

Software Requirements Specification (SRS) Document

Diva Drapes

Team Members

Faiqa Fatima Rana (22F-3278)

Tahmeed Ahmad (22F-3286)

Muneeb Arif (22F-3881)



Department of Computer Science

FAST – National University of Computer & Emerging Sciences

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1. Introduction

Diva Drapes is a web-based women's clothing brand that offers stylish and affordable Korean fashion trends in Pakistan. The platform provides an online marketplace where users can browse and purchase fashionable clothing in four main categories: **Winter Casual**, **Winter Formal**, **Summer Casual**, and **Summer Formal**. The platform ensures an authentic collection at price-friendly rates, catering to the growing demand for trendy Korean fashion.

2. Vision Document

2.1. Problem Statement

Category	Description
Problem	<ul style="list-style-type: none">Finding authentic and trendy Korean women's fashion is difficult in Pakistan.Existing options are either overpriced or lack variety.Limited availability of affordable and stylish Korean clothing.
Affects	<ul style="list-style-type: none">Impacts fashion-conscious women who seek trendy and affordable clothing.Limits access to authentic Korean fashion trends in the local market.
Impact	<ul style="list-style-type: none">Results in a lack of variety and high prices for Korean fashion.Forces consumers to rely on international platforms with higher shipping costs and longer delivery times.
Solution	<ul style="list-style-type: none">Provide a centralized platform offering curated and authentic Korean fashion.Ensure affordability and variety in clothing options.Offer a user-friendly and secure shopping experience.

2.2. Business Opportunities

- Growing Market Demand:** There is a growing demand for stylish and affordable Korean fashion in Pakistan.
- Centralized Platform:** Diva Drapes can become a one-stop solution for Korean fashion enthusiasts.
- Partnerships:** Potential partnerships with local and international suppliers to ensure a steady supply of authentic clothing.

2.3. Objectives

1. **Develop a User-Friendly Platform:** Create an intuitive and easy-to-navigate online platform that allows users to browse and purchase trendy Korean-style clothing effortlessly.
2. **Categorize Products Effectively:** Organize clothing items into four main categories—**Winter Casual, Winter Formal, Summer Casual, and Summer Formal**—to enhance user experience and simplify product discovery.
3. **Ensure Affordability and Quality:** Offer affordable pricing for all products while maintaining high-quality standards to ensure customer satisfaction and repeat purchases.
4. **Provide a Secure Shopping Experience:** Implement robust security measures, including encrypted transactions and secure user authentication, to protect customer data and build trust.
5. **Enable Seamless Order Management:** Develop a streamlined order tracking and management system for both customers and admins, ensuring timely delivery and efficient handling of user queries.

2.4. Scope

The scope of **Diva Drapes** encompasses the development of a web-based platform designed to provide users with an efficient and enjoyable shopping experience for Korean fashion. The platform will feature a secure user authentication and profile management system to ensure the privacy and safety of user data. Additionally, an intuitive shopping cart and checkout process will be integrated to streamline the purchasing experience. This scope ensures that **Diva Drapes** delivers seamless, secure, and high-quality shopping experience for its customers.

2.5. Constraints

- **Limited Availability:** Certain clothing items may have limited availability due to supplier restrictions.
- **Shipping Delays:** Potential delays in shipping based on logistics and delivery partners.
- **High Traffic:** Ensuring the website performs efficiently under high traffic conditions.

2.6. Stakeholder and User Description

2.6.1. Market Demographics

The target market comprises fashion-conscious women in Pakistan who are interested in trendy and affordable Korean fashion. This includes individuals from diverse backgrounds, professions, and age groups who seek stylish and authentic clothing options.

2.6.2. Stakeholder Profiles

2.6.2.1 Customers

Representatives	Customers
Description	<ul style="list-style-type: none"> They are the end-users of the platform who browse, purchase, and interact with the products.
Type	<ul style="list-style-type: none"> External Stakeholders
Responsibilities	<ul style="list-style-type: none"> Browse and purchase products. Provide feedback and reviews to improve the platform. Engage with the platform through promotions and marketing campaigns.
Success Criteria	<ul style="list-style-type: none"> High customer satisfaction, repeat purchases, and positive reviews.
Involvement	<ul style="list-style-type: none"> Active users of the platform.
Comments/Issues	<ul style="list-style-type: none"> None

2.6.2.2. Admin

Representatives	Admin
Description	<ul style="list-style-type: none"> They manage the platform's operations, including product listings, user queries, and order management.
Type	<ul style="list-style-type: none"> Internal Stakeholders
Responsibilities	<ul style="list-style-type: none"> 1. Manage inventory and product listings. 2. Handle customer queries and complaints. 3. Monitor and maintain the platform's performance.
Success Criteria	<ul style="list-style-type: none"> Smooth platform operations, timely resolution of issues, and efficient order management.
Involvement	<ul style="list-style-type: none"> Daily management and oversight of the platform.
Comments/Issues	<ul style="list-style-type: none"> None

DIVA DRAPES

2.6.2.3. Suppliers

Representatives	Suppliers
Description	<ul style="list-style-type: none">• They provide authentic and trendy Korean fashion items for the platform.
Type	<ul style="list-style-type: none">• External Stakeholders
Responsibilities	<ul style="list-style-type: none">• Supply clothing items on time and in good condition.• Maintain consistent quality and authenticity of products.• Collaborate with the admin team to manage inventory.
Success Criteria	<ul style="list-style-type: none">• Timely delivery of high-quality products and consistent supply.
Involvement	<ul style="list-style-type: none">• Regular supply of products and collaboration with the admin team.
Comments/Issues	<ul style="list-style-type: none">• None

2.6.2.4. Web Development Team

Representatives	Web Development Team
Description	<ul style="list-style-type: none">• They design, develop, and maintain the Diva Drapes platform.
Type	<ul style="list-style-type: none">• Internal Stakeholders
Responsibilities	<ul style="list-style-type: none">• Develop and maintain the website's front-end and back-end.• Implement security measures to protect user data.• Fix bugs and update the platform as needed.
Success Criteria	<ul style="list-style-type: none">• A functional, user-friendly, and secure platform.
Involvement	<ul style="list-style-type: none">• Ongoing development and maintenance of the platform.
Comments/Issues	<ul style="list-style-type: none">• None

2.6.2.5. Marketing Team

Representatives		Marketing Team
Description		<ul style="list-style-type: none"> They promote the platform and attract customers through marketing campaigns and social media.
Type		<ul style="list-style-type: none"> Internal Stakeholders
Responsibilities		<ul style="list-style-type: none"> Develop and execute marketing strategies. Manage social media accounts and online advertisements. Analyze customer feedback and market trends to improve outreach.
Success Criteria		<ul style="list-style-type: none"> Increased customer acquisition, brand visibility, and engagement.
Involvement		<ul style="list-style-type: none"> Ongoing marketing and promotional activities.
Comments/Issues		<ul style="list-style-type: none"> None

2.6.3. User Environment

Users can access Diva Drapes via web browsers on desktops, laptops, and mobile devices, ensuring a seamless experience across various devices and network conditions.

2.6.4. Stakeholder Summary

Name	Description	Responsibilities
Customers	End-users who browse, purchase, and interact with the platform.	Browse and purchase products, provide feedback, and engage with the platform.
Admin	Manage platform operations, including product listings and user queries.	Manage inventory, handle customer queries, and monitor platform performance.
Suppliers	Provide authentic and trendy Korean fashion items for the platform.	Supply high-quality products on time and collaborate with the admin team.
Web Development Team	Designs, develops, and maintains the Diva Drapes platform.	Develop and maintain the platform, implement security measures, and fix bugs.
Marketing Team	Promotes the platform and attracts customers through marketing campaigns.	Develop marketing strategies, manage social media, and analyze customer feedback.

3. System Requirements Specification

3.1 System Features

3.1.1. User Authentication and Registration:

- Secure login and registration for users, including password recovery and social media login options.

3.1.2. Product Catalog Management:

- Admins shall be able to add, update, and remove products from the catalog, including product details, images, and pricing.

3.1.3. Shopping Cart and Checkout Process:

- Users shall be able to add items to the cart, view the cart, and complete purchases through a secure checkout process.

3.1.4. Order Management System:

- Admins shall be able to manage orders, update order status, and handle customer queries related to orders.

3.1.5. Data Visualization and Reporting:

- Admins shall have access to a dashboard displaying sales trends, popular products, and customer feedback for decision-making.

3.2 Functional Requirements

3.2.1. User Registration and Login:

- Users shall be able to register and log in securely using email and password or social media accounts.

3.2.2. Product Browsing and Filtering:

- Users shall be able to browse products by category (Winter Casual, Winter Formal, Summer Casual, Summer Formal) and filter by size, color, and price range.

3.2.3. Shopping Cart and Checkout:

- Users shall be able to add products to the shopping cart, view the cart, and proceed to a secure checkout process.

3.2.4. Order Tracking:

- Users shall be able to track their orders in real-time, including order status and delivery updates.

3.2.5. Product Reviews and Ratings:

- Users shall be able to leave reviews and ratings for products they have purchased, and view reviews from other users.

3.3 Non-Functional Requirements

3.3.1. Security:

- The platform shall ensure secure transactions using encryption (e.g., SSL/TLS) and protect user data from unauthorized access.

3.3.2. Performance:

- The platform shall handle up to 10,000 concurrent users without performance degradation, with a maximum page load time of 3 seconds.

3.3.3. User-Friendly Interface:

- The platform shall have an intuitive and responsive design that works seamlessly on desktops, tablets, and mobile devices.

3.3.4. Scalability:

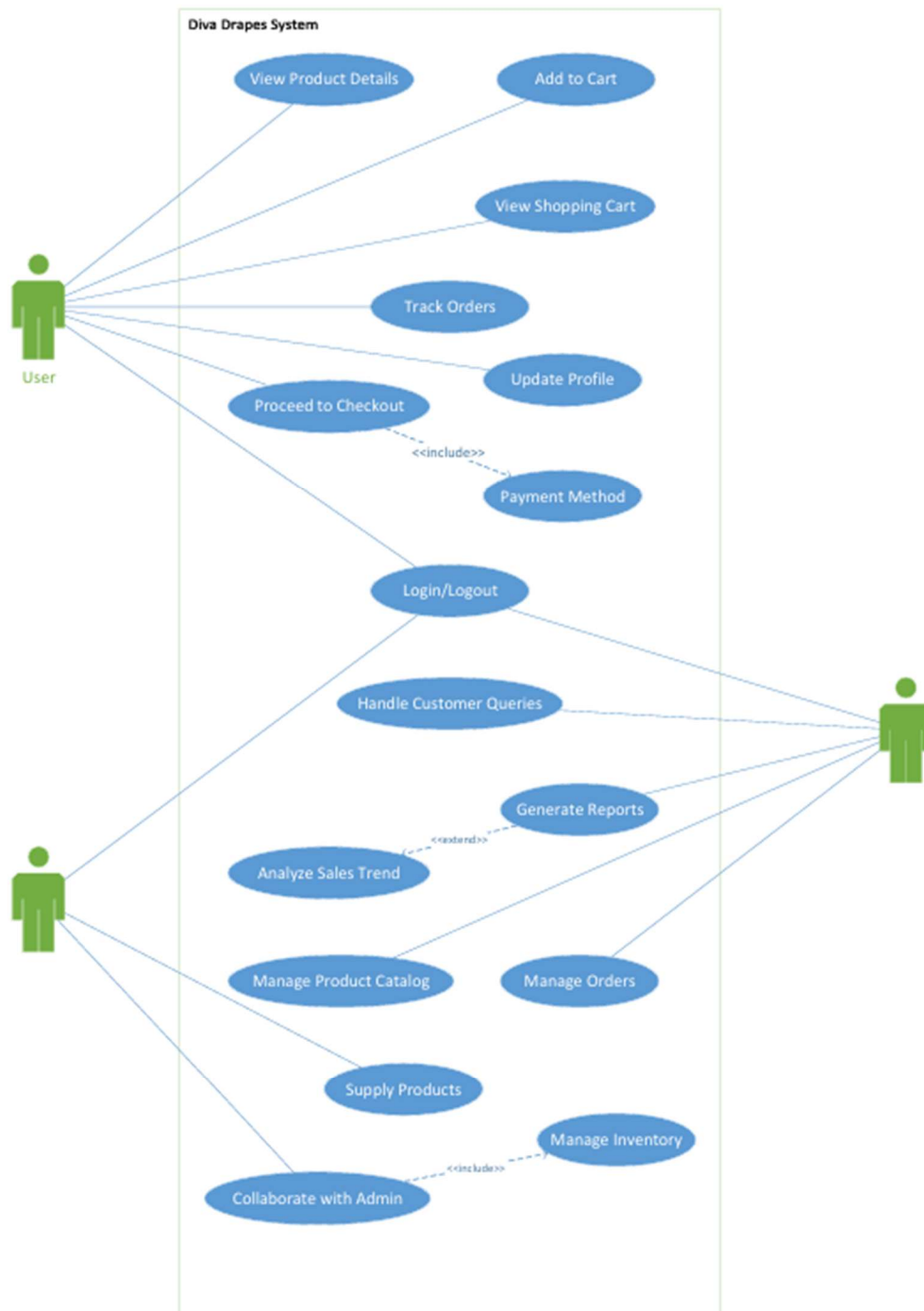
- The system shall be scalable to accommodate future growth in users, products, and transactions without requiring major rework.

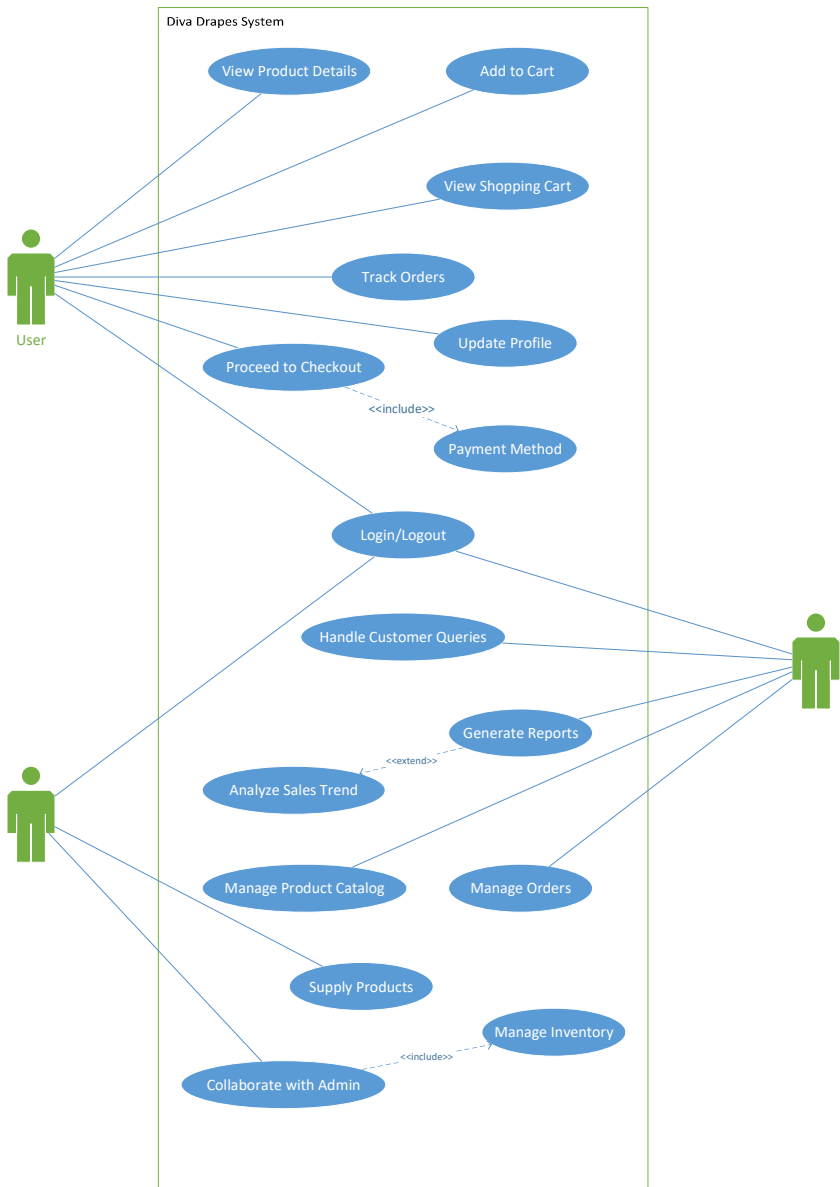
3.3.5. Data Backup and Recovery:

- The system shall automatically back up user data and order history daily and provide a recovery mechanism in case of data loss.

4. Use Case Models:

4.1 Use Case Diagram





4.2 Expanded Use Cases

4.2.1. User Authentication and Authorization

Element	Description
Use Case Name	User Authentication and Authorization
Primary Actor	User
Secondary Actor	Admin (for user management)
Preconditions	<ul style="list-style-type: none"> - The user must have an existing account or the ability to register. - The system must be online and operational.
Postconditions	<ul style="list-style-type: none"> - The user is authenticated and authorized to access the system. - The session is maintained until the user logs out or the session expires.
Main Success Scenario	<ol style="list-style-type: none"> 1. The user enters login credentials. 2. The system verifies credentials. 3. If valid, the system grants access. 4. If a new user, the system allows registration. 5. If authentication is successful, the system issues a session token.
Alternate Flows	<ul style="list-style-type: none"> - User initiates a password reset. - User logs in via social media.
Exceptions	<ul style="list-style-type: none"> - Incorrect credentials result in authentication failure. - Multiple failed login attempts lock the account.

4.2.2. View Product Details

Element	Description
Use Case Name	View Product Details
Primary Actor	User
Preconditions	<ul style="list-style-type: none"> - The user must be logged in or browsing as a guest.
Postconditions	<ul style="list-style-type: none"> - The user has viewed product details successfully.
Main Success Scenario	<ol style="list-style-type: none"> 1. The user selects a product from the catalog. 2. The system displays the product details, including name, price, images, and description. 3. The user can scroll through images, check reviews, and select available sizes/colors.
Exceptions	<ul style="list-style-type: none"> - The product is out of stock and marked as unavailable.

4.2.3. Add to Cart

Element	Description
Use Case Name	Add to Cart
Primary Actor	User
Preconditions	- The user has selected a product.
Postconditions	- The product is successfully added to the shopping cart.
Main Success Scenario	1. The user selects a product and clicks "Add to Cart." 2. The system confirms availability. 3. The product is added to the cart. 4. The system updates the cart total and item count.
Exceptions	- The product is out of stock.

4.2.4. View Shopping Cart

Element	Description
Use Case Name	View Shopping Cart
Primary Actor	User
Preconditions	- The user has at least one item in the cart.
Postconditions	- The cart details are displayed to the user.
Main Success Scenario	1. The user navigates to the shopping cart. 2. The system displays all added products, their prices, and quantities. 3. The user can update quantities or remove items.
Exceptions	- The cart is empty, and the system prompts the user to browse products.

4.2.5. Proceed to Checkout

Element	Description
Use Case Name	Proceed to Checkout
Primary Actor	User
Preconditions	- The user must have items in the cart.
Postconditions	- The user is redirected to the payment page.
Main Success Scenario	<ol style="list-style-type: none"> 1. The user clicks on "Checkout." 2. The system prompts the user to log in (if not logged in). 3. The system verifies stock availability. 4. The system directs the user to the payment page.
Exceptions	- One or more items are out of stock.

4.2.6. Payment Method

Element	Description
Use Case Name	Payment Method
Primary Actor	User
Preconditions	- The user has proceeded to checkout.
Postconditions	- The payment is processed successfully.
Main Success Scenario	<ol style="list-style-type: none"> 1. The user selects a payment method (credit card, PayPal, cash on delivery). 2. The system validates the payment details. 3. The transaction is processed. 4. A confirmation is displayed.
Exceptions	- Payment fails due to incorrect details or insufficient funds.

4.2.7. Track Orders

Element	Description
Use Case Name	Track Orders
Primary Actor	User
Preconditions	- The user has placed an order.
Postconditions	- The order tracking status is displayed.
Main Success Scenario	1. The user navigates to "My Orders." 2. The system fetches and displays the order status (Processing, Shipped, Delivered).
Exceptions	- The system fails to retrieve order status due to a server issue.

4.2.8. Update Profile

Element	Description
Use Case Name	Update Profile
Primary Actor	User
Preconditions	- The user is logged in.
Postconditions	- The profile is updated successfully.
Main Success Scenario	1. The user navigates to the profile page. 2. The user updates personal details. 3. The system saves the changes and confirms the update.
Exceptions	- The system fails to save due to an error.

4.2.9. Manage Product Catalog

Element	Description
Use Case Name	Manage Product Catalog
Primary Actor	Admin
Preconditions	- The admin must be logged in.
Postconditions	- Products are updated in the catalog.
Main Success Scenario	1. The admin adds/updates/removes products. 2. The system updates the catalog.
Exceptions	- System error prevents changes.

4.2.10. Handle Customer Queries

Element	Description
Use Case Name	Handle Customer Queries
Primary Actor	Admin
Preconditions	- A customer submits a query.
Postconditions	- The query is resolved.
Main Success Scenario	1. The admin views customer queries. 2. The admin responds or escalates.
Exceptions	- The system fails to deliver the query response.

4.2.11. Generate Reports

Element	Description
Use Case Name	Generate Reports
Primary Actor	Admin
Preconditions	- The system has sales data.
Postconditions	- The report is generated.
Main Success Scenario	1. The admin selects a report type. 2. The system generates and displays the report.
Exceptions	- The system fails to retrieve data.

4.2.12. Analyze Sales Trend

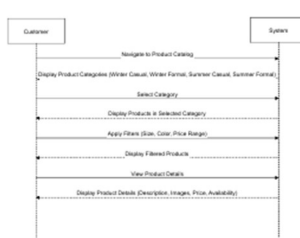
Element	Description
Use Case Name	Analyze Sales Trend
Primary Actor	Admin
Preconditions	- Sales data exists.
Postconditions	- The sales trend is analyzed.
Main Success Scenario	1. The admin selects sales metrics. 2. The system displays analytics.
Exceptions	- Data retrieval fails.

4.3 System Sequence Diagram (SSD)

1. SSD for User Registration and Login



2. SSD for Product Browsing and Filtering



3. SSD for Shopping Cart and Checkout



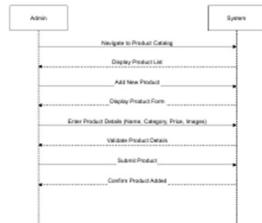
4. SSD for Order Tracking



5. SSD for Product Reviews and Ratings



6. SSD for Product Catalog Management (Admin)



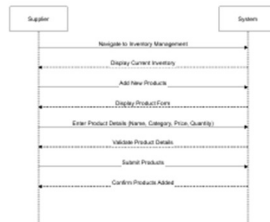
7. SSD for Order Management System (Admin)



8. SSD for Data Visualization and Reporting (Admin)



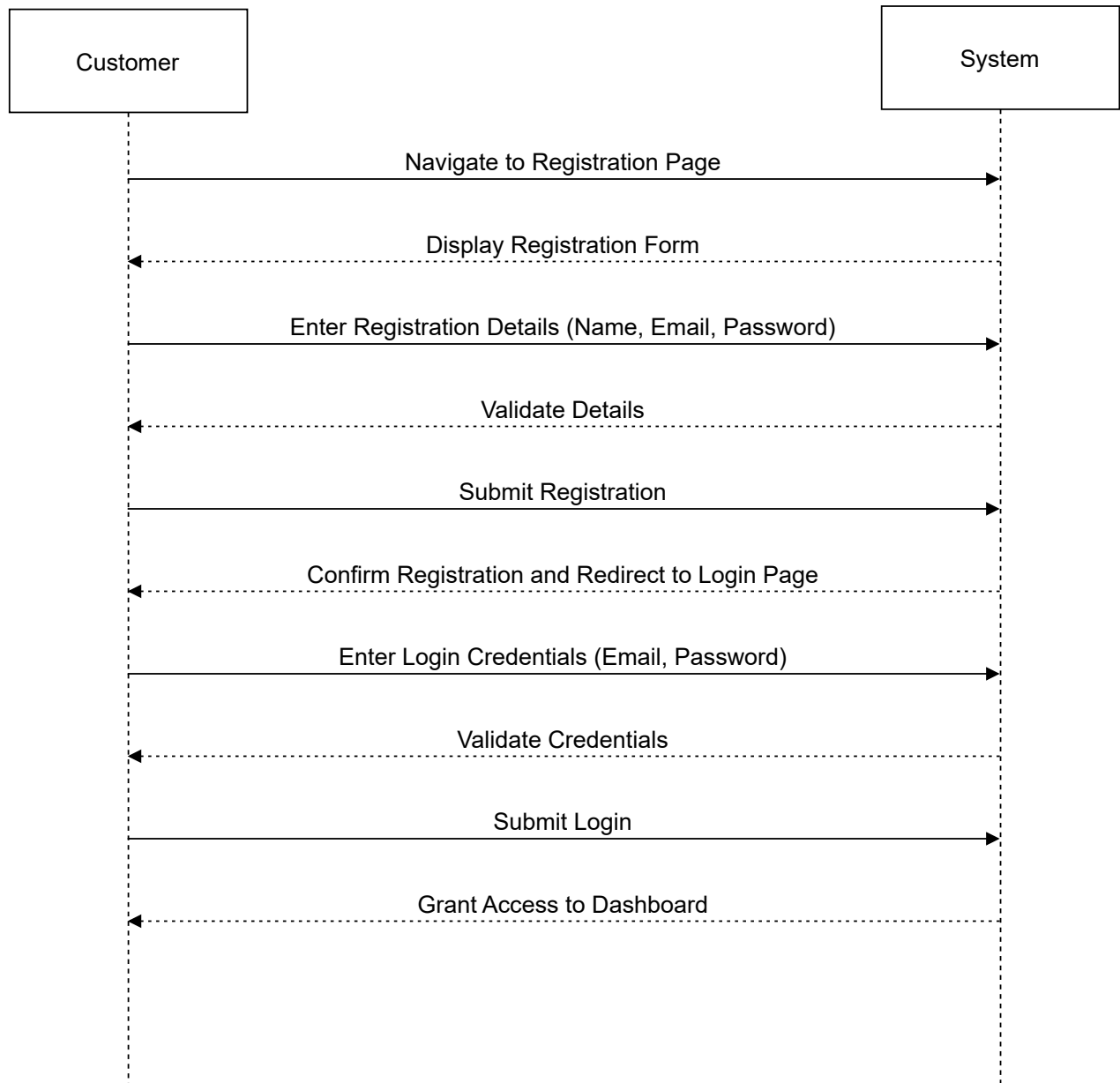
9. SSD for Supply Products (Supplier)



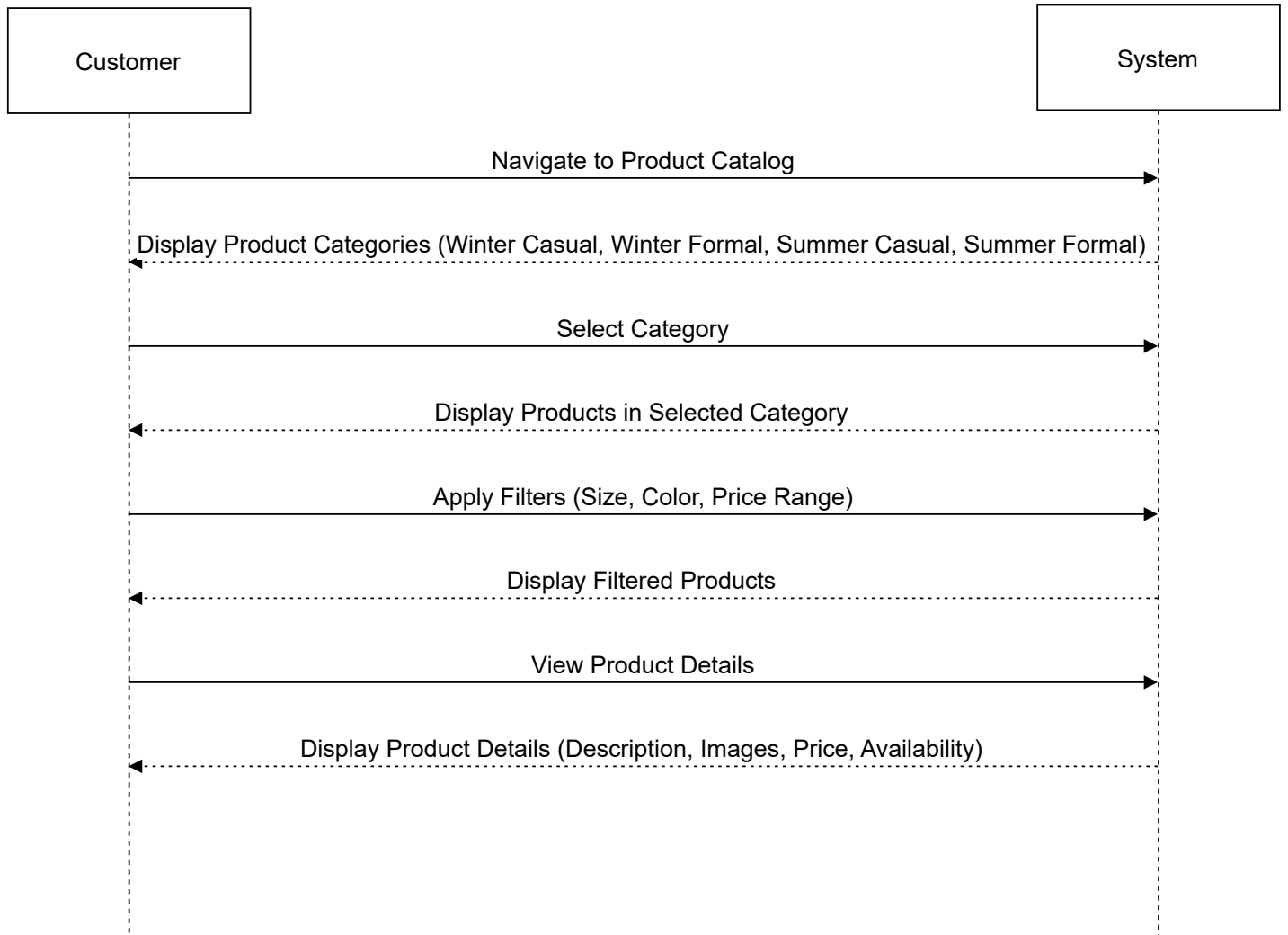
10. SSD for Collaborate with Admin (Supplier)



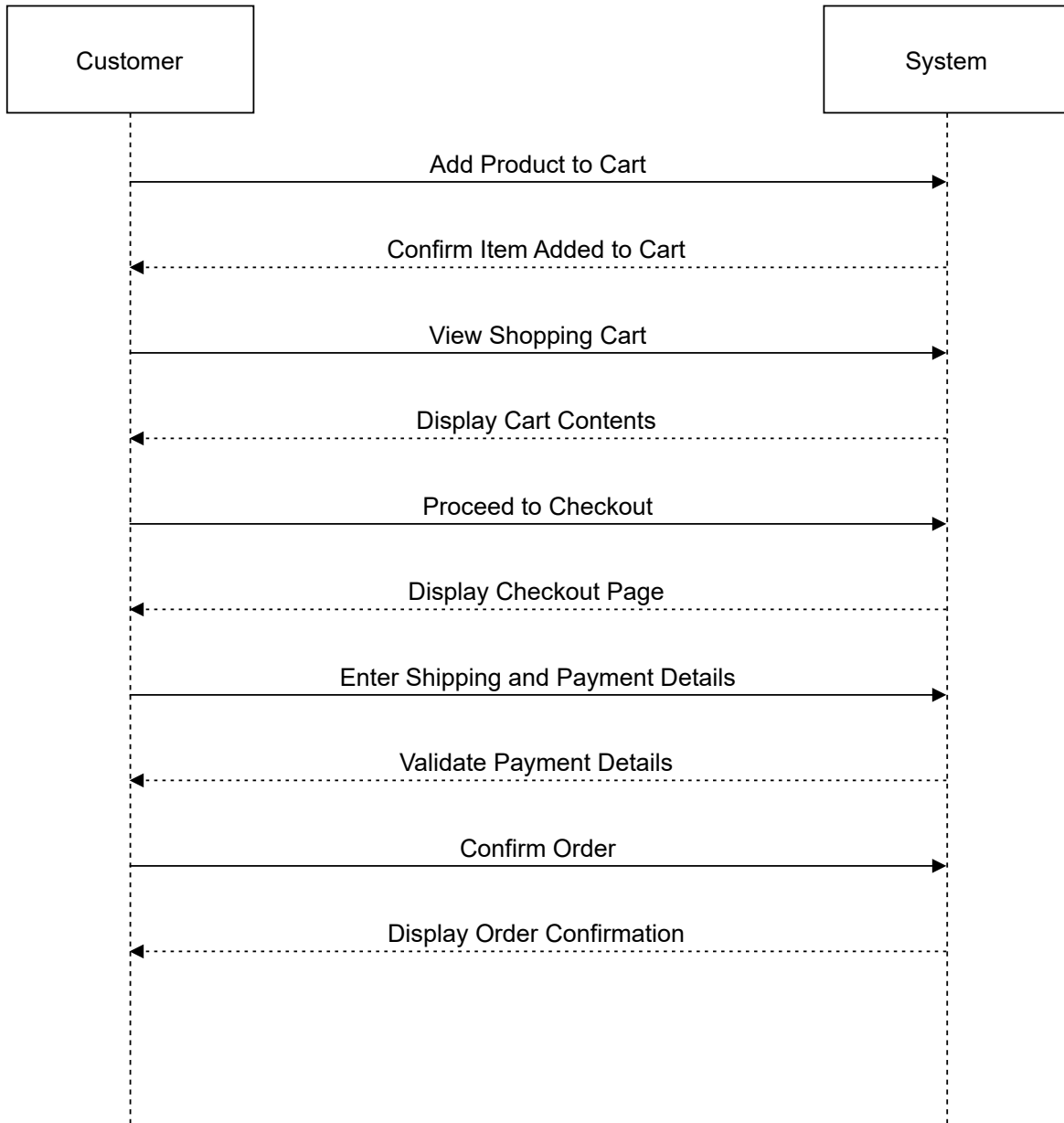
1. SSD for User Registration and Login



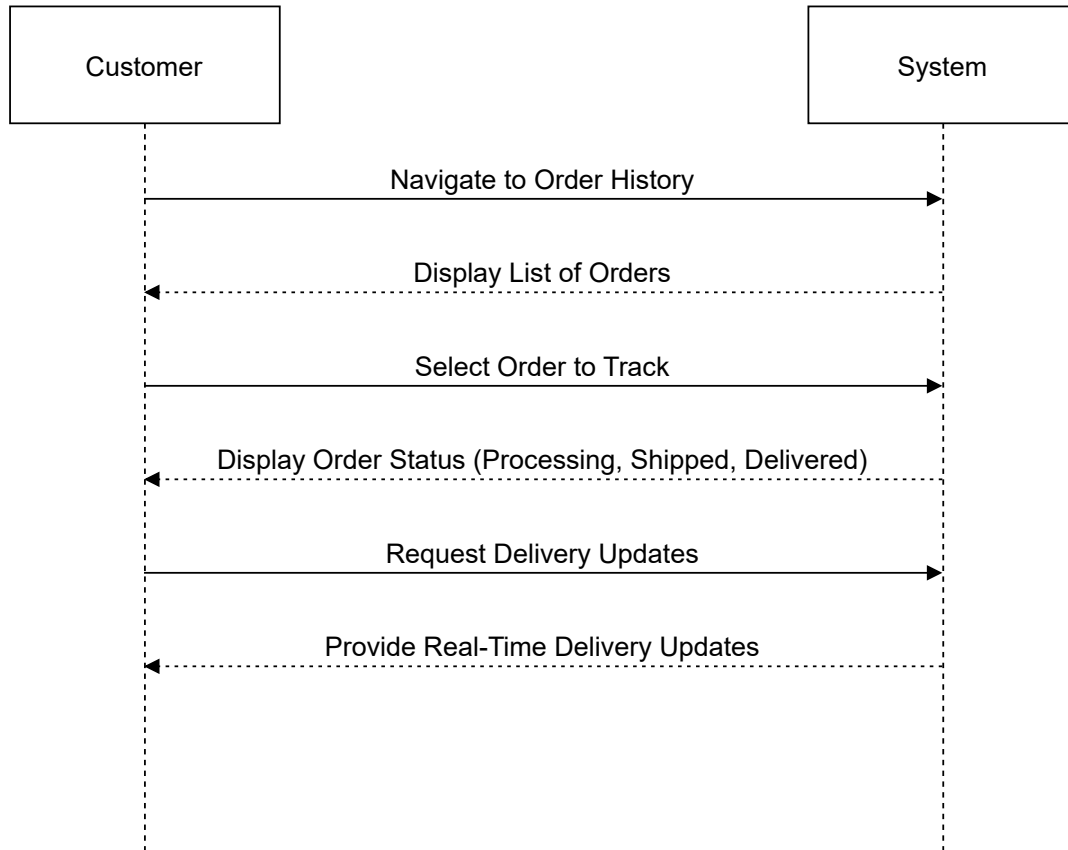
2. SSD for Product Browsing and Filtering



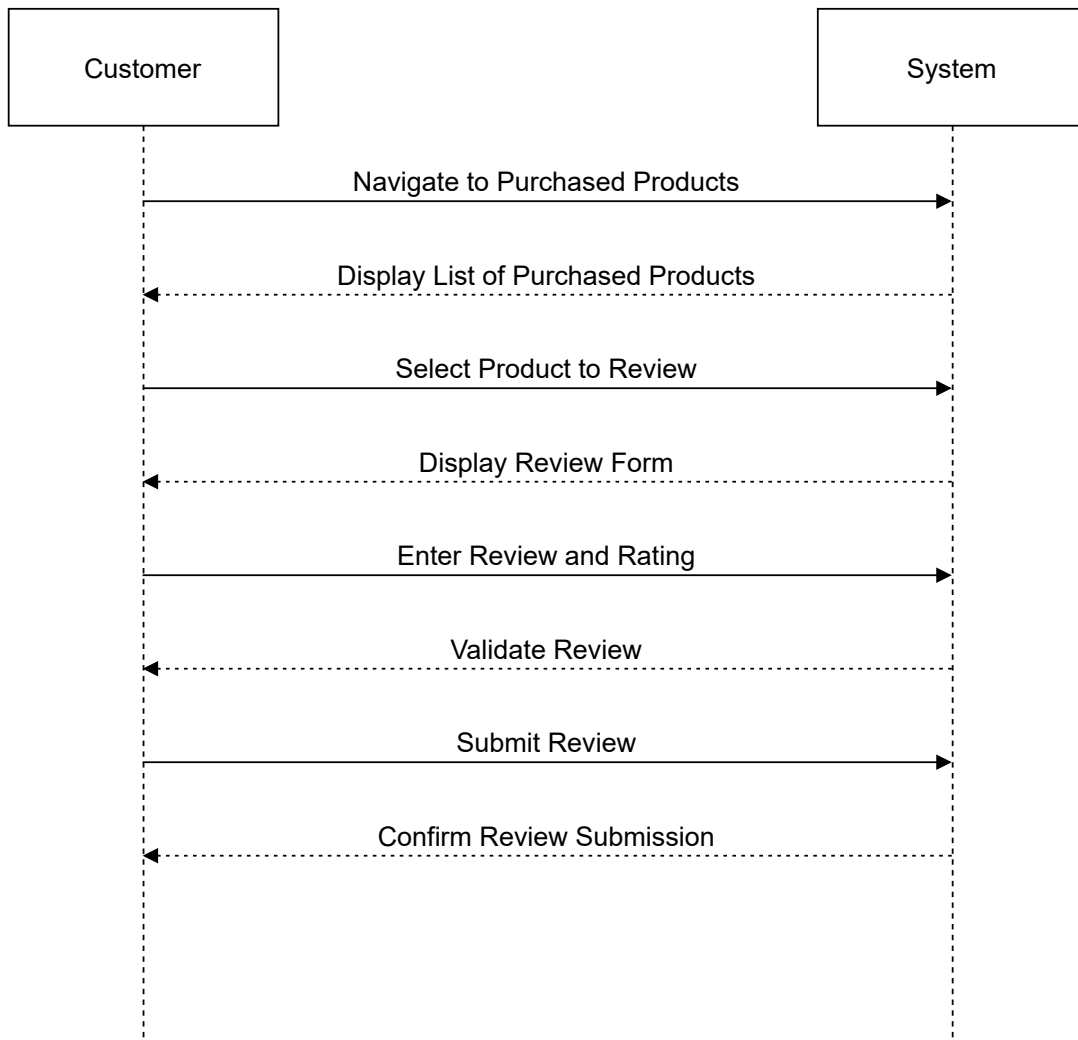
3. SSD for Shopping Cart and Checkout



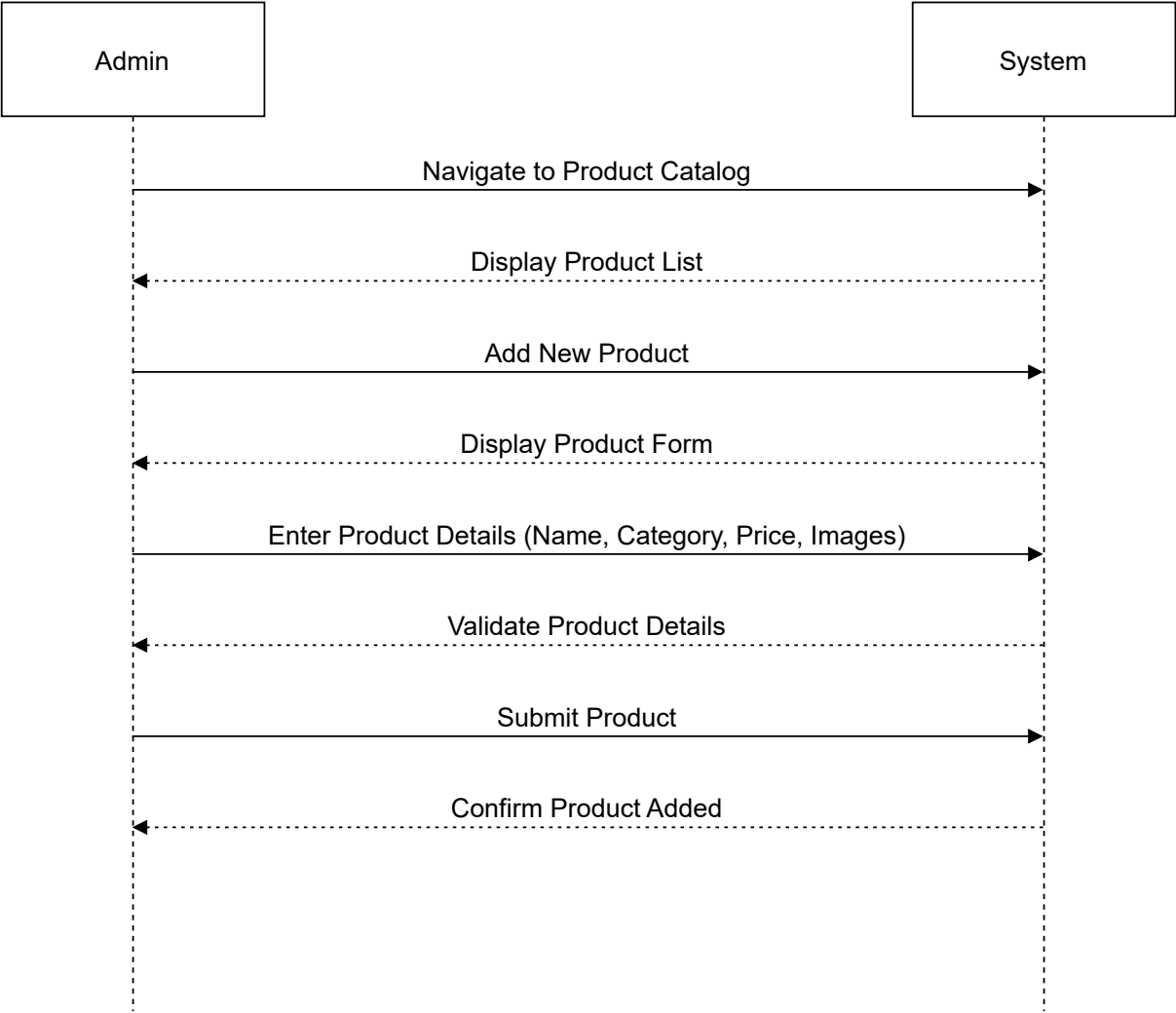
4. SSD for Order Tracking



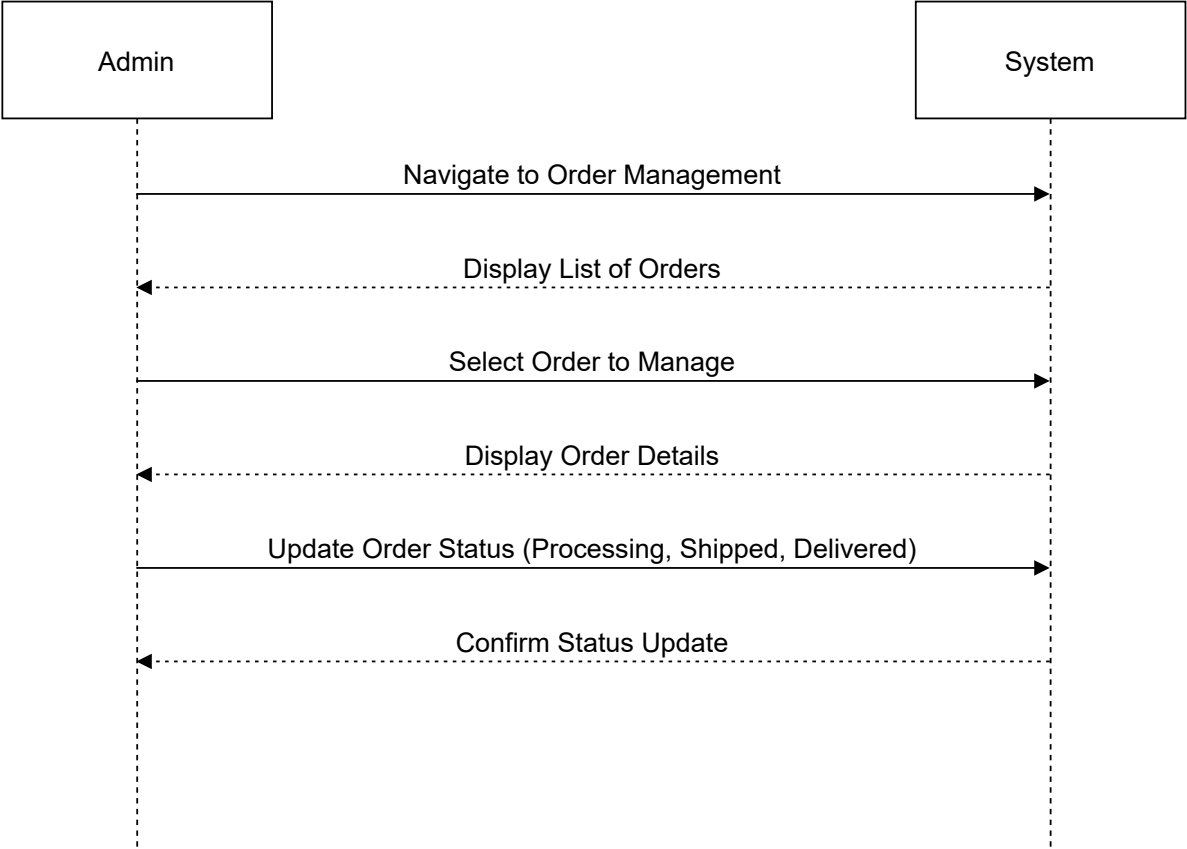
5. SSD for Product Reviews and Ratings



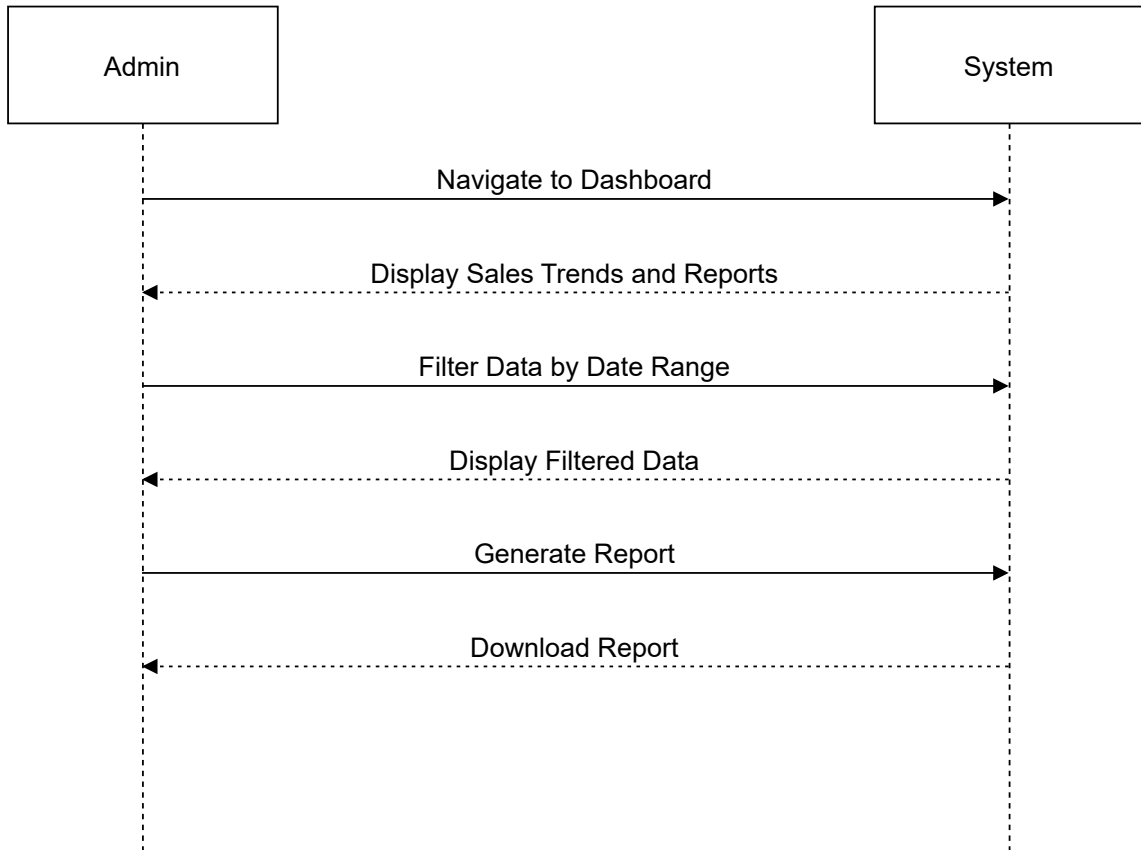
6 SSD for Product Catalog Management (Admin)



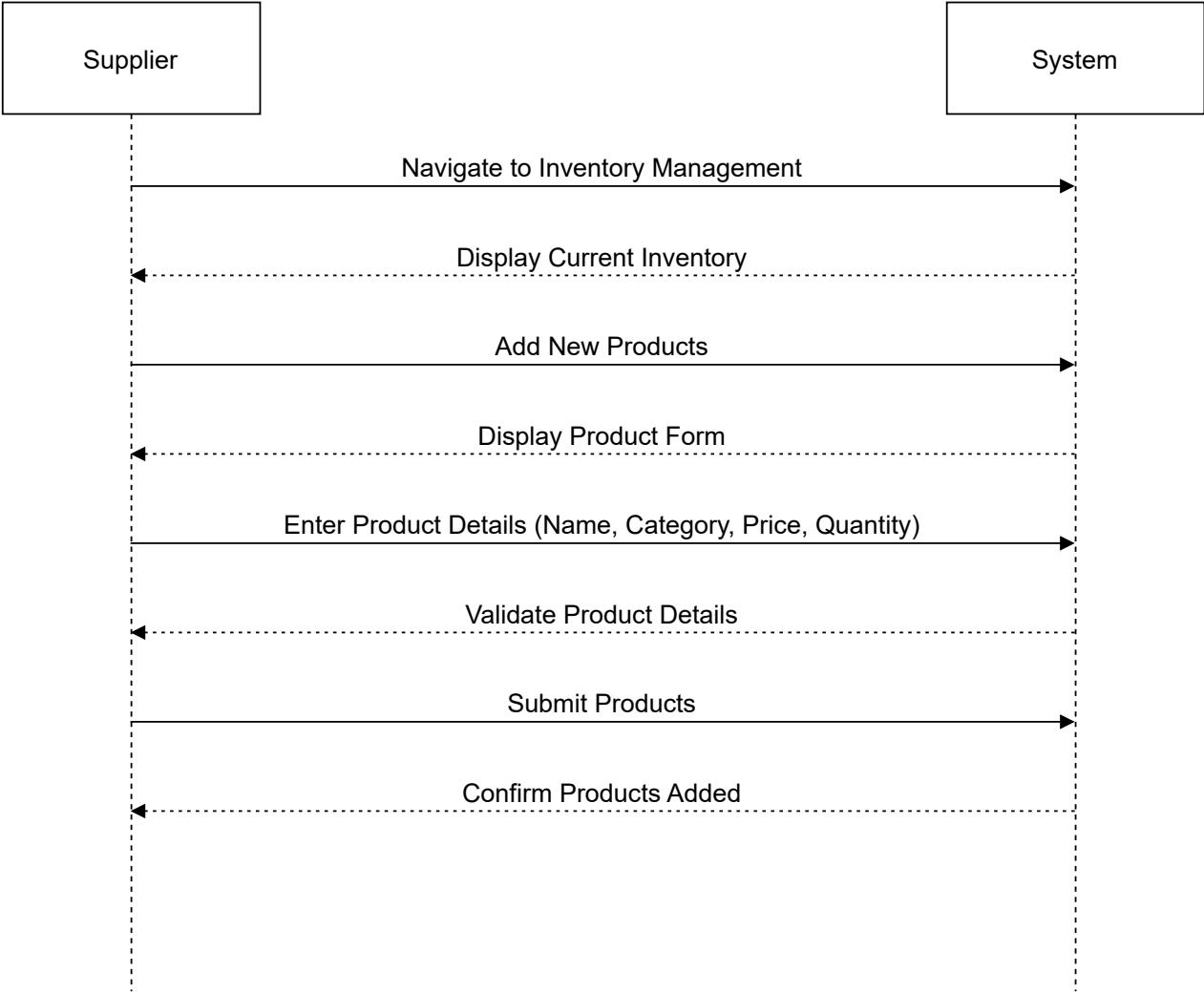
7. SSD for Order Management System (Admin)



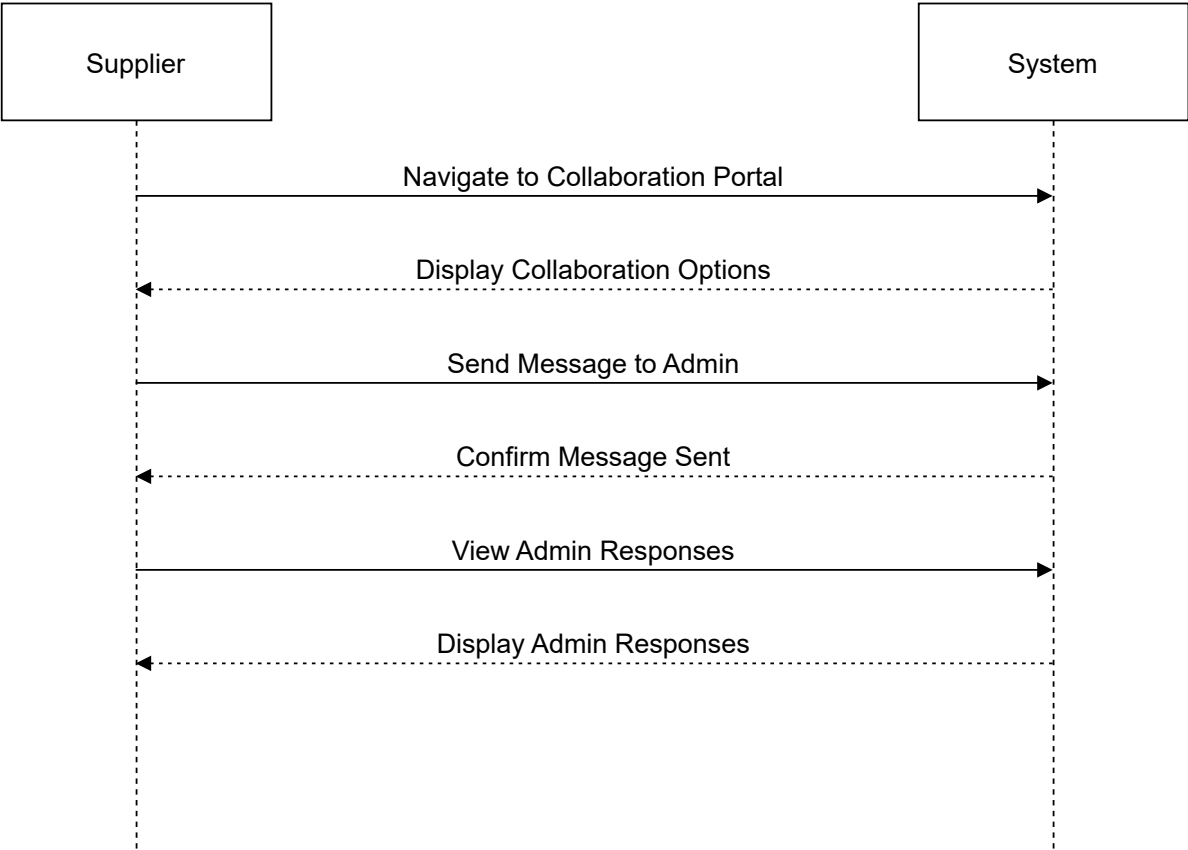
8. SSD for Data Visualization and Reporting (Admin)



9. SSD for Supply Products (Supplier)



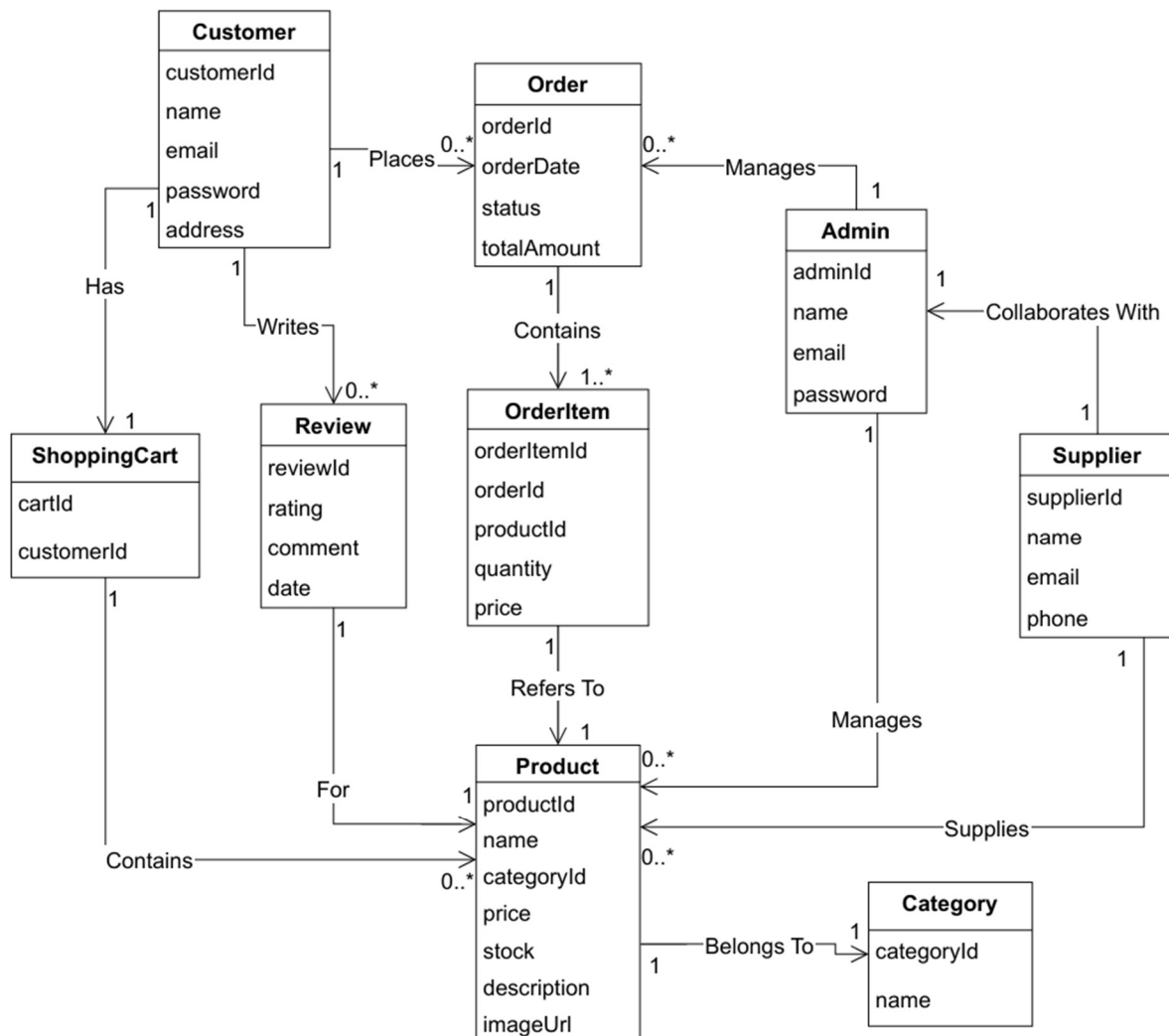
10. SSD for Collaborate with Admin (Supplier)

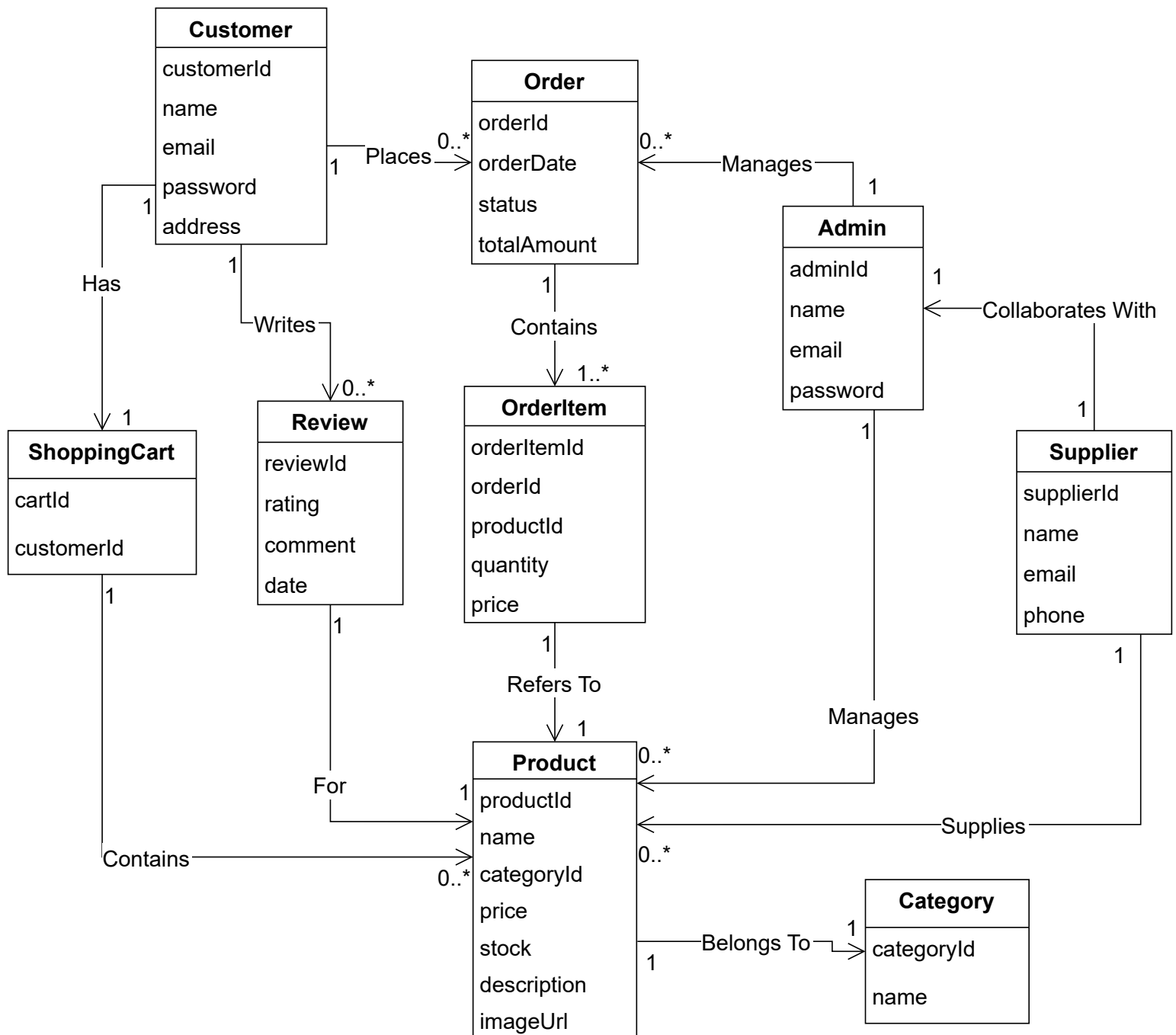


5. Design Phase Artifacts:

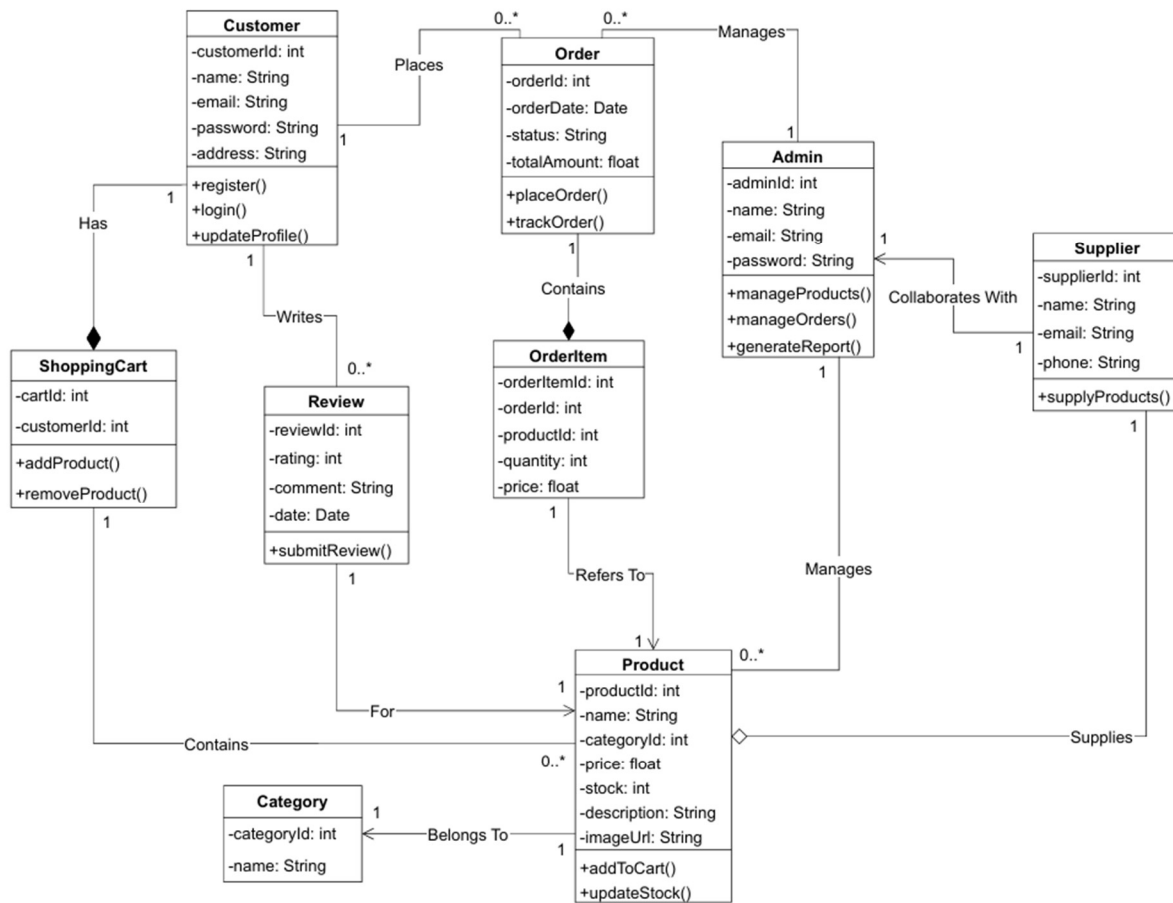
5.1 Structural Design:

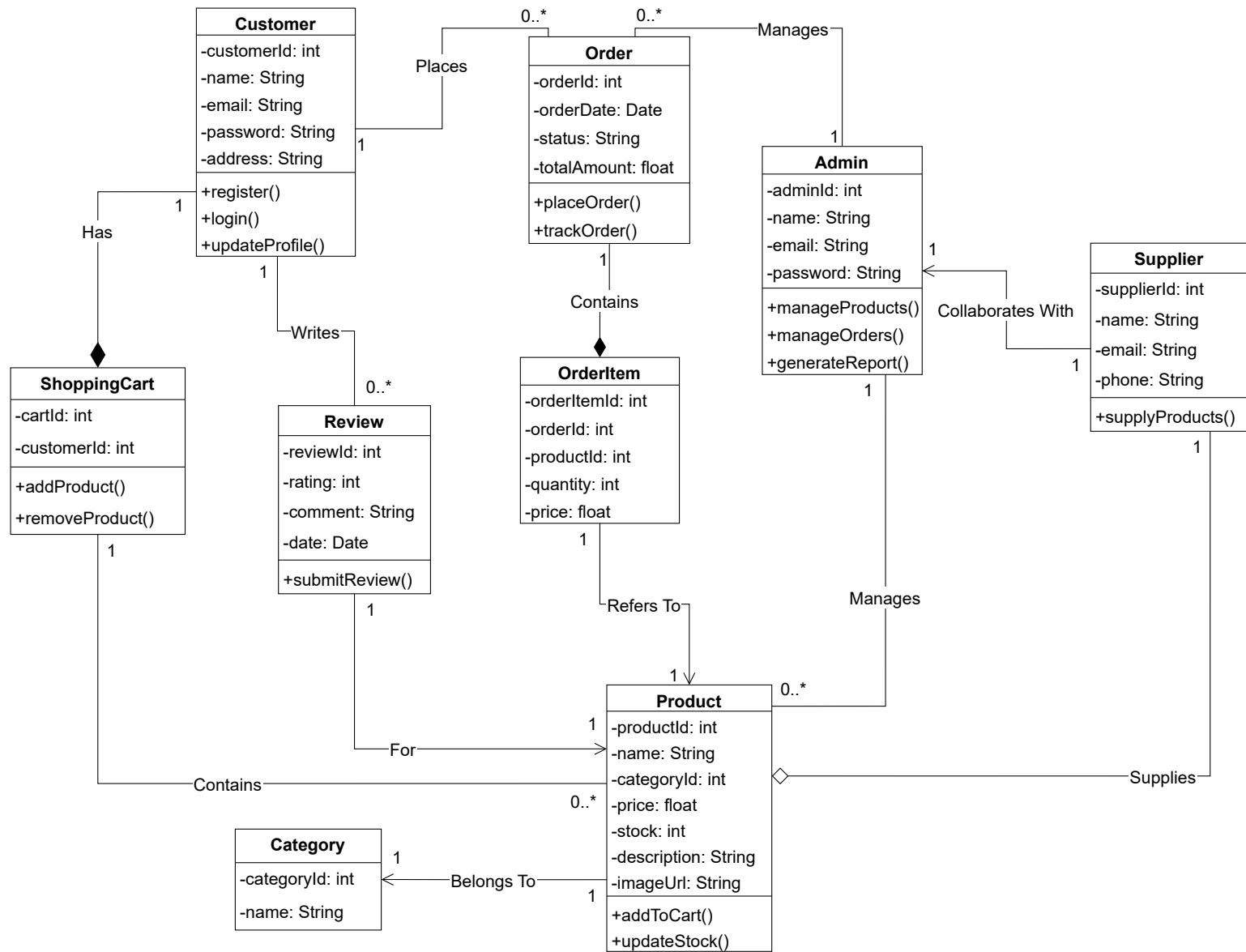
5.1.1 Domain Model





5.1.2 Class Diagram

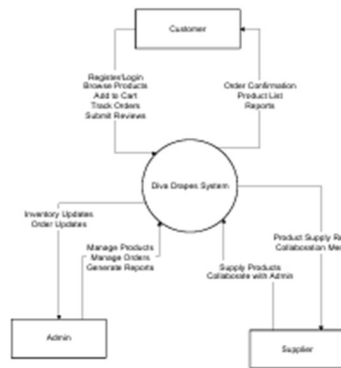




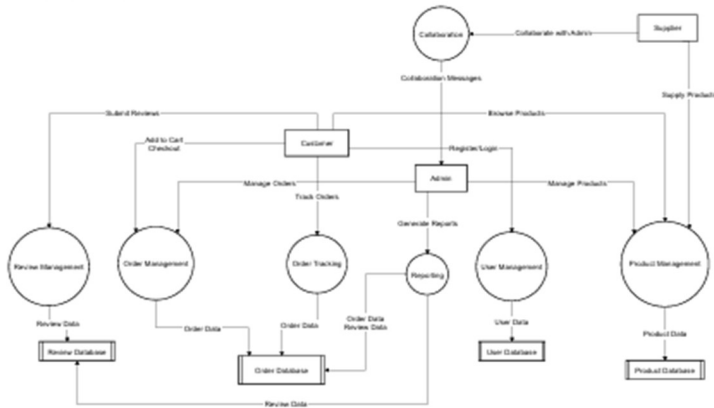
5.2 Behavioral Design:

5.2.1 Data Flow Diagram (DFD)

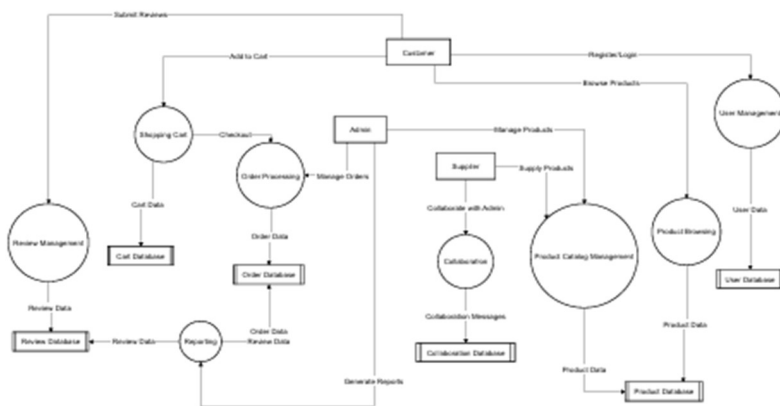
DFD LEVEL 0



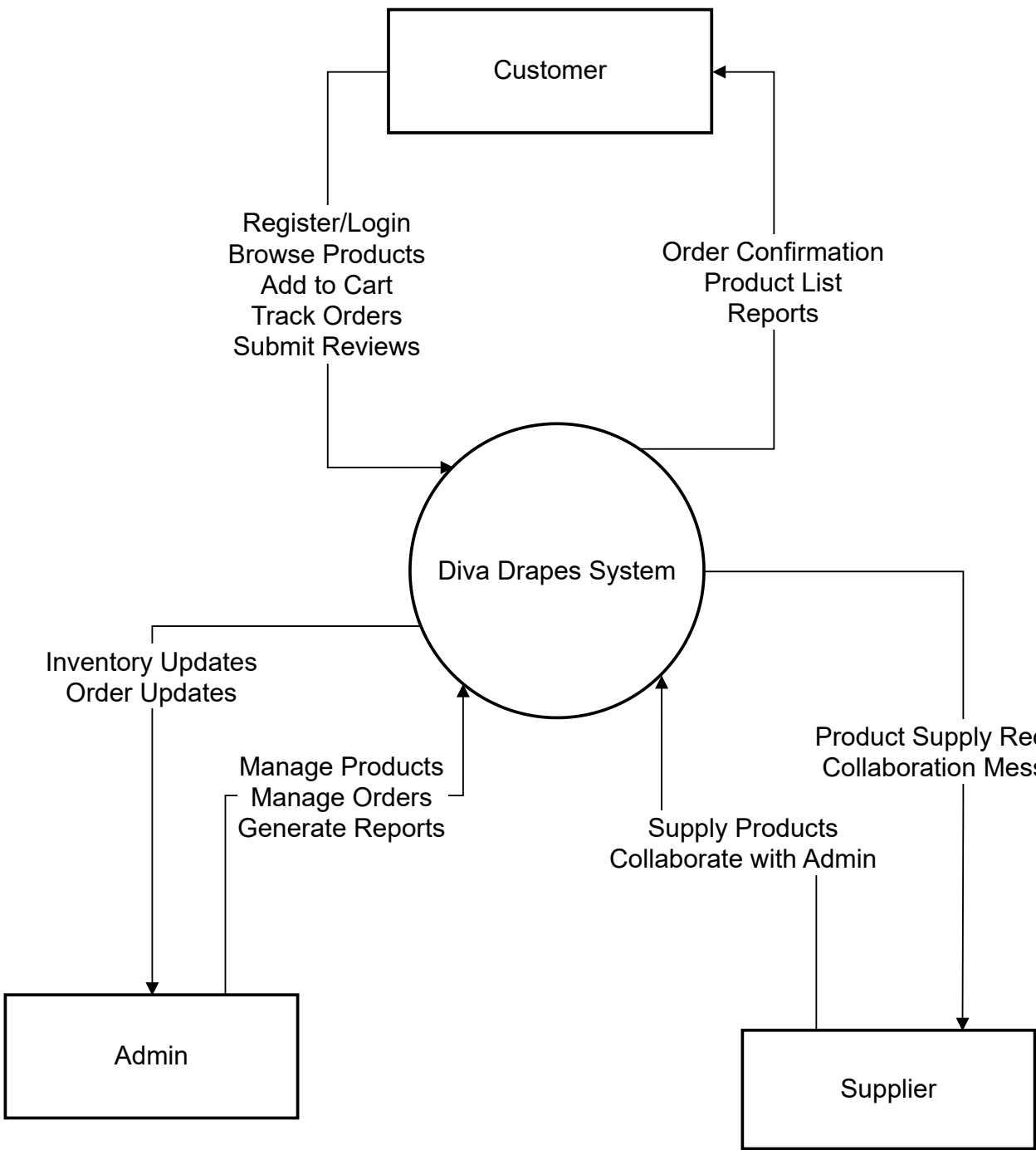
DFD LEVEL 1



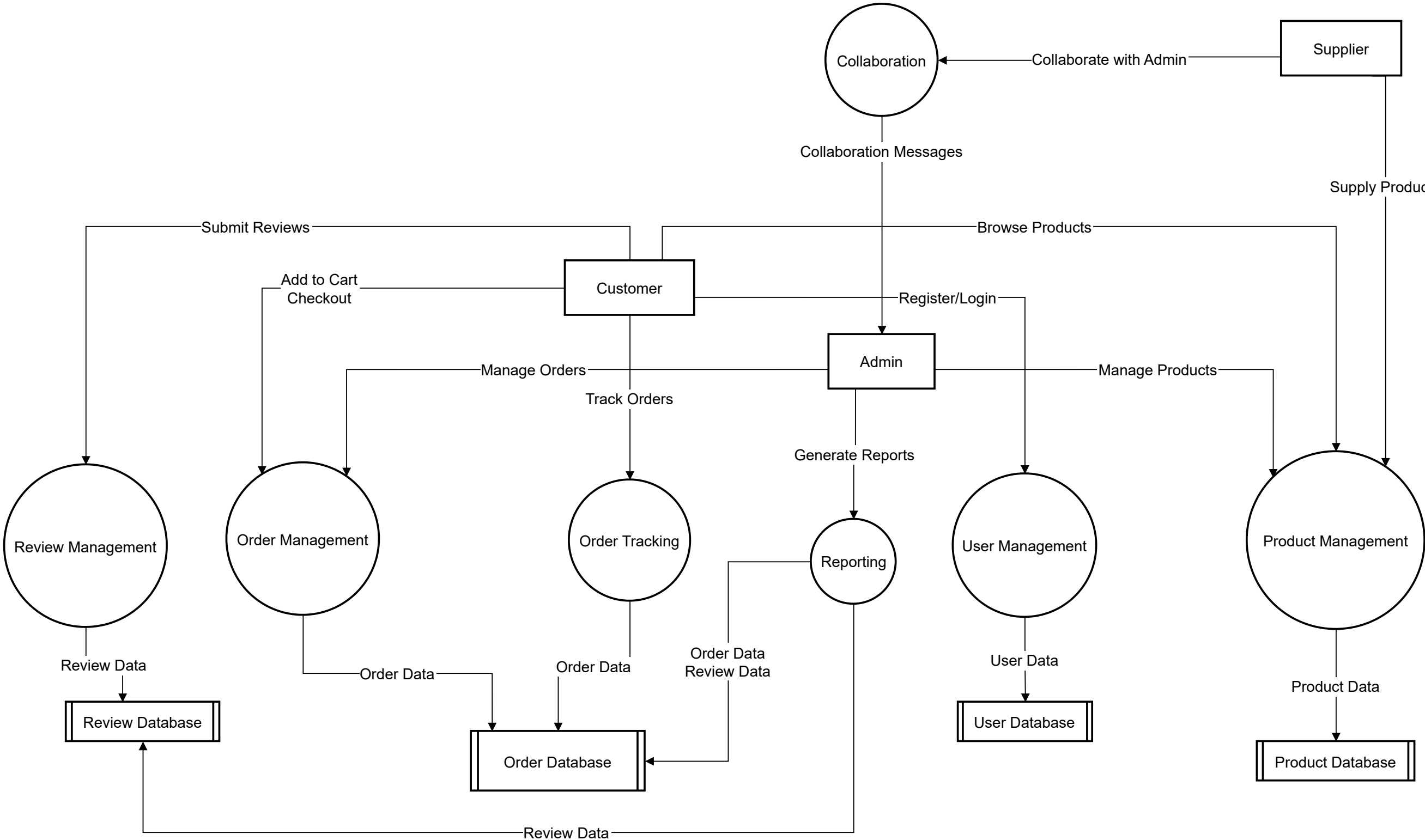
DFD LEVEL 2



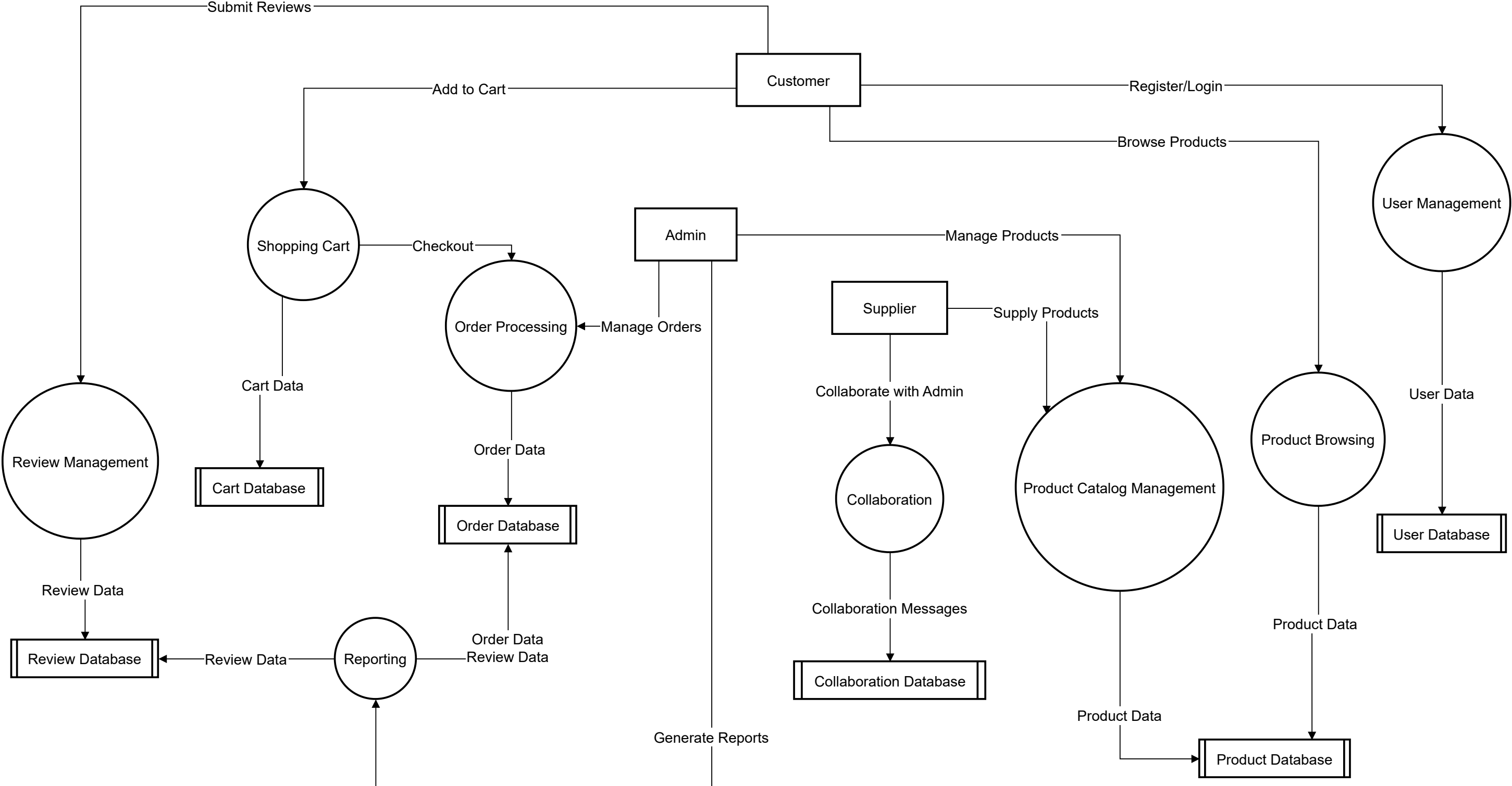
DFD LEVEL 0



DFD LEVEL 1



DFD LEVEL 2



5.2.2 Activity Diagram

1. Activity Diagram for User Registration and Login



2. Activity Diagram for Product Browsing and Filtering



3. Activity Diagram for Shopping Cart and Checkout



4. Activity Diagram for Order Tracking



5. Activity Diagram for Product Reviews and Ratings



6. Activity Diagram for Product Catalog Management (Admin)



7. Activity Diagram for Order Management System (Admin)



7. Activity Diagram for Data Visualization and Reporting (Admin)



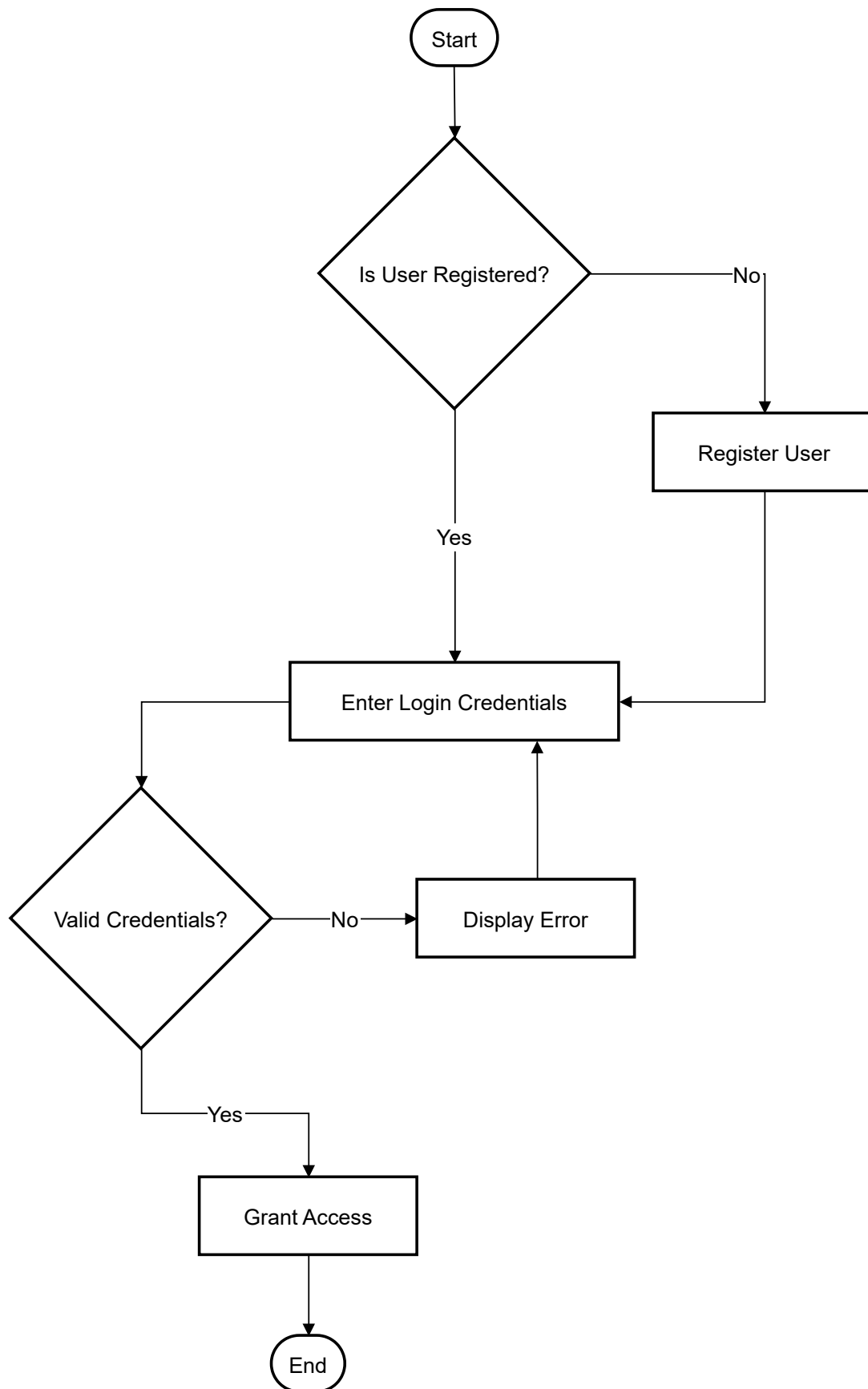
9. Activity Diagram for Supply Products (Supplier)



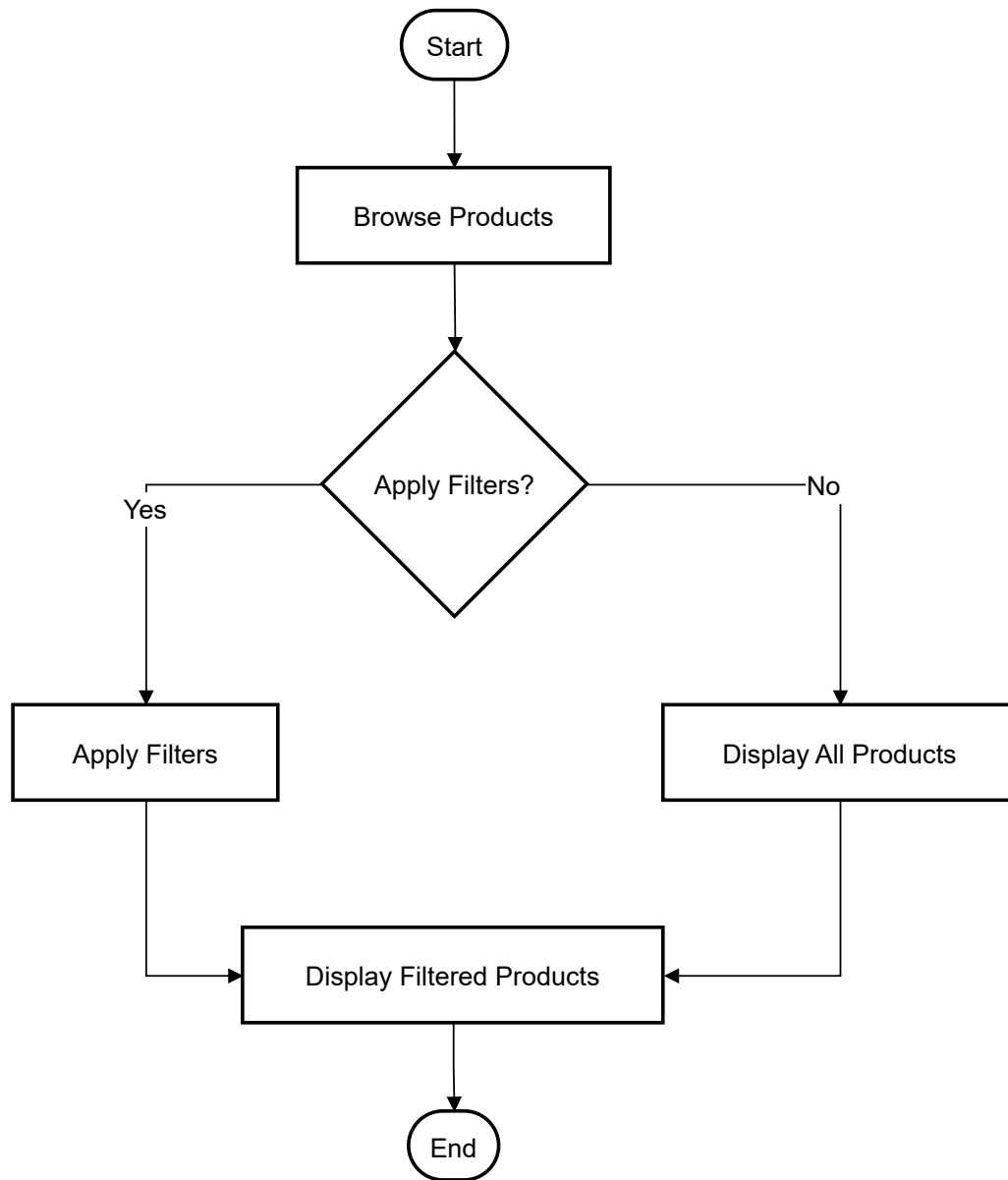
10. Activity Diagram for Collaborate with Admin (Supplier)



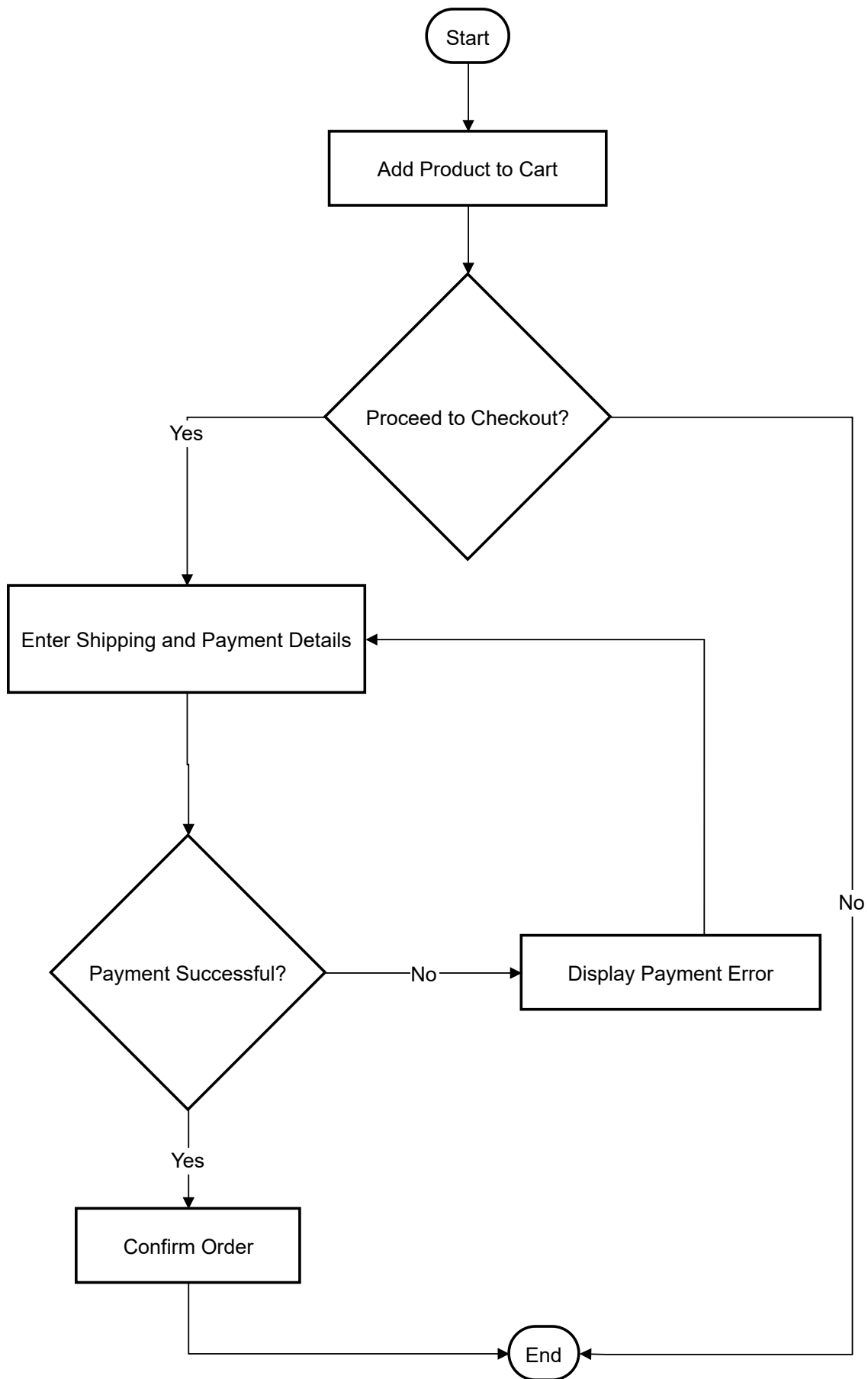
1. Activity Diagram for User Registration and Login



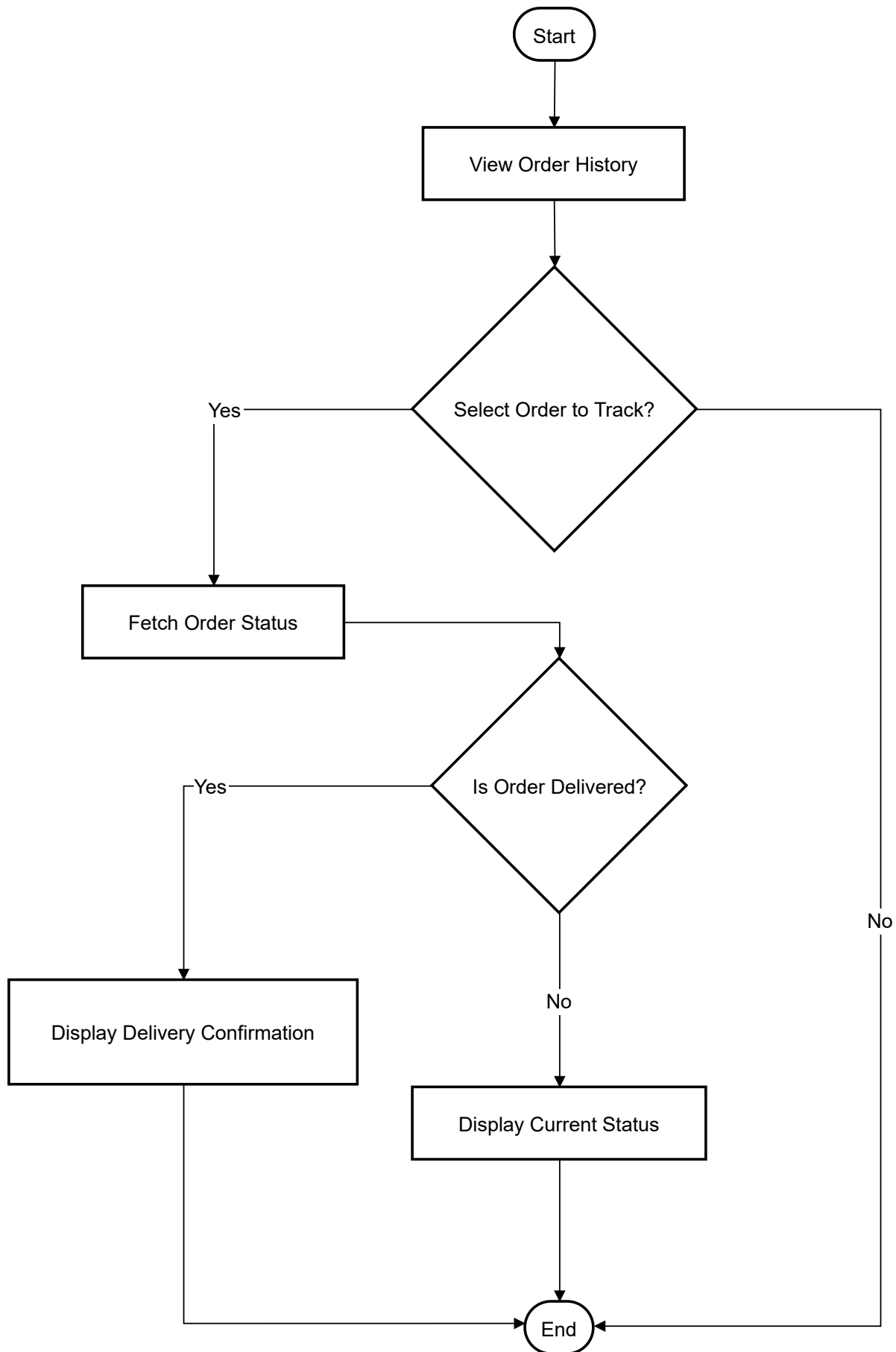
2. Activity Diagram for Product Browsing and Filtering



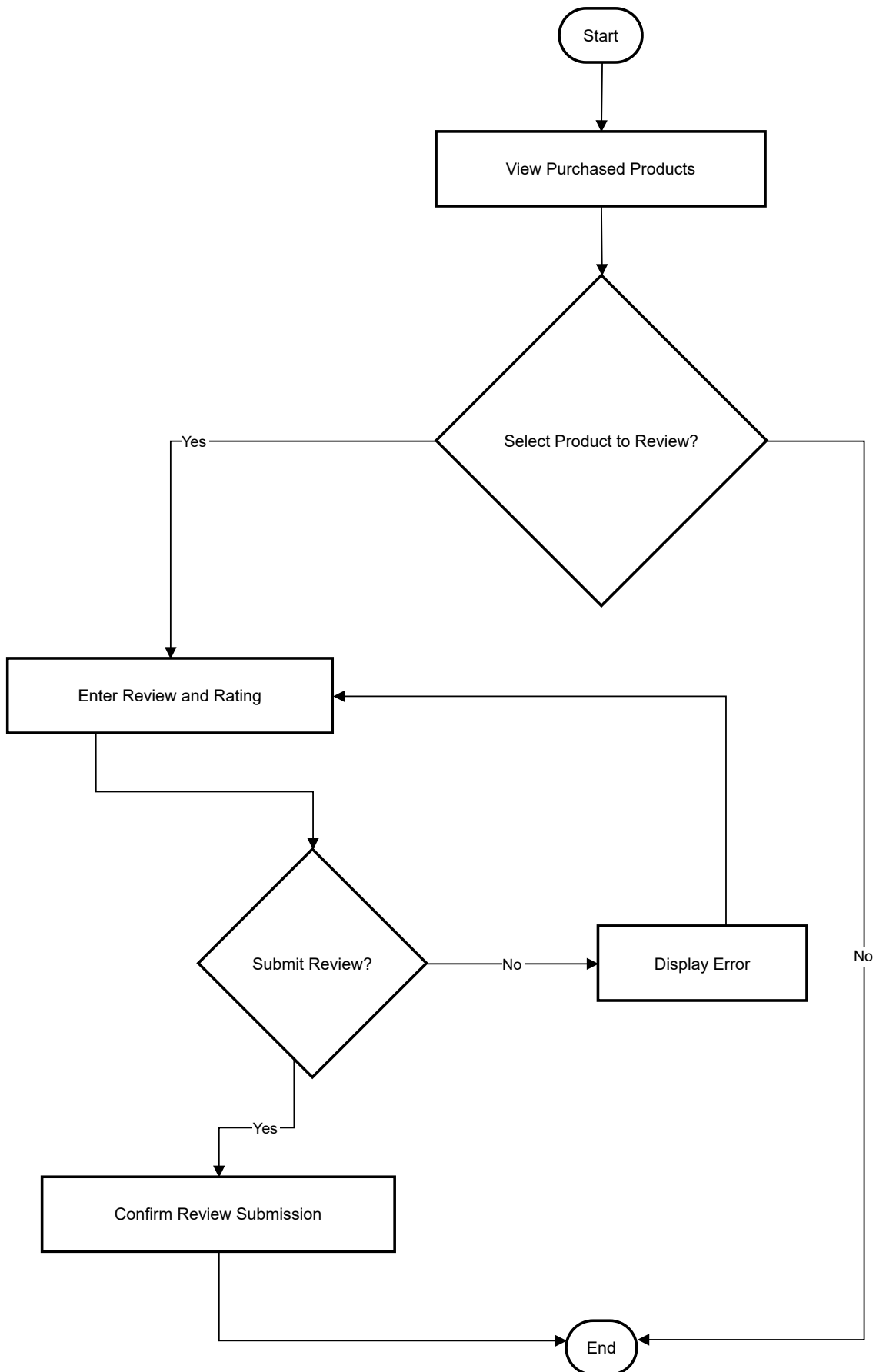
3. Activity Diagram for Shopping Cart and Checkout



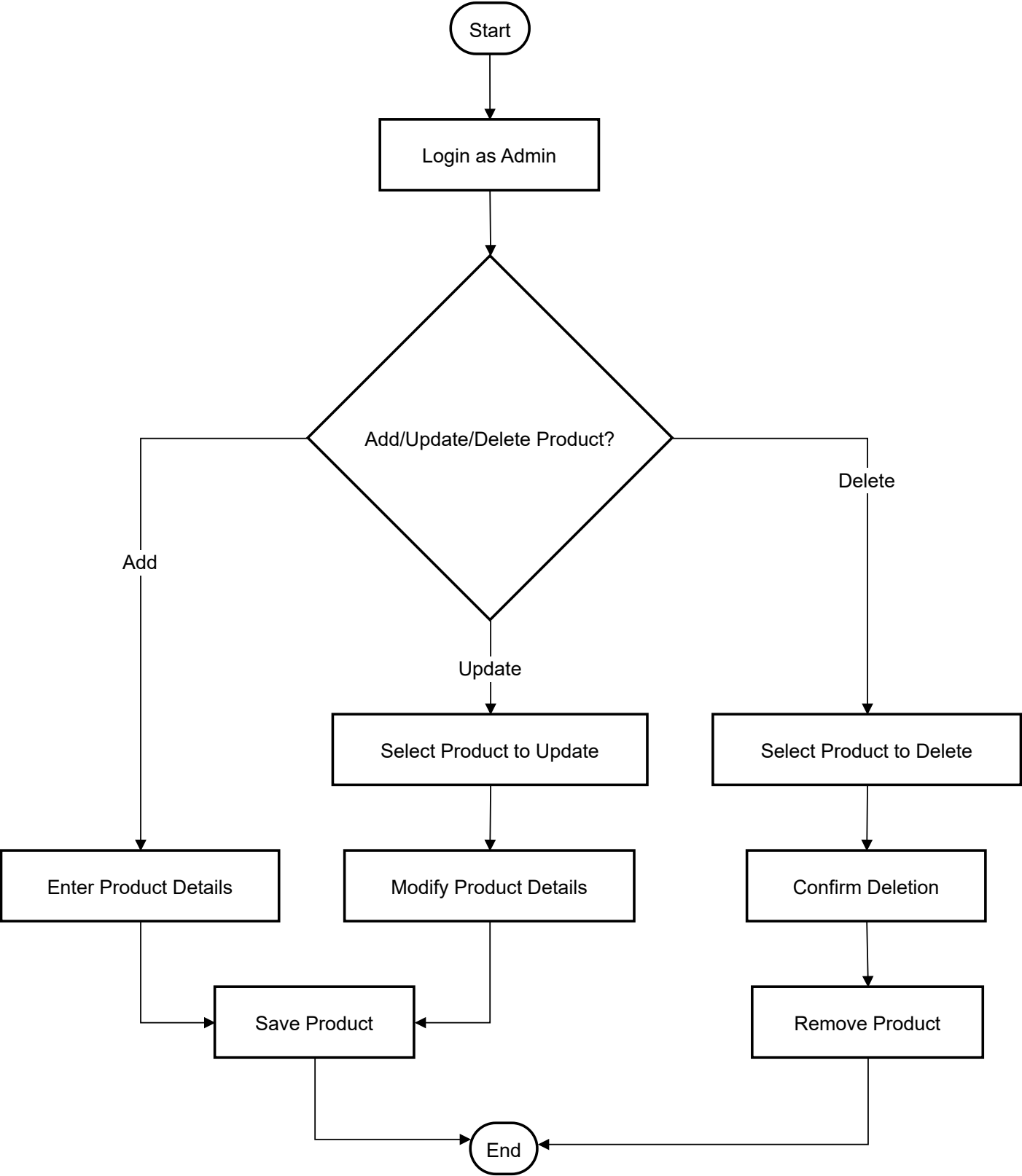
4. Activity Diagram for Order Tracking



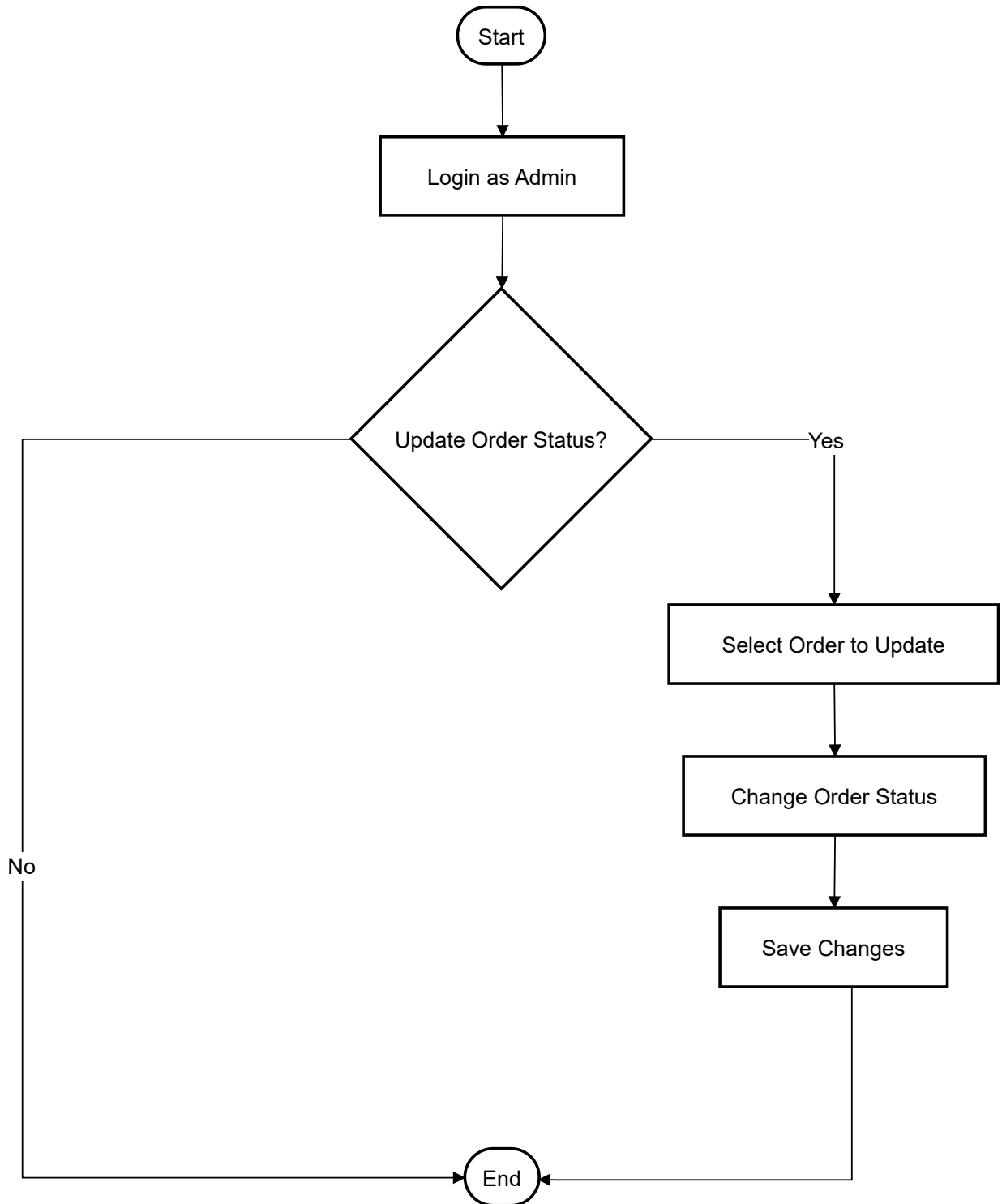
5. Activity Diagram for Product Reviews and Ratings



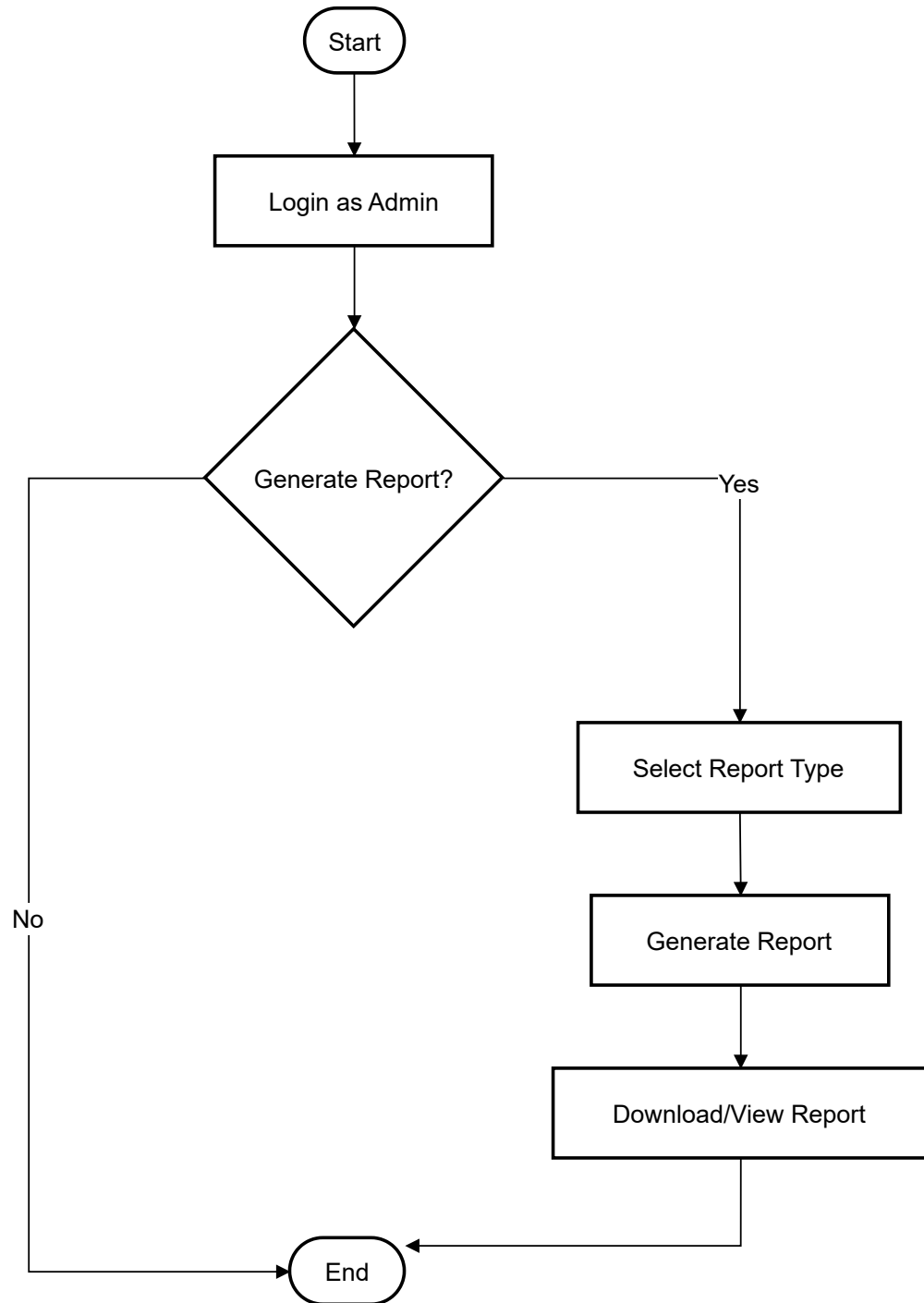
6. Activity Diagram for Product Catalog Management (Admin)



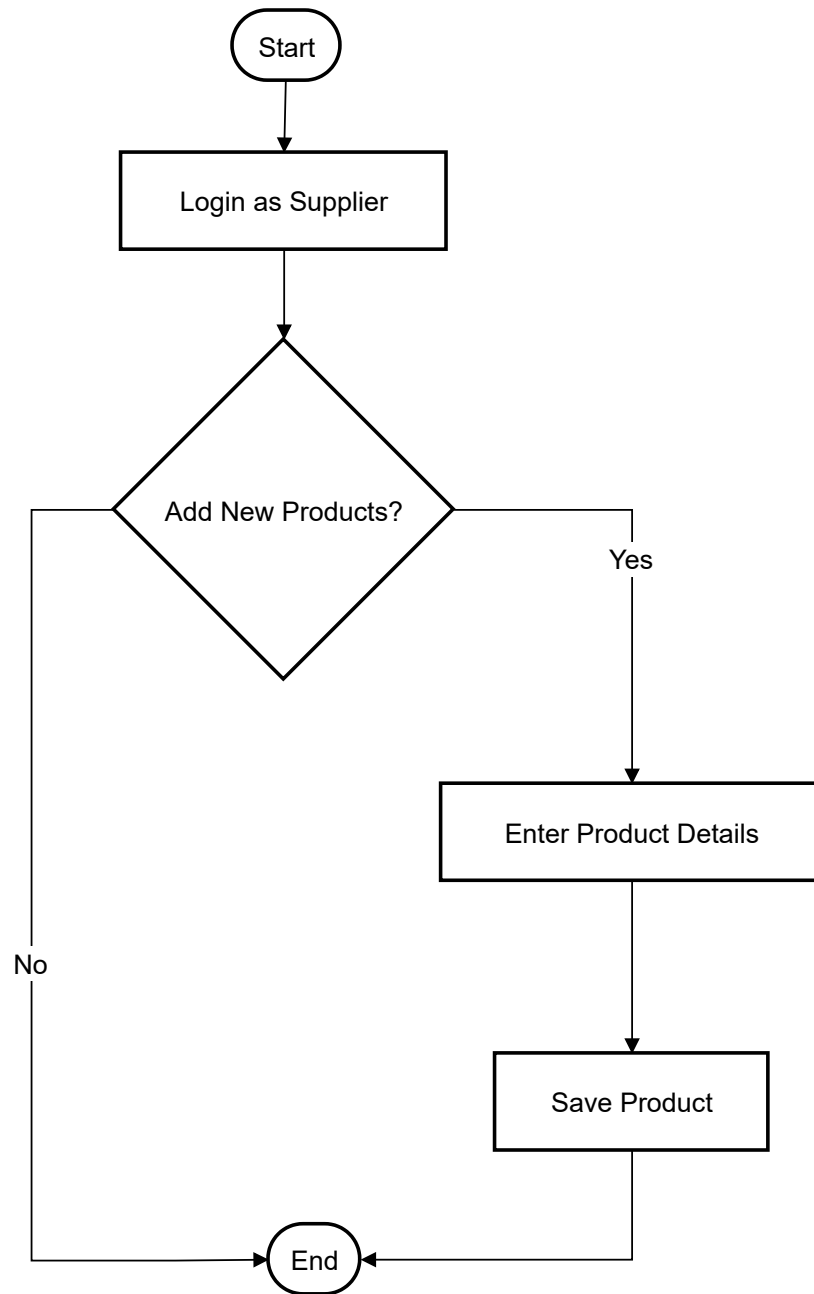
7. Activity Diagram for Order Management System (Admin)



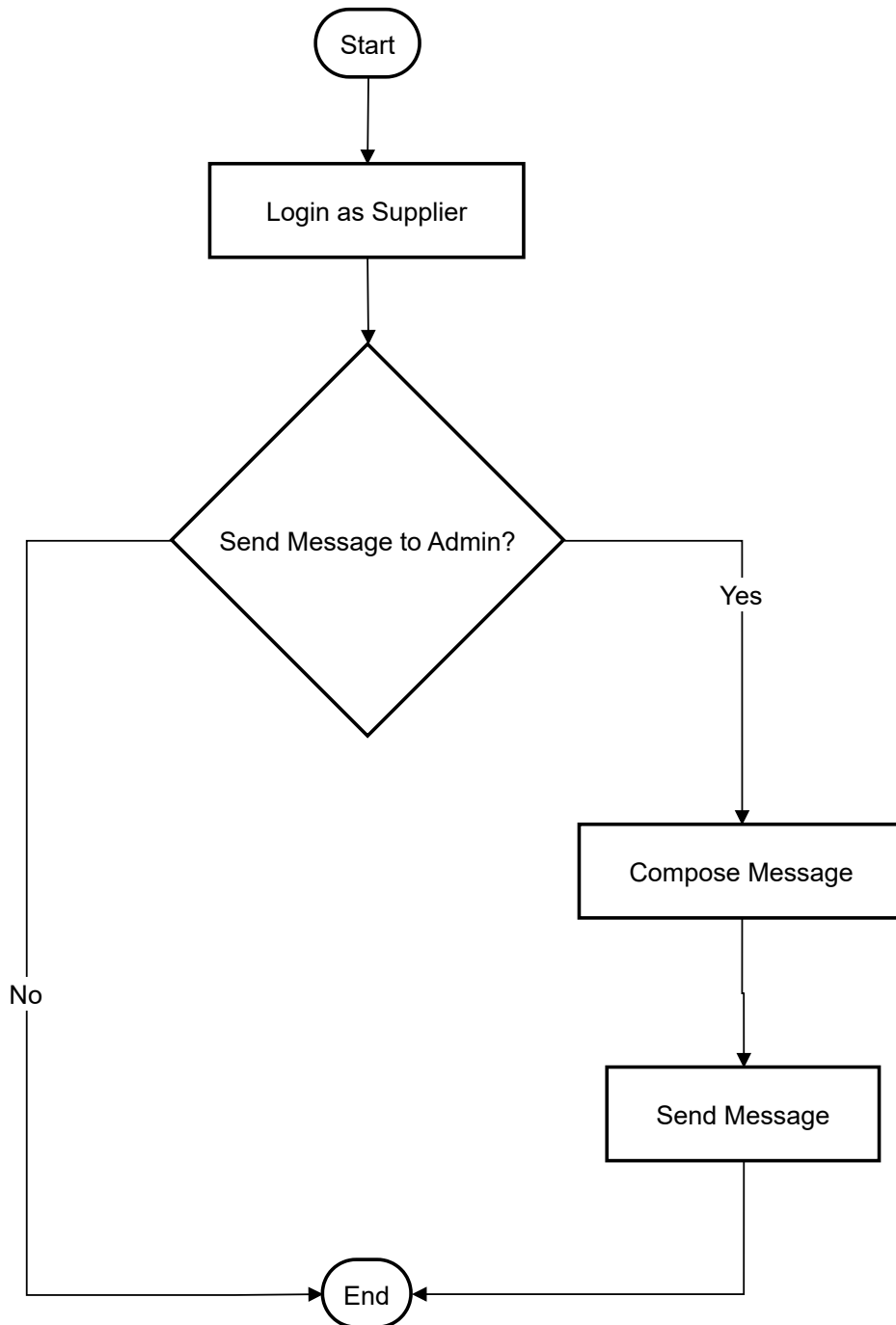
7. Activity Diagram for Data Visualization and Reporting (Admin)



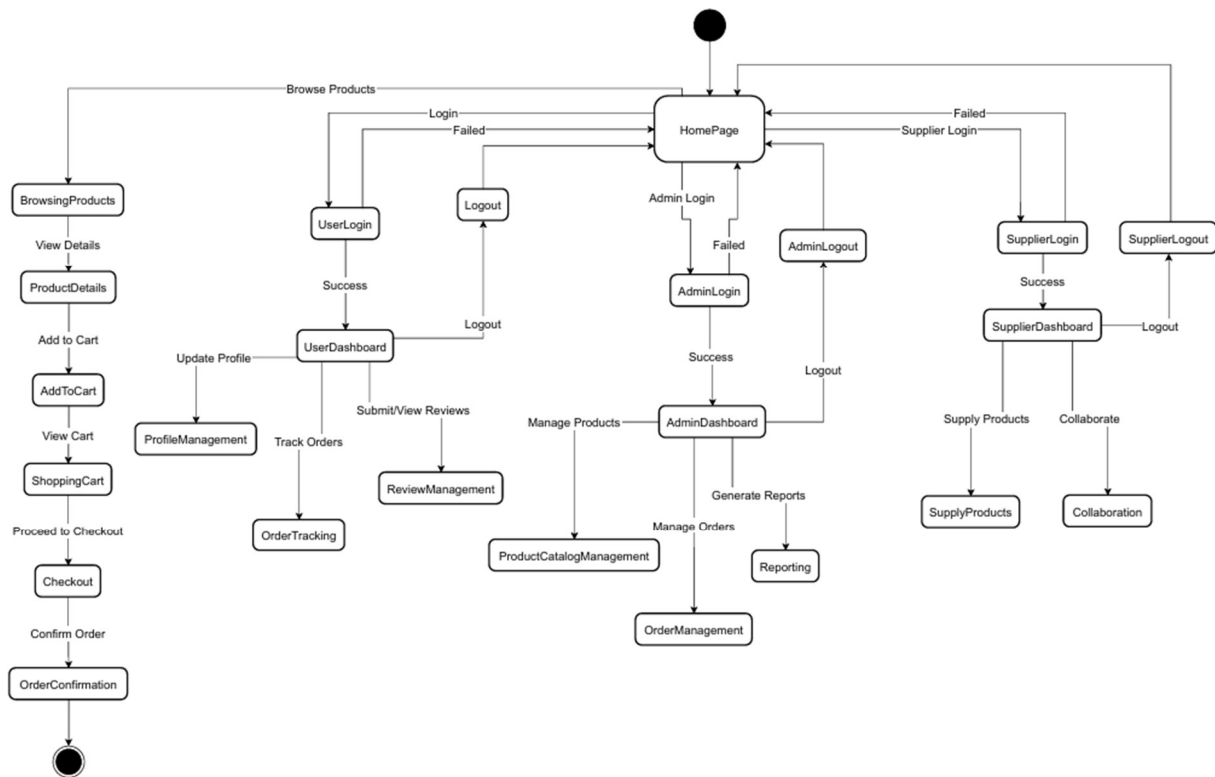
9. Activity Diagram for Supply Products (Supplier)

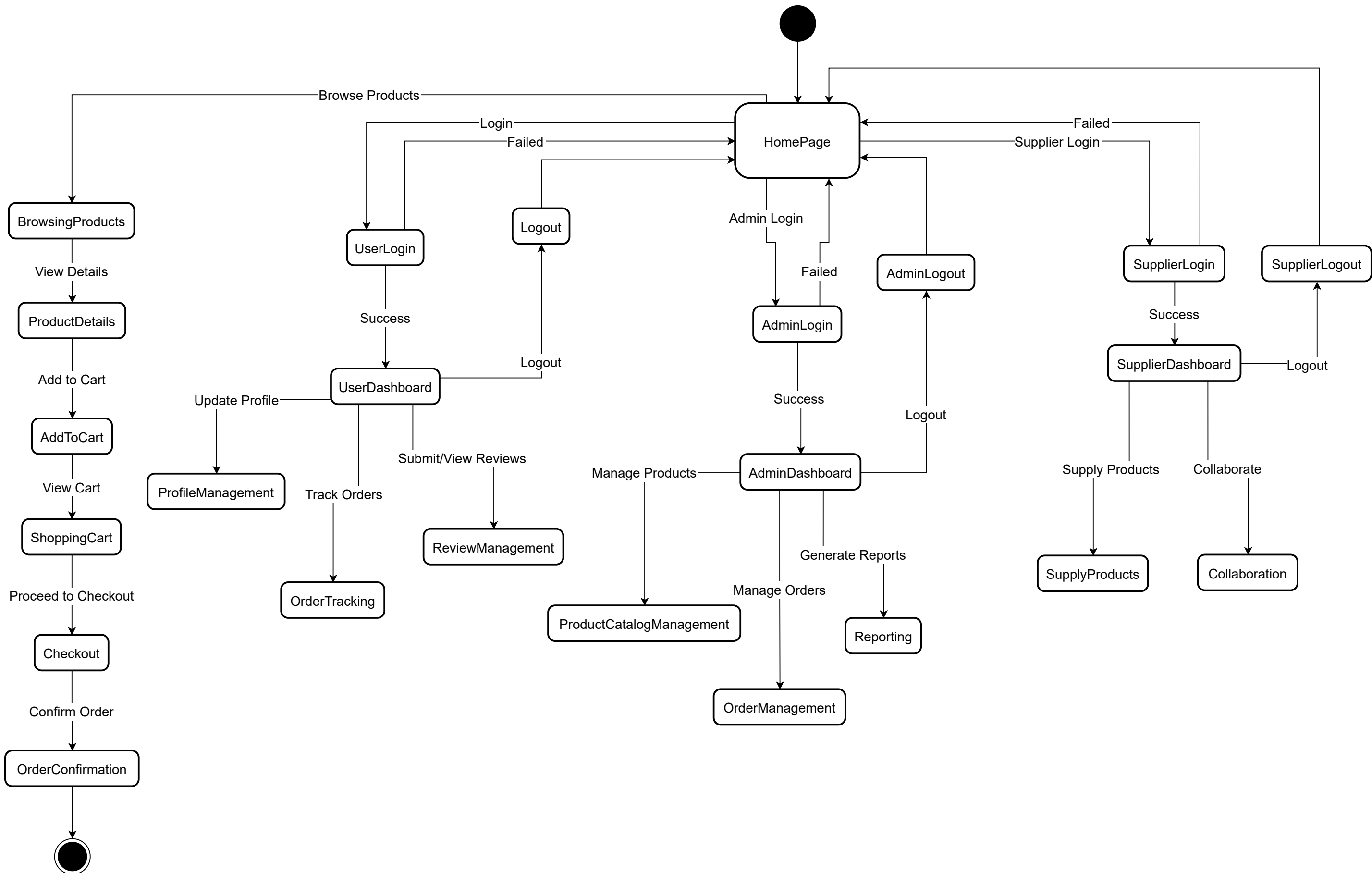


10. Activity Diagram for Collaborate with Admin (Supplier)

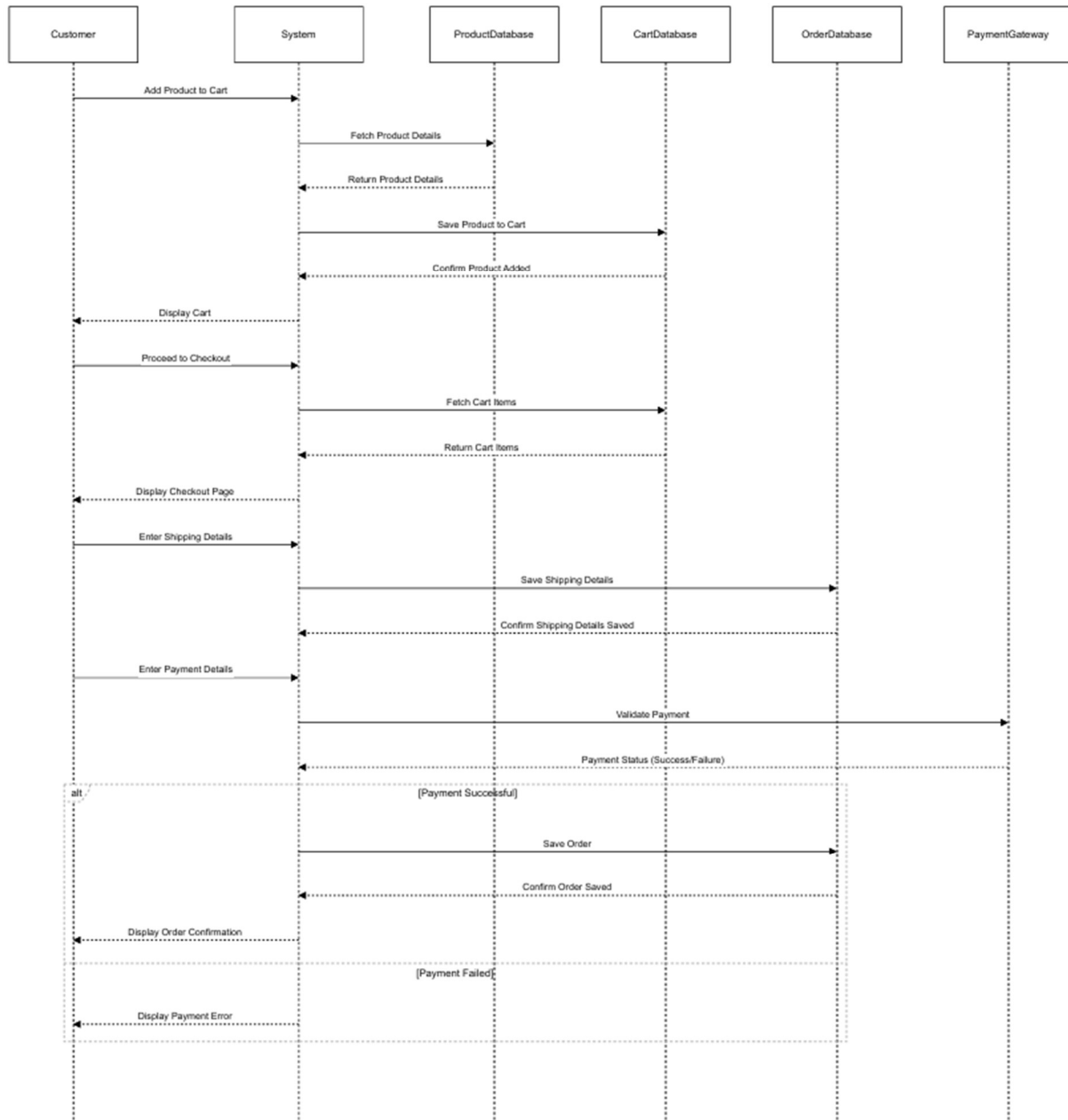


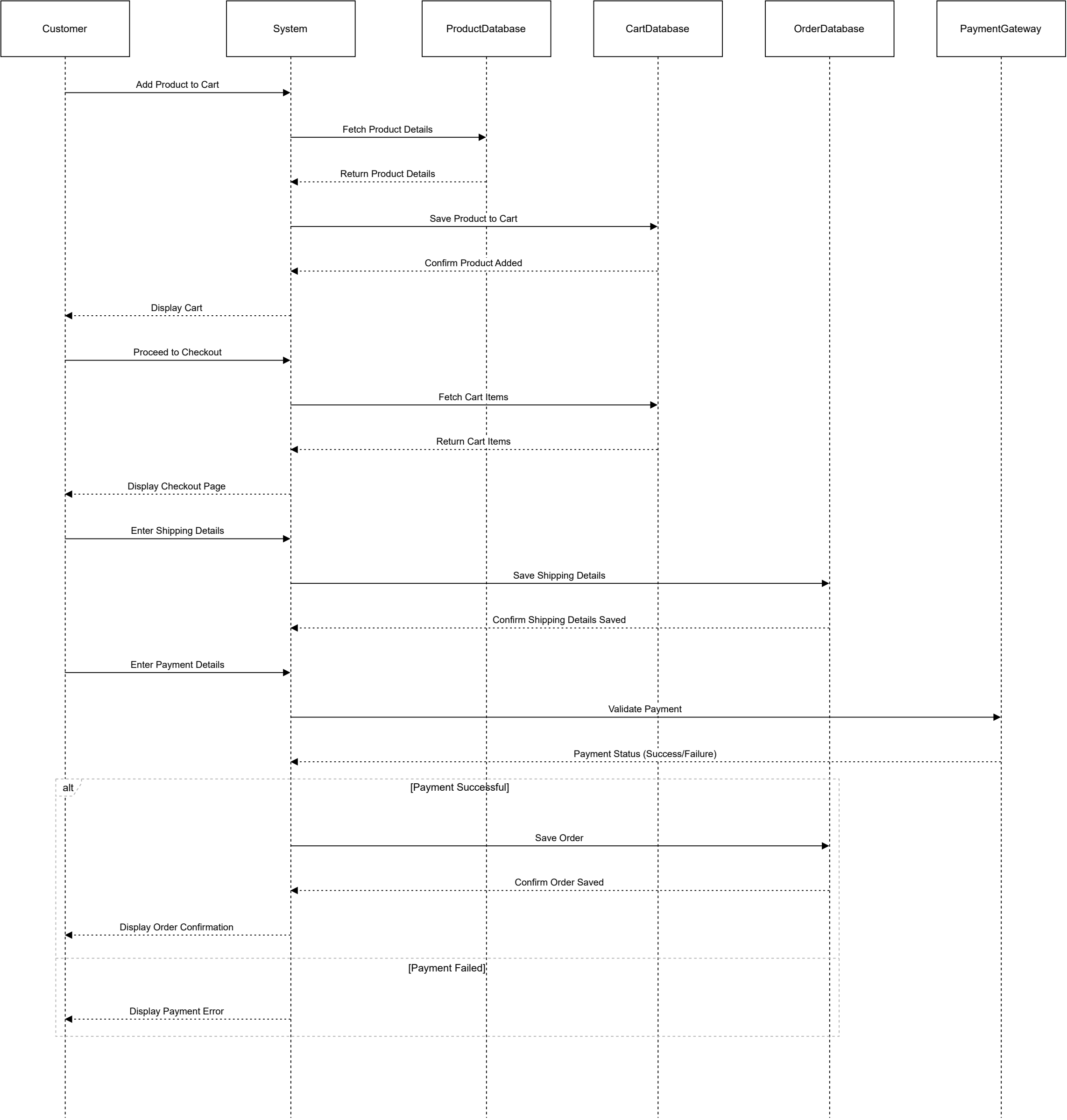
5.2.3 State Machine / Network Automata





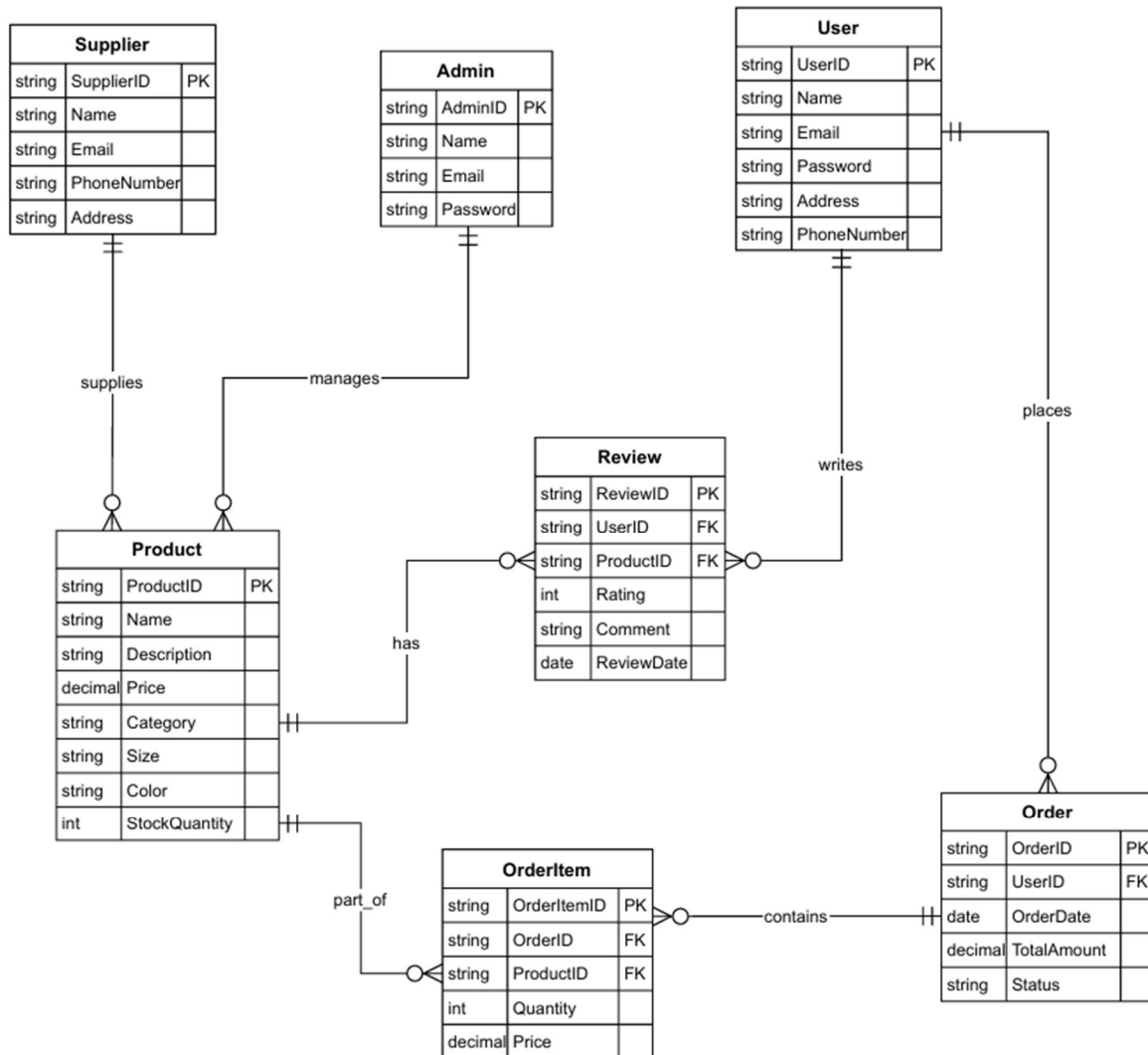
5.2.4 Sequence Diagram





5.3 Database Design:

5.3.1 Entity-Relationship (ER) Diagram / Schema Design



Supplier		
string	SupplierID	PK
string	Name	
string	Email	
string	PhoneNumber	
string	Address	

Admin		
string	AdminID	PK
string	Name	
string	Email	
string	Password	

User		
string	UserID	PK
string	Name	
string	Email	
string	Password	
string	Address	
string	PhoneNumber	

Product		
string	ProductID	PK
string	Name	
string	Description	
decimal	Price	
string	Category	
string	Size	
string	Color	
int	StockQuantity	

Review		
string	ReviewID	PK
string	UserID	FK
string	ProductID	FK
int	Rating	
string	Comment	
date	ReviewDate	

OrderItem		
string	OrderItemID	PK
string	OrderID	FK
string	ProductID	FK
int	Quantity	
decimal	Price	

Order		
string	OrderID	PK
string	UserID	FK
date	OrderDate	
decimal	TotalAmount	
string	Status	

supplies

manages

writes

places

has

part_of

contains