

**Business Requirements Document**  
**For Alphaura E – Commerce Website**



**Author: Shehan Amarasinghe**

**Version: 1.0**

# Contents

Overview .....	4
Feasibility Study Report .....	5
Market Analysis.....	5
Analysis of the Current Fashion E-commerce Market.....	5
Identification of Competitors .....	5
SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats) .....	6
Similar Site Comparision .....	8
Introduction: .....	8
User Experience and Interface Design: .....	8
Functionality and Feature Integration: .....	9
Scalability and Performance Optimization:.....	9
Security and Data Privacy:.....	10
1. stockroom.lk:.....	10
Key Features:.....	10
2. incarnage.com:.....	11
Key Features:.....	11
3.adidas.com/lk.....	11
Key Features:.....	12
Summary Table.....	13
Functionalities:.....	15
Store Owner/Admin: .....	15
Fashion Designers: .....	15
Customers (Fashion Designers):.....	15
Customers (Product Purchasing):.....	15
Functional Requirements: .....	16
Non-Functional Requirements: .....	16
Some more functionalities .....	17
Methodology.....	18
Agile development methodology.....	18
Why is agile development methodology important for us? .....	19
Why agile for our system .....	20
2.Financial Feasibility .....	22
3.Operational Feasibility .....	23
Integration with Existing Business Processes.....	23

Impact on Daily Operations .....	24
Training and Skill Requirements for Staff .....	25
Team Collaboration and Communication .....	25
4.Schedule Feasibility.....	26
Requirement Gathering .....	26
Client Information .....	26
Work Breakdown Structure for Alphaura Web App Development .....	29
Risk Analysis for Alphaura Web App Development .....	31
1. Technical Risks:.....	31
2. Scope Creep: .....	31
3. Data Security and Privacy:.....	32
4. Resource Constraints: .....	32
5. Integration Challenges: .....	32
6. Change in Market Trends: .....	32
7. Budget Overruns: .....	32
8. User Adoption: .....	33
9. External Dependencies: .....	33
10. Legal and Compliance Risks: .....	33
11. Global Events and External Factors:.....	33
Diagrams .....	34
ER Diagram.....	34
Relational Scehma.....	34
Use case Diagram .....	36
Class Diagram.....	37
Sequence Diagram .....	38

# Overview

This requirement document will provide the requirement for alphuara e-commerce website

Both functional and non-functional requirement will be documented.

# **Feasibility Study Report**

## **Market Analysis**

### **Analysis of the Current Fashion E-commerce Market**

The fashion e-commerce market is experiencing a paradigm shift, with consumers increasingly turning to online platforms for their shopping needs. Factors such as convenience, a vast array of choices, and personalized shopping experiences are driving this trend. The market is characterized by rapid technological advancements, evolving consumer behaviors, and a heightened emphasis on sustainability and ethical practices. Alphaura's entry into this dynamic landscape comes at a juncture where digital experiences are integral to the modern shopping journey.

### **Identification of Competitors**

- Alphaura operates in a competitive landscape alongside key players such as:
- The Fashion Store (TFS): Known for its diverse range of clothing and accessories, TFS has established itself as a formidable competitor in the fashion e-commerce sector.
- Carnage: With a focus on edgy and contemporary styles, Carnage appeals to a younger demographic, offering unique and bold fashion choices.
- Fashion Bug: Recognized for its affordable yet stylish offerings, Fashion Bug has a strong presence, particularly among budget-conscious consumers seeking fashionable options.

## **SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats)**

### **Strengths**

**a. Established Brand Presence:** Alphaura benefits from a strong brand presence built over the years through its physical stores, contributing to immediate recognition and trust among customers.

**b. Quality and Innovation:** Known for quality craftsmanship and innovative designs, Alphaura has the potential to set itself apart in a crowded market.

**c. Customer Loyalty:** A base of loyal customers who appreciate Alphaura's aesthetic and may readily transition to the online platform.

### **Weaknesses**

**a. Limited Online Presence:** Relative to competitors, Alphaura's current online presence may be limited, requiring strategic efforts to gain digital market share.

**b. Technological Learning Curve:** Potential challenges in adapting to the latest e-commerce technologies and trends.

### **Opportunities**

**a. E-commerce Growth:** The overall growth of the e-commerce market presents a significant opportunity for Alphaura to tap into a wider customer base.

**b. Global Expansion:** The web app provides an avenue for Alphaura to expand its reach globally, reaching customers beyond its physical store locations.

**c. Personalization Trends:** Embracing personalization through AI and data analytics can enhance the customer experience, catering to individual preferences.

### **Threats**

**a. Intense Competition:** The presence of strong competitors like TFS, Carnage, and Fashion Bug poses a threat, necessitating differentiation strategies.

**b. Changing Consumer Preferences:** Rapid shifts in fashion trends and consumer preferences may challenge Alphaura's ability to stay relevant.

**c. Technological Risks:** Dependence on technology introduces potential risks, such as cybersecurity threats or disruptions that may impact the web app's functionality.

# Similar Site Comparison

## Introduction:

In today's digital era, the online retail landscape is bustling with diverse platforms vying for consumer attention and engagement. Among the plethora of options available, three prominent websites stand out: stockroom.lk, adidas.com/lk, and incarnage.com. Each of these platforms caters to distinct market segments and offers unique experiences to users. In this comparative analysis, we delve into various aspects of these websites, ranging from user experience and interface design to functionality and feature integration, scalability, performance optimization, and security and data privacy measures.

## User Experience and Interface Design:

**Stockroom.lk:** Stockroom.lk boasts a sleek and minimalist interface, with intuitive navigation and a visually appealing layout. The website offers a seamless browsing experience, with clear categorization of products and easy access to search functionalities. The design prioritizes simplicity and elegance, ensuring that users can find what they're looking for with minimal effort.

**Adidas.com/lk:** Adidas.com/lk impresses with its modern and dynamic interface, reflecting the brand's ethos of innovation and athleticism. The website features vibrant visuals, engaging multimedia content, and interactive elements that captivate users' attention. With user-friendly navigation and immersive product showcases, Adidas.com/lk delivers a compelling user experience that resonates with its target audience of sports enthusiasts and fashion-forward individuals.

**Incarnage.com:** Incarnage.com stands out for its bold and edgy interface design, reflecting the brand's identity as a leading provider of gaming and entertainment products. The website features a dark color scheme, striking visuals, and thematic elements that appeal to gamers and tech enthusiasts. Despite its visually intensive design, Incarnage.com maintains a user-friendly layout and intuitive navigation, ensuring a seamless browsing experience for visitors.



## **Functionality and Feature Integration:**

**Stockroom.lk:** Stockroom.lk offers a comprehensive range of functionalities, including product browsing, filtering, and search options, as well as account management features and secure payment gateways. The website also incorporates social sharing buttons and customer reviews to enhance user engagement and trust.

**Adidas.com/lk:** Adidas.com/lk excels in functionality and feature integration, offering advanced product customization tools, size guides, and interactive product showcases. The website also provides seamless integration with social media platforms, allowing users to share their favorite products with friends and followers.

**Incarnage.com:** Incarnage.com prioritizes functionality tailored to its niche market, offering features such as product pre-orders, limited edition releases, and exclusive deals for registered users. The website also incorporates community forums and live chat support to foster interaction among gamers and enthusiasts.

## **Scalability and Performance Optimization:**

**Stockroom.lk:** Stockroom.lk demonstrates robust scalability and performance optimization, with fast loading times, responsive design, and seamless scalability to accommodate increased traffic and user activity. The website leverages caching mechanisms and content delivery networks (CDNs) to ensure optimal performance across devices and geographical regions.

**Adidas.com/lk:** Adidas.com/lk leverages cutting-edge technologies and optimization techniques to deliver exceptional scalability and performance. The website utilizes server-side rendering, lazy loading, and image optimization to minimize load times and enhance the user experience, even during peak traffic periods.

**Incarnage.com:** Incarnage.com prioritizes performance optimization to cater to its tech-savvy audience, implementing caching strategies, code minification, and server-side optimizations to deliver fast and responsive browsing experiences. The website also employs load balancing and auto-scaling mechanisms to handle spikes in traffic effectively.

## **Security and Data Privacy:**

**Stockroom.lk:** Stockroom.lk prioritizes security and data privacy, implementing SSL encryption, secure payment gateways, and robust authentication mechanisms to protect user information and transactions. The website also complies with data protection regulations and employs regular security audits to identify and mitigate potential vulnerabilities.

**Adidas.com/lk:** Adidas.com/lk maintains stringent security measures to safeguard user data and transactions, including encryption protocols, PCI DSS compliance, and multi-factor authentication for user accounts. The website also educates users about data privacy practices and provides transparency regarding data collection and usage.

**Incarnage.com:** Incarnage.com places a strong emphasis on security and data privacy, implementing encryption protocols, firewalls, and intrusion detection systems to protect against unauthorized access and cyber threats. The website also adheres to industry standards and best practices for data handling and regularly updates its security measures to mitigate emerging risks.

In conclusion, while each of these websites offers distinct user experiences and features, they share a common commitment to delivering exceptional functionality, performance, and security to their users. Whether shopping for fashion apparel, sports gear, or gaming accessories, users can expect a seamless and secure online experience from stockroom.lk, adidas.com/lk, and incarnage.com.

## **1. stockroom.lk:**

Stockroom.lk is a popular online marketplace based in Sri Lanka, offering a wide range of products across categories such as fashion, electronics, home goods, and more. It serves as a one-stop destination for shoppers looking for quality products at competitive prices.

### **Key Features:**

- **Extensive Product Catalog:** Stockroom.lk boasts a diverse range of products, including clothing, accessories, electronics, appliances, and lifestyle goods.
- **User-Friendly Interface:** The website features a clean and intuitive interface, with easy navigation and search functionalities for users to find products effortlessly.
- **Secure Payment Options:** Stockroom.lk offers secure payment gateways for safe and convenient transactions, including credit/debit cards, online banking, and cash on delivery.

- Account Management: Users can create accounts to manage their orders, track shipments, and access exclusive deals and promotions.
- Customer Reviews and Ratings: The website incorporates customer reviews and ratings to help shoppers make informed purchasing decisions and build trust in the platform.
- Social Sharing: Stockroom.lk includes social sharing buttons, allowing users to share their favorite products with friends and followers on social media platforms.

## **2. incarnage.com:**

Incarnage.com is a leading online retailer specializing in gaming accessories, merchandise, and collectibles. Catering to gamers and tech enthusiasts, the website offers a curated selection of gaming peripherals, apparel, figurines, and more.

### **Key Features:**

- Gaming Focus: Incarnage.com is tailored to the gaming community, with a focus on gaming accessories, merchandise, and exclusive collectibles from popular gaming franchises.
- Limited Edition Releases: The website frequently offers limited edition releases and exclusive deals on gaming merchandise, attracting avid collectors and enthusiasts.
- Pre-Order System: Incarnage.com allows users to pre-order upcoming products, ensuring they secure their desired items before they sell out.
- Community Forums: The website features community forums where gamers can discuss gaming trends, share tips and strategies, and connect with like-minded individuals.
- Live Chat Support: Incarnage.com provides live chat support for customers seeking assistance with their orders, product inquiries, or technical issues.
- Newsletter Subscriptions: Users can subscribe to newsletters to receive updates on new product releases, promotions, and gaming events.

## **3.adidas.com/lk**

Adidas.com/lk is the official online store of Adidas in Sri Lanka, offering a wide range of sports apparel, footwear, and accessories for men, women, and children. The website showcases the latest Adidas collections and provides an immersive shopping experience for sports enthusiasts.

**Key Features:**

- Sports Focus: Adidas.com/lk caters to athletes and sports enthusiasts, with a comprehensive selection of performance-driven sports apparel, footwear, and accessories.
- Product Customization: The website offers advanced product customization tools, allowing users to personalize their footwear and apparel with custom designs, colors, and graphics.
- Size Guides: Adidas.com/lk provides detailed size guides and fitting recommendations to help users find the perfect fit for their sportswear and footwear purchases.
- Interactive Product Showcases: The website features interactive product showcases with 360-degree views, zoom-in functionality, and detailed product descriptions for a closer look at Adidas products.
- Social Media Integration: Adidas.com/lk seamlessly integrates with social media platforms, enabling users to share their favorite Adidas products with friends and followers and stay updated on the latest trends and promotions.
- Secure Shopping Experience: The website prioritizes security and data privacy, offering secure payment options, encryption protocols, and fraud prevention measures to ensure a safe and seamless shopping experience for users.

Each of these websites caters to different market segments and offers unique features and functionalities tailored to the needs and preferences of their target audience. Whether shopping for fashion apparel, gaming accessories, or sports gear, users can find a diverse array of products and services on stockroom.lk, incarnage.com, and adidas.com/lk.

**Summary Table**

	<b>Stockroom.lk</b>	<b>Incarnage.com</b>	<b>Adidas.com.lk</b>
Appearance	Presents a modern and user-friendly interface, prioritizing ease of navigation and product discovery.	Showcases an elegant and visually appealing design that complements the focus on designer collections and artistic expression.	Maintains a brand-specific aesthetic that aligns with the athletic theme and global recognition of Adidas.
Performance	Generally delivers fast loading times and an efficient search function to optimize the user experience for browsing and finding desired products.	Performance may vary depending on the volume and complexity of designer content, potentially impacting loading times and search effectiveness.	Optimizes website performance for quick loading of brand-specific products and streamlined navigation within the Adidas product range.
Login	Offers the flexibility of guest checkout for one-time purchases, while incentivizing account creation for features like wishlist, saved addresses, order tracking, and loyalty program benefits.	Requires account creation for all features, aiming to cultivate a sense of community and loyalty among registered users who gain access to exclusive designer content and personalized recommendations.	Mandates account creation for all purchases, integrating seamlessly with global Adidas accounts and offering features like order tracking and purchase history.
Security	Implements secure checkout processes	Employs secure checkout	Adheres to the globally recognized

	<p>to safeguard customer information and financial transactions. Additionally, they should outline comprehensive data protection policies to assure users of their commitment to privacy.</p>	<p>procedures, but information regarding specific measures to protect designer data, particularly for emerging designers, might be limited.</p>	<p>security standards set by Adidas, ensuring robust protection of customer information and financial transactions throughout the checkout process.</p>
Availability	<p>Maintains 24/7 availability to cater to a global customer base and diverse shopping habits.</p>	<p>Availability might be subject to variations based on individual designer activity and content updates.</p>	<p>Product availability is dependent on stock levels and might be regionally limited based on Adidas's global distribution network.</p>

## **Functionalities:**

### **Store Owner/Admin:**

1. Manage Accounts
2. Manage Listings
3. Manage Stocks
4. Manage Articles
5. Manage Orders
6. Manage Feedbacks
7. Manage Discounts

### **Fashion Designers:**

1. Manage Personal Accounts
2. Manage Blogs
3. Manage Feedbacks

### **Customers (Fashion Designers):**

1. View Blogs
2. Review Blogs
3. Contact Fashion Designers

### **Customers (Product Purchasing):**

1. Manage Personal Accounts
2. Product Purchasing
3. Manage Cart
4. Edit Quantity
5. Manage Feedback of Products
6. Search Products
7. Filter Products

## **Functional Requirements:**

- User authentication and authorization mechanisms for secure access to respective functionalities.
- CRUD (Create, Read, Update, Delete) operations for managing accounts, listings, articles, orders, feedback, and discounts.
- Real-time updates and notifications for changes in stocks and orders.
- Integration with payment gateways for secure and seamless transactions.
- Search functionality with keyword-based and category-based filtering options.
- Responsive design and mobile compatibility for accessibility across devices.

## **Non-Functional Requirements:**

- Security: Implementation of SSL encryption, data encryption, and secure authentication mechanisms to protect sensitive information.
- Performance: Optimization of database queries, caching mechanisms, and server resources to ensure fast loading times and responsiveness.
- Scalability: Designing the system architecture to handle increasing user traffic and data volume over time.
- Usability: Intuitive user interfaces with clear navigation, informative feedback messages, and error handling mechanisms.
- Reliability: Regular backups, fault-tolerant systems, and disaster recovery plans to ensure continuous availability of the platform.
- Compliance: Adherence to data privacy regulations (e.g., GDPR, CCPA) and industry standards for handling customer data and transactions.



## **Some more functionalities**

### **1. Personalized Recommendations:**

- Utilizes customer data and browsing history to suggest tailored product recommendations, enhancing the shopping experience and increasing the likelihood of purchase.

### **2. Social Media Integration:**

- Seamlessly integrates with popular social media platforms, allowing users to share their favorite products, articles, and blog posts with their social networks, driving engagement and brand visibility.

### **3. Customization Options:**

- Enables customers to personalize their purchases by choosing custom colors, designs, or features for select products, fostering a sense of ownership and individuality in their shopping experience.

### **4. Fashion Quiz**

- Engages users with interactive quizzes to assess their style preferences, fashion knowledge, or body type, providing personalized recommendations and style advice based on their quiz responses.

### **5. Style Guides:**

- Offers curated collections, trend forecasts, and styling tips from fashion experts, helping users stay informed about the latest trends and discover new ways to express their personal style.

### **6. Size Recommender:**

- Assists users in selecting the right size for clothing and accessories by analyzing their body measurements, past purchases, and brand-specific size charts, reducing the likelihood of returns due to sizing issues.

### **7. Fashion Events Calendar:**

- Provides a calendar of upcoming fashion events, including runway shows, trunk shows, sales events, and fashion weeks, allowing users to stay informed about industry happenings and plan their participation accordingly.

## **8. Fast Selling Products and New Arrivals:**

- Highlights top-selling products and newly added items on the website's homepage or dedicated sections, enabling users to discover popular trends and the latest arrivals quickly and conveniently.

## **Methodology**

### **Agile development methodology**

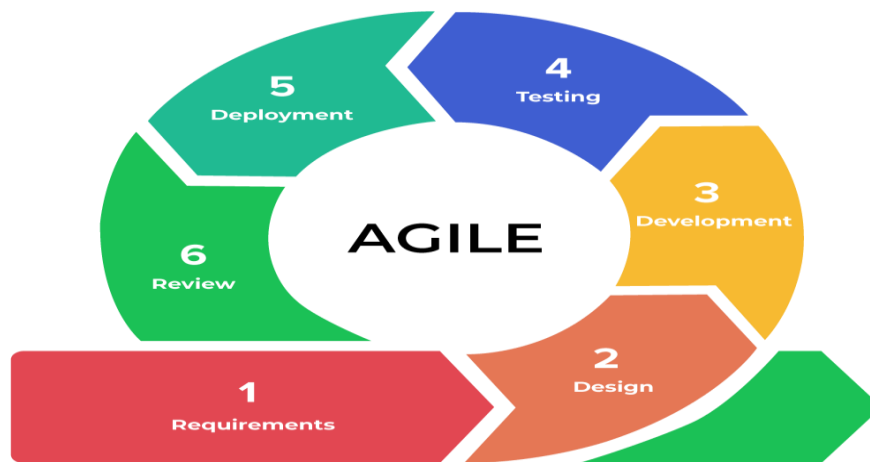
The agile development methodology emphasizes iterative and incremental development, focusing on delivering working software in small, frequent releases. This approach prioritizes customer collaboration, adaptability to changing requirements, and continuous improvement. Unlike traditional waterfall methodologies where each stage must be completed before moving to the next, agile allows for concurrent work on different stages of the development process.

One of the key principles of agile is its emphasis on teamwork and communication. Cross-functional teams collaborate closely throughout the development process, breaking down silos and fostering a collective ownership mindset. This enables rapid feedback loops and quicker response to changes or issues that arise during development.

Another distinguishing feature of agile is its flexibility and adaptability. Instead of rigidly following a predefined plan, agile teams embrace change and respond to customer feedback and evolving requirements. This allows for a more responsive and customer-centric approach, ultimately leading to higher levels of customer satisfaction.

By delivering working software in small increments, agile mitigates risks associated with traditional waterfall methodologies, where large-scale changes are often implemented late in the development process. This iterative approach allows for early validation of concepts, identification of potential issues, and timely adjustments, reducing the likelihood of costly rework or project failures.

Overall, the agile methodology empowers teams to deliver value to customers more efficiently and effectively through collaboration, adaptability, and continuous improvement.



### **Why is agile development methodology important for us?**

Agile stands out as a highly flexible development methodology, offering a robust framework that promotes timely project completion within budget constraints while minimizing risks. Its strength lies in fostering improved communication with customers, resulting in heightened satisfaction. In terms of risk management, Agile excels in its capacity to seamlessly adapt to changes, even within the complexity of projects, without disrupting the overall project timeline. This adaptability ensures that the development teams can navigate uncertainties effectively and respond to evolving requirements, ultimately contributing to the successful and on-time delivery of projects. (agilealliance, 2024)

- Changing Requirements:  
Agile accommodates evolving requirements in the dynamic job market.
- Quick Iterations and Releases:  
Agile enables frequent releases of small increments for rapid feature delivery.
- User-Centric Development:  
Agile emphasizes collaboration with job seekers and employers for user-friendly platforms.
- Cross-Functional Teams:  
Collaboration among diverse roles ensures holistic development.

- **Rapid Response to Market Changes:**  
Agile allows quick adaptation to shifts in demand, technology, and user preferences.
- **Risk Mitigation:**  
Iterative development identifies and addresses issues early, reducing project risks.
- **Continuous Improvement:**  
Agile fosters a culture of ongoing enhancement based on user feedback and market trends.

## **Why agile for our system**

Agile methodology is well-suited for developing the website for Alphaura due to the dynamic nature of the fashion industry and the need for iterative development and continuous improvement. Here's a brief explanation of why Agile is the ideal approach:

**1. Flexibility and Adaptability:** Agile allows for flexibility in responding to changing market trends, customer preferences, and business requirements. In the fast-paced fashion industry, where trends evolve rapidly, being able to adapt quickly is crucial to staying competitive.

**2. Iterative Development:** Agile follows an iterative development approach, where the project is broken down into smaller, manageable increments called sprints. This allows for early and frequent delivery of working software, enabling stakeholders to provide feedback and make adjustments throughout the development process.

**3. Customer-Centric Focus:** Agile places a strong emphasis on customer collaboration and feedback. By involving Alphaura's stakeholders, including store owners, fashion designers, and customers, in the development process, Agile ensures that the final product meets their needs and expectations.

**4. Continuous Improvement:** Agile promotes a culture of continuous improvement, where teams reflect on their work at the end of each sprint and identify opportunities for enhancement. This iterative feedback loop enables the website to evolve iteratively, incorporating new features, optimizations, and refinements over time.

**5. Reduced Time to Market:** Agile methodologies emphasize delivering value early and frequently. By prioritizing features based on their importance and feasibility, Agile allows Alphaura to launch a minimum viable product (MVP) quickly and iteratively add new features in subsequent iterations, reducing time to market and enabling faster ROI.

**6. Risk Mitigation:** Agile mitigates project risks by breaking down the development process into smaller, manageable iterations. This allows teams to identify and address issues early, reducing the likelihood of costly delays or setbacks later in the project lifecycle.

Overall, Agile methodology aligns well with the dynamic and customer-centric nature of the fashion industry, enabling Alphaura to develop a responsive, feature-rich website that meets the evolving needs of its stakeholders while maintaining a competitive edge in the market.

## 2.Financial Feasibility

The Financial Feasibility Report related to our website is shown in the following table. Below are the different types of costs and their respective amounts. It is found that the total cost of this website is approximately Rs.1.1 million.

<b>Project Name – Alphaura Fashions</b>		
<b>Date -</b>		
<b>Project Manager-</b>		
<b>Cost No</b>	<b>Description</b>	<b>Original Budget(LKR)</b>
1	Domain	LKR. 15,000.00
2	Hosting	LKR. 40,000.00
3	SSL Certificate	LKR. 40,000.00
4	Responsive Design	LKR. 35,000.00
5	Interactive Multimedia	LKR. 18,000.00
6	E Commerce Functionality	LKR. 60,000.00
7	Style and Theme	LKR. 40,000.00
8	Database Integration	LKR. 60,000.00
<b>Website Development and Maintain Cost</b>	<b>LKR. 308,000</b>	
10	Project Manager	LKR. 200,000.00
11	System Analyst	LKR. 90,000.00

12	Front End Developer	LKR. 140,000.00
13	Backend/Database Engineer	LKR. 170,000.00
14	QA Engineer	LKR. 90,000.00
<b>Wages</b>	<b>LKR. 690,000</b>	
15	Internet Cost	LKR. 20,000.00
16	Travel and Transport	LKR. 10,000.00
17	Food and beverages	LKR. 18,000.00
18	Computer Repairs	LKR. 31,000.00
19	Current Bills	LKR. 23,000.00
<b>Others</b>	<b>LKR. 102,000</b>	
<b>Total</b>	<b>LKR.1,100,000</b>	

### 3.Operational Feasibility

#### Integration with Existing Business Processes

The smooth integration of the planned web application for Alphaura with the current business processes is a critical component of its success. This entails a careful analysis of how well the solution fits into the established operational dynamics and processes of Alphaura's physical storefronts. Important things to think about are:

Inventory Management: Making sure that the online application and the current inventory management systems are synchronised in real-time to avoid stock level inconsistencies and enable precise order fulfilment.

Order Fulfillment: minimising processing times, improving customer satisfaction, and streamlining the order fulfilment process to effectively handle both online and in-store sales.

Customer Relationship Management (CRM): integrating the online application with the existing CRM system to keep a single client database, allowing for targeted marketing campaigns and individualised customer interactions.

Point of Sale (POS) Integration: Encouraging a seamless interaction with the current point-of-sale system to guarantee uniform reporting of financial transactions and sales data.

## **Impact on Daily Operations**

The introduction of the web application will inevitably have an impact on the daily operations of Alphaura. Understanding and managing these changes are essential to maintaining operational efficiency. Key considerations include:

Order Processing: The web app introduces a new channel for order processing. Staff must be trained to handle online orders, coordinate with the fulfillment team, and ensure timely delivery.

Customer Service: A potential increase in customer inquiries and support requests may occur. Adequate training and support systems should be in place to manage customer interactions effectively.

Workflow Adjustments: Staff may need to adapt to changes in workflows, such as managing online returns or exchanges, coordinating with the online support team, and updating product information on the web app.



## **Training and Skill Requirements for Staff**

Given the diverse roles within the 4-person team (project manager, front-end developer, back-end developer, and database developer), specific training programs and skill development initiatives will be crucial:

**Project Manager:** Training in project management methodologies, communication skills, and an understanding of e-commerce operations will be beneficial.

**Front-end Developer:** Skill enhancement in HTML, CSS, and JavaScript, along with knowledge of responsive design principles and user experience (UX) best practices.

**Back-end Developer:** Advanced training in PHP, familiarity with backend frameworks, and a focus on security practices in web development.

**Database Developer:** Proficiency in MySQL, database optimization techniques, and knowledge of data modeling to ensure efficient data storage and retrieval.

## **Team Collaboration and Communication**

Given the collaborative nature of the project, effective communication and teamwork are vital. Regular team meetings, collaborative tools, and open communication channels will foster a cohesive working environment.

## 4.Schedule Feasibility

The estimated number of days needed to finish this project-related website is listed below. It need about 35 days to finish all six different types of work in our project.

Task name	Duration
Project Initiation	1 week
Planning	1 week
Design Phase	3 weeks
Development	2 months
Testing	2 weeks
Deployment	2 weeks
Maintenance and Support	-

## Requirement Gathering

### Client Information:

- Client Name: Ashfaq Yusuf
- Company/Organization: Alphaura Fashion Store
- Contact Person: Ashfaq Yusuf
- Contact Information: +94 71 232 4597

Date of Document: 2024

### 1. Introduction:

The Alphaura Fashion Accessories Web Application aims to provide a platform for fashion enthusiasts to explore, purchase, and engage with fashion designers through blogs and other interactive features. This document outlines the specific requirements and functionalities desired by the client.

### 2. Functional Requirements:

#### User Management:

- Users should be able to create accounts with the following information:
  - Name
  - Contact Number
  - Email Address
- Fashion designers should have additional profile management features.

#### Product Management:

- Admin should be able to add, delete, and edit product listings.
- Stock levels should be automatically updated based on purchases.

#### Blog Management:

- Fashion designers should have the ability to create, edit, and delete blog posts.
- Customers should be able to view and leave feedback on blog posts.

#### Order Management:

- Admin should manage orders, including accepting, deleting, and updating order details.
- Customers should have access to order history and tracking.

#### Feedback Management:

- Fashion designers should be able to view and respond to feedback on their blogs.
- Customers should leave feedback on purchased products.

#### Discount Management:

- Admin should be able to set up discounts and promotions.
- Discounts should be visible to signed-up customers.

#### Shopping Cart and Checkout:

- Users should be able to add products to a shopping cart, edit quantities, and proceed to checkout.
- Guest checkout should be an option for users who don't want to create accounts.

#### Search and Filtering:

- Users should be able to search for products using keywords and filter results by category, price, and discounts.

#### Communication Features:

- Fashion designers should have the ability to respond to user inquiries and feedback.

### 3. Design Requirements:

#### User Interface (UI):

- Clean, modern, and visually appealing design.
- Intuitive navigation to enhance user experience.

#### Color Scheme and Branding:

- Use colors and branding elements consistent with the Alphaura Fashion Accessories brand.
- Colors should reflect the fashion industry and appeal to the target audience.

#### Images and Visual Elements:

- High-quality images of products and fashion designs.
- Visual elements should enhance the user experience and engagement.

#### Typography:

- Use readable fonts that complement the design and ensure ease of reading.

### 4. Agreement Statement:

I, Ashfaq Yusuf, acknowledge that the requirements outlined in this document accurately represent the functionalities and design preferences for the Alphaura Fashion Accessories Web Application. I agree to collaborate with the development team to ensure the successful implementation of these requirements.

Client's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

# **Work Breakdown Structure for Alphaura Web App Development**

## **1. Project Initiation**

- 1.1 Define Project Scope
- 1.2 Identify Stakeholders
- 1.3 Conduct Feasibility Study
- 1.4 Develop Project Charter
- 1.5 Obtain Project Approvals

## **2. Planning**

- 2.1 Develop Project Plan
  - 2.1.1 Define Project Deliverables
  - 2.1.2 Create Project Schedule
  - 2.1.3 Plan Resource Allocation
  - 2.1.4 Identify Risks and Mitigation Strategies
- 2.2 Define Technical Requirements
- 2.3 Establish Development Environment
- 2.4 Develop Quality Assurance Plan

## **3. Design Phase**

- 3.1 UX/UI Design
  - 3.1.1 Wireframing
  - 3.1.2 Prototyping
  - 3.1.3 User Feedback
- 3.2 Front-end Design
  - 3.2.1 HTML Structure

### 3.2.2 CSS Styling

### 3.2.3 JavaScript Functionality

## 3.3 Back-end Design

### 3.3.1 Database Schema

### 3.3.2 Server-side Logic

### 3.3.3 Integration with Front-end

## 4. Development

### 4.1 Front-end Development

#### 4.1.1 Implement HTML Structure

#### 4.1.2 Apply CSS Styling

#### 4.1.3 Integrate JavaScript Functionality

### 4.2 Back-end Development

#### 4.2.1 Implement Database Schema

#### 4.2.2 Develop Server-side Logic

#### 4.2.3 Integration with Front-end

### 4.3 Database Development

#### 4.3.1 Setup MySQL Database

#### 4.3.2 Implement Database Queries and Optimization

## 5. Testing

### 5.1 Unit Testing (PHPUnit)

#### 5.1.1 Develop Test Cases

#### 5.1.2 Execute Unit Tests

### 5.2 Integration Testing

### 5.3 User Acceptance Testing

#### 5.4 Resolve Issues and Bugs

### **6. Deployment**

#### 6.1 Deploy Web App to Staging Environment

#### 6.2 User Training (if applicable)

#### 6.3 Final Testing in Production Environment

#### 6.4 Launch Web App

#### 6.5 Monitor Performance and Address Issues

### **7. Maintenance and Support**

#### 7.1 Regular Updates and Bug Fixes

#### 7.2 User Support and Issue Resolution

#### 7.3 Continuous Improvement Initiatives

#### 7.4 Documentation Updates

## **Risk Analysis for Alphaura Web App Development**

### **1. Technical Risks:**

Risk: Unforeseen technical complexities in implementing certain features.

Mitigation: Conduct a thorough technical feasibility study, involve technical experts in the planning, and allocate buffer time for technical challenges.

### **2. Scope Creep:**

Risk: Expanding project scope beyond the initial requirements.

Mitigation: Clearly define and document project scope during the planning phase. Implement a change control process for any scope changes.

### **3. Data Security and Privacy:**

Risk: Breach of user data or non-compliance with data protection laws.

Mitigation: Implement robust security measures, conduct regular security audits, and ensure compliance with relevant data protection regulations.

### **4. Resource Constraints:**

Risk: Shortage of skilled resources or unexpected team member unavailability.

Mitigation: Cross-train team members, have a contingency plan for critical roles, and consider outsourcing for specialized skills if necessary.

### **5. Integration Challenges:**

Risk: Difficulty in integrating the web app with existing systems.

Mitigation: Perform thorough compatibility tests, engage IT teams early in the process, and have a rollback plan in case of integration failures.

### **6. Change in Market Trends:**

Risk: Shifts in market trends affecting user preferences.

Mitigation: Stay updated on market trends, conduct regular market research, and design the app to be flexible and adaptable to changing preferences.

### **7. Budget Overruns:**

Risk: Exceeding the allocated budget for development and maintenance.



Mitigation: Regularly monitor expenses, conduct budget reviews, and have a contingency fund for unforeseen costs.

## **8. User Adoption:**

Risk: Low user adoption rates leading to underutilization of the web app.

Mitigation: Implement user-friendly design, conduct beta testing, and develop a comprehensive marketing and user engagement strategy.

## **9. External Dependencies:**

Risk: Delays caused by dependencies on external vendors or third-party services.

Mitigation: Clearly identify external dependencies, have backup plans, and establish communication channels with external stakeholders.

## **10. Legal and Compliance Risks:**

Risk: Failure to comply with legal regulations related to e-commerce and data protection.

Mitigation: Regularly review and update legal compliance, seek legal counsel, and stay informed about changes in relevant laws.

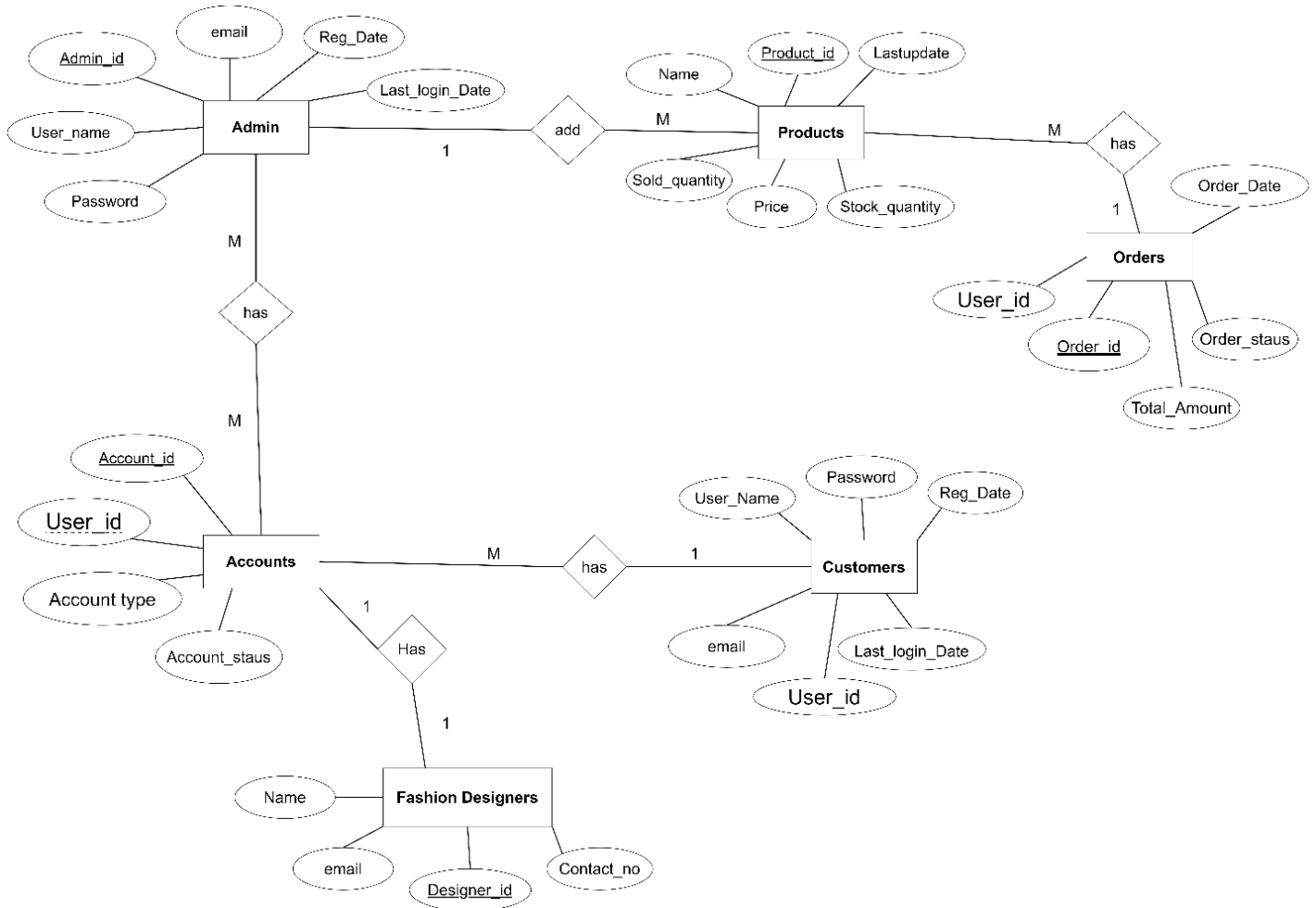
## **11. Global Events and External Factors:**

Risk: Unforeseen events such as natural disasters, economic downturns, or global crises impacting the project.

Mitigation: Develop a risk response plan, assess the impact of external factors, and have contingency plans for major disruptions.

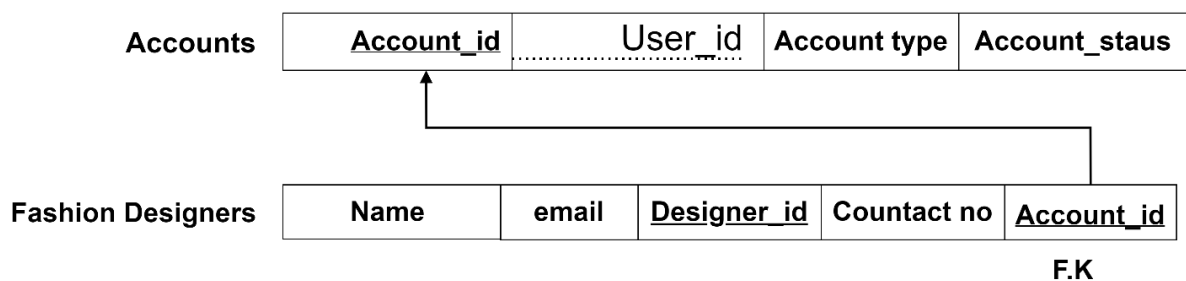
# Diagrams

## ER Diagram

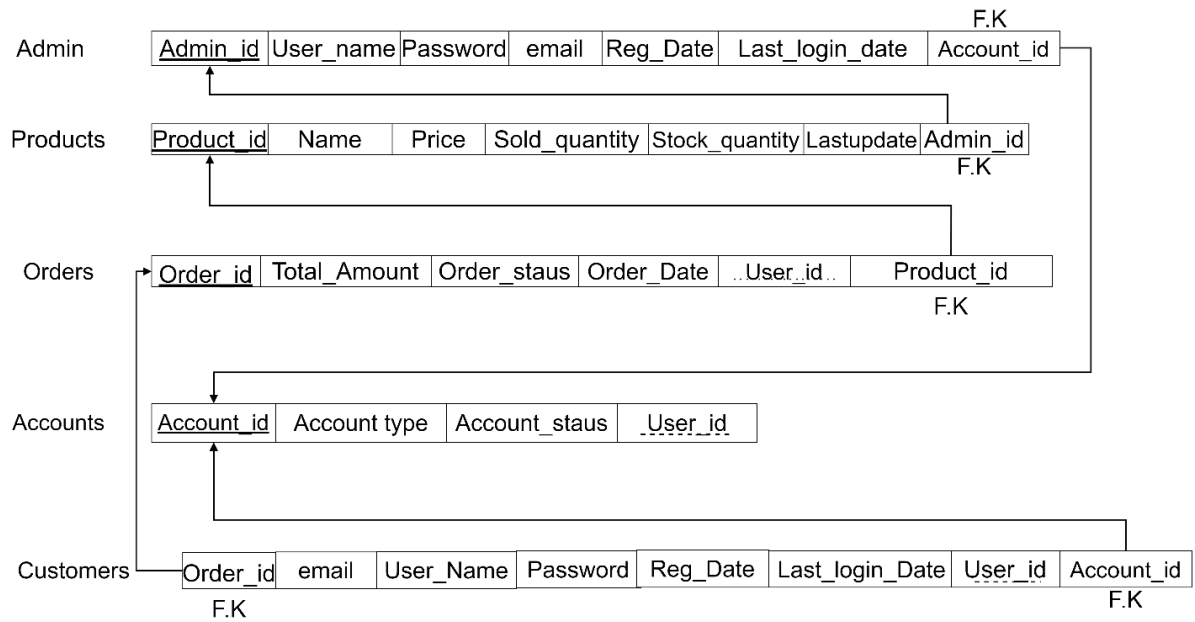


## Relational Scehma

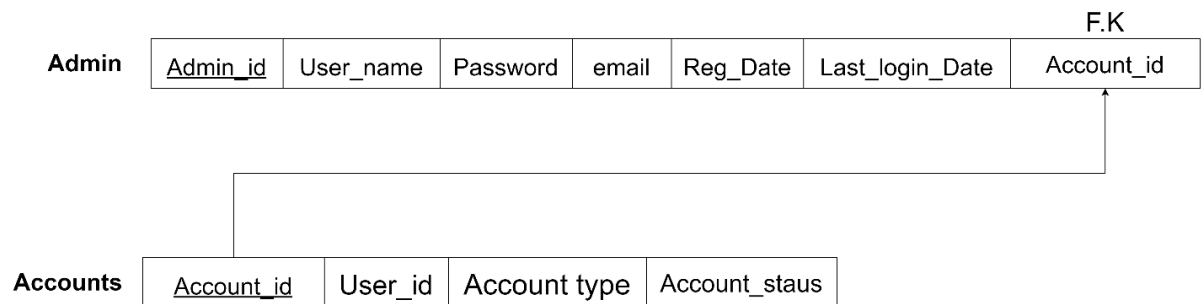
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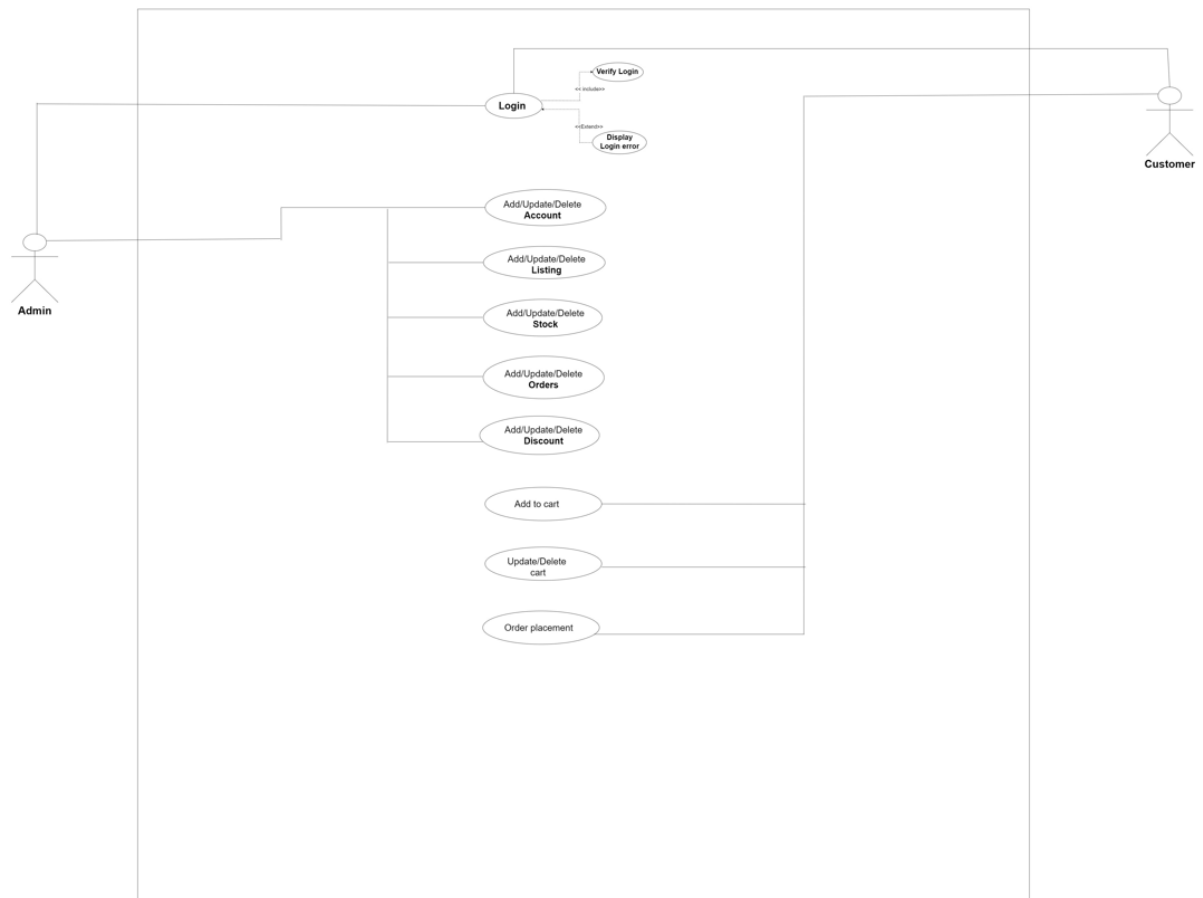
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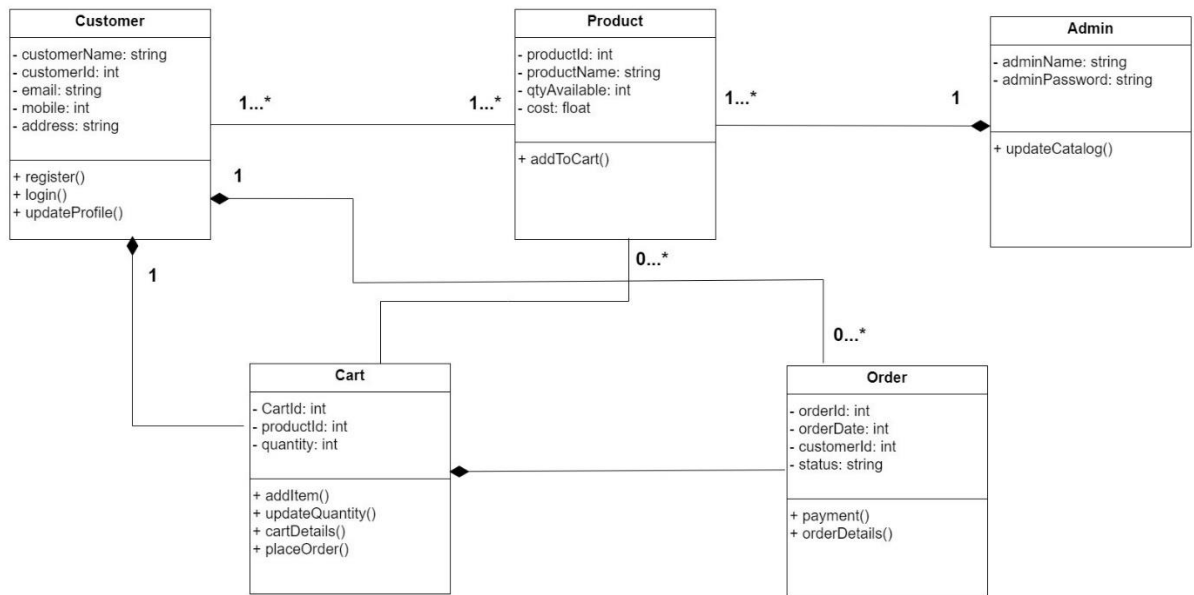
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# Use case Diagram



# Class Diagram



# Sequence Diagram

