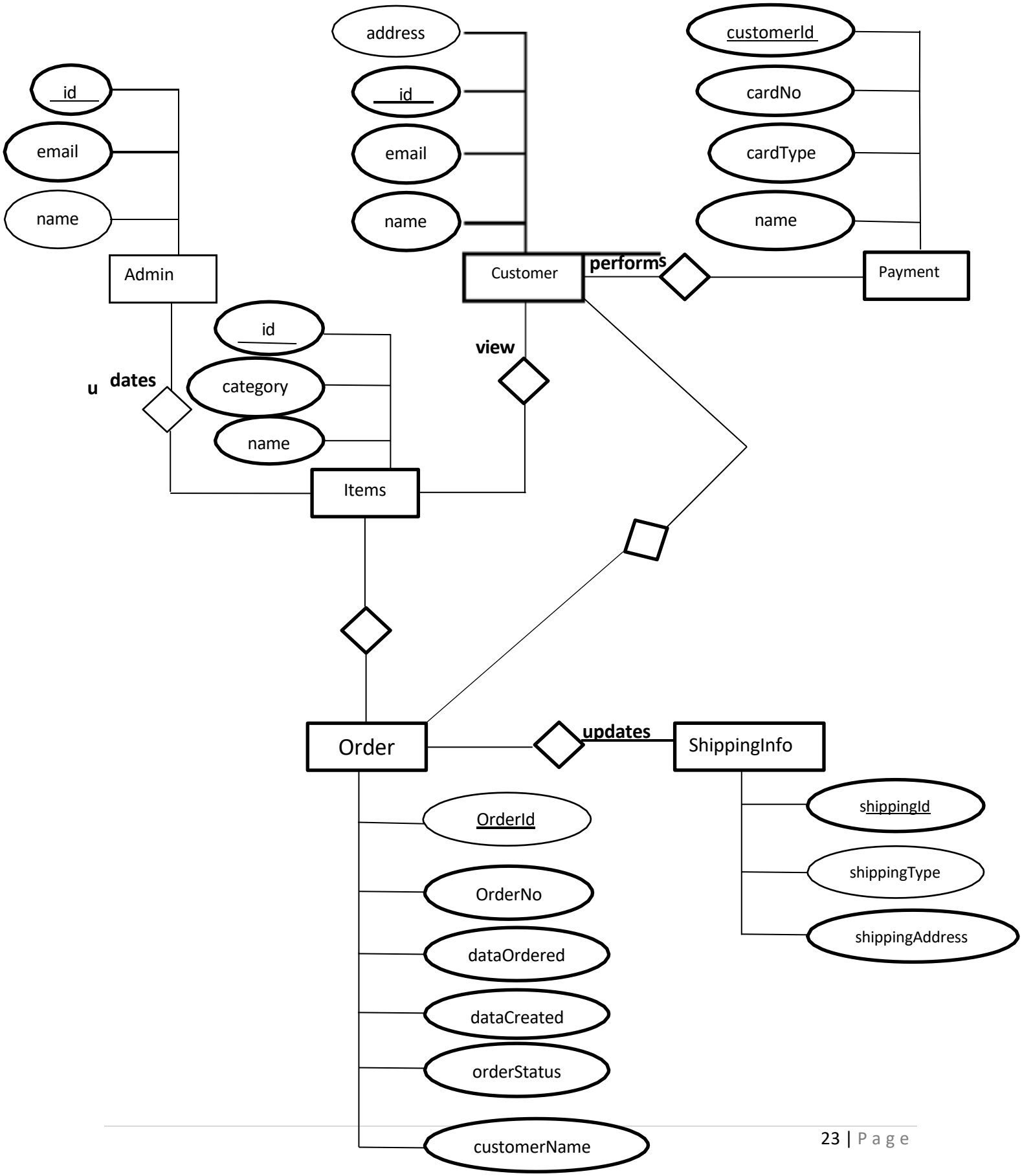
ViewAdmin page
[check(itemExists)=true]
Update
Add
Return
Return
Return

4. Class Diagram



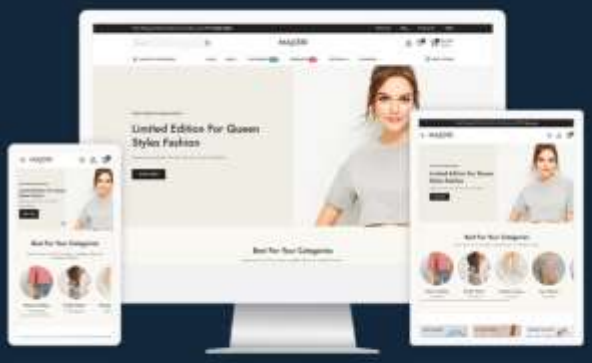
5. ERD

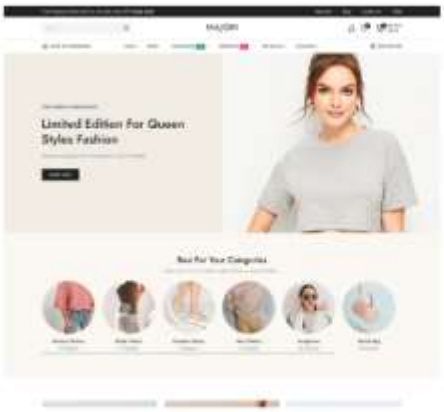

address
id
email
name
customerId
cardNo
cardType
name
id
email
name
Admin
Customer
performs
Payment
id
category
name
u
dates
view
Items
Order
updates
ShippingInfo
OrderId
OrderNo
dataOrdered
dataCreated
orderStatus
customerName
shippingId
shippingType
shippingAddress

Highly Attractive Responsive Design

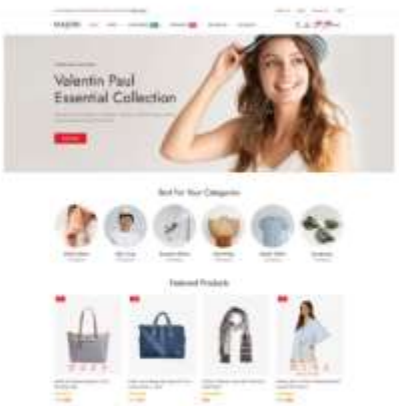
Optimize for Mobile Users: Turn Shoppers into Customers with a Mobile-First Experience.

- Easy scalable in each device
- Compatible with all browser
- Optimized SVG Icons
- Touch scrollable element

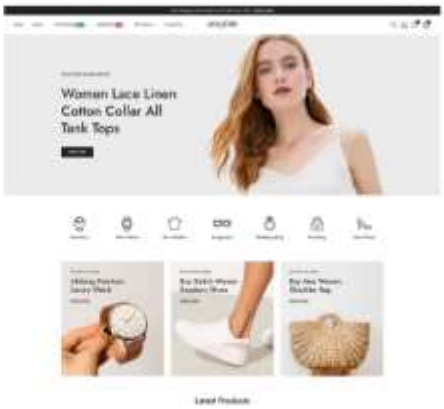




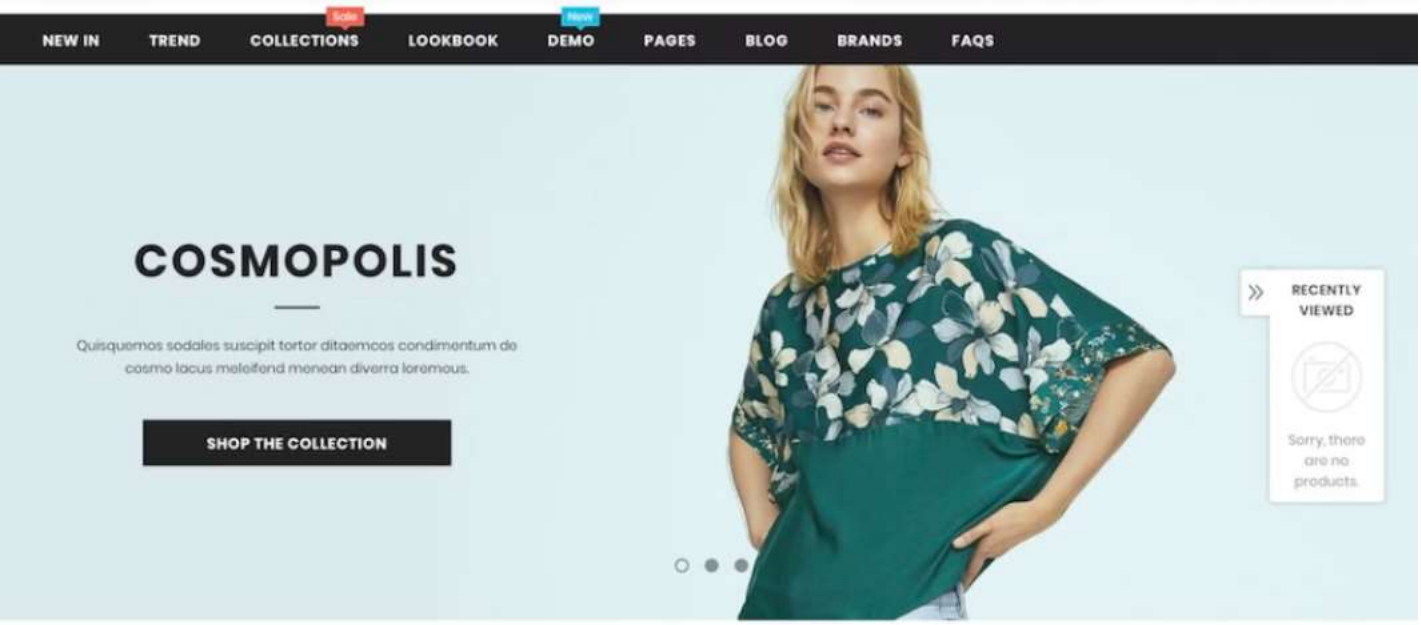
Layout 01



Layout 02



Layout 03

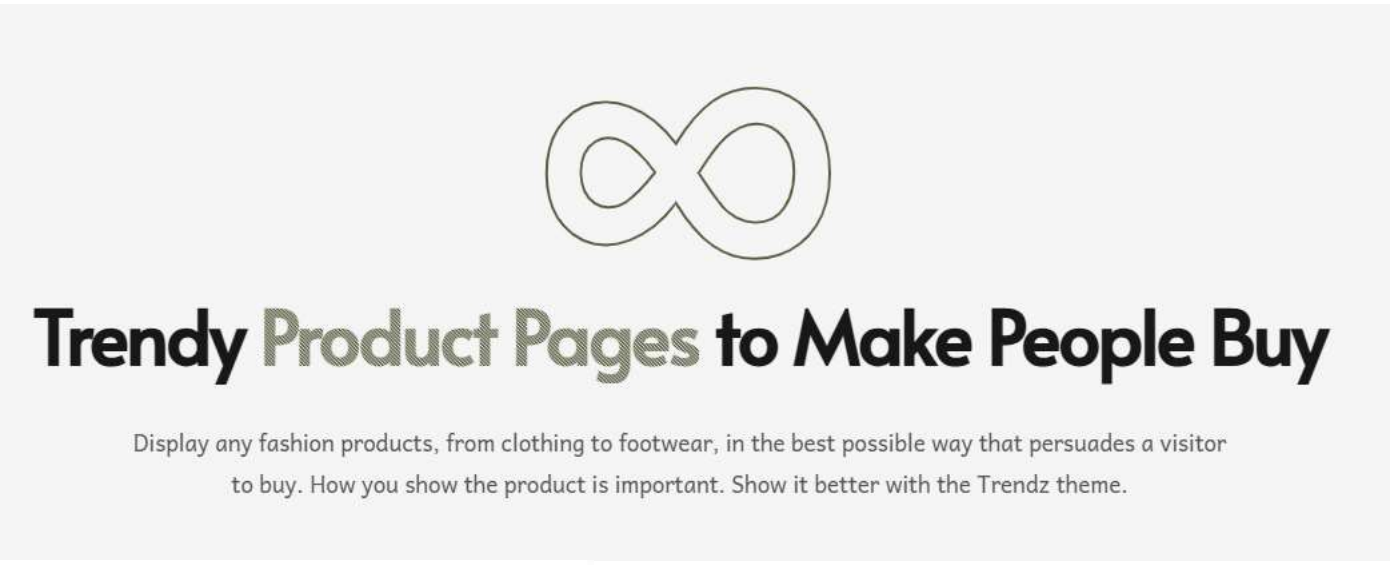


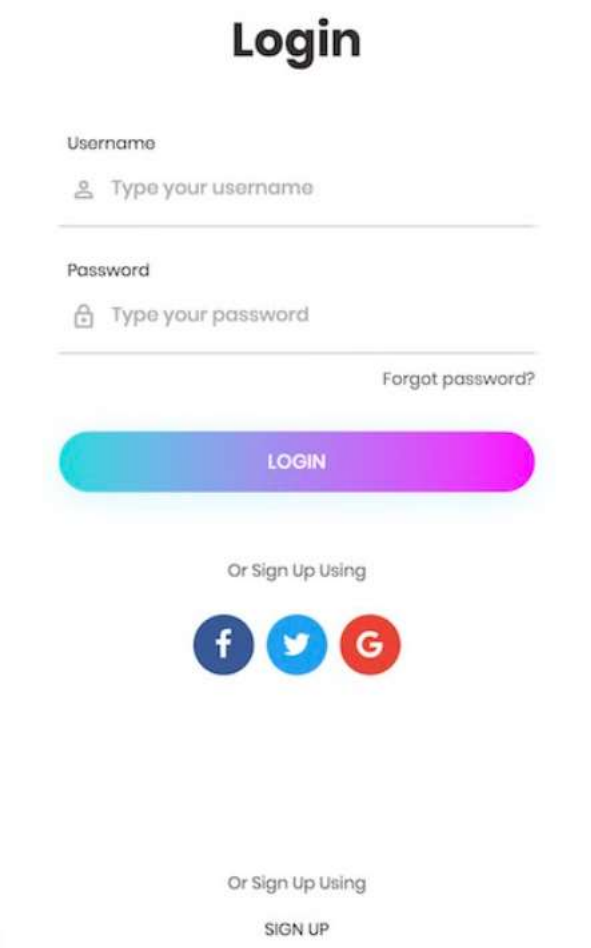
Enter store password

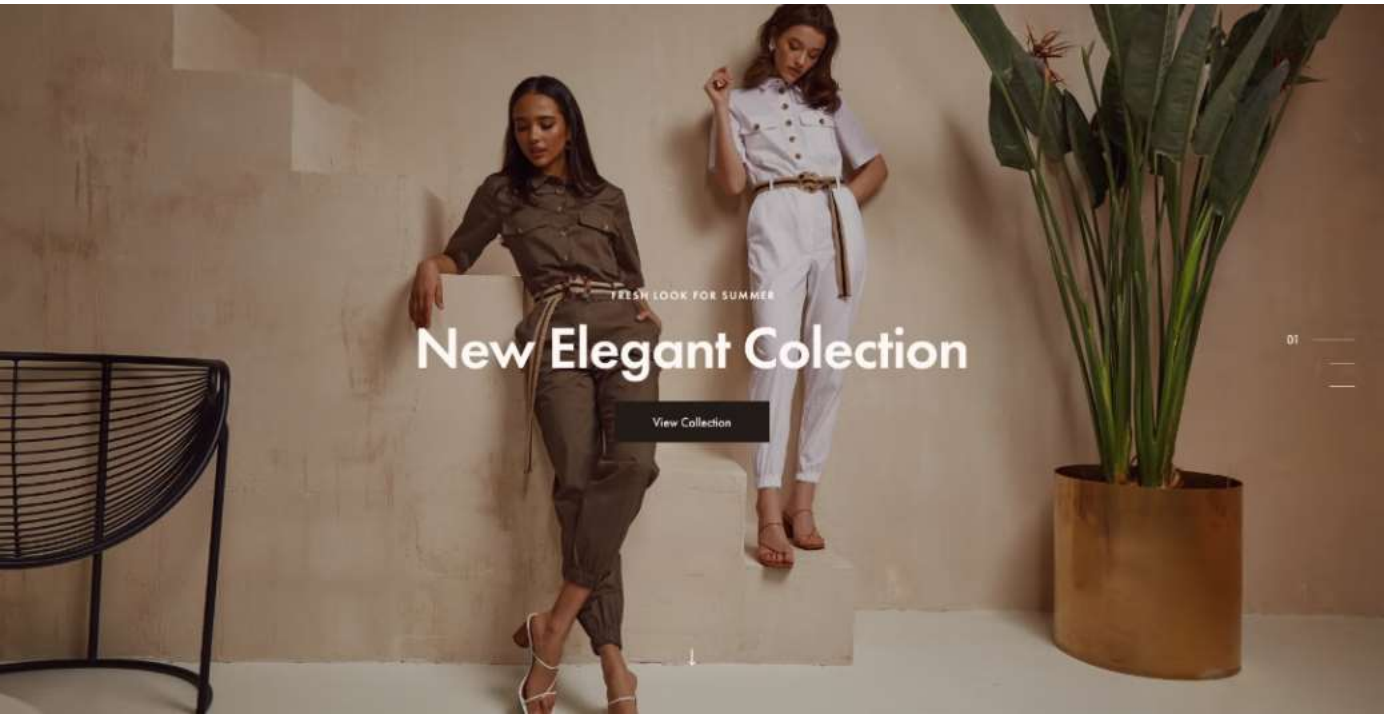
••••••••••••••

Enter

Are you the store owner? Log in here


Trendy Product Pages to Make People Buy
Display any fashion products, from clothing to footwear, in the best possible way that persuades a visitor to buy. How you show the product is important. Show it better with the Trendz theme.


Login
Username
Type your username
Password
Type your password
Forgot password?
LOGIN
Or Sign Up Using
Or Sign Up Using
SIGN UP


FRESH LOOK FOR SUMMER
New Elegant Colection
View Collection
01