

Group 4

Cosmetics Store Management System

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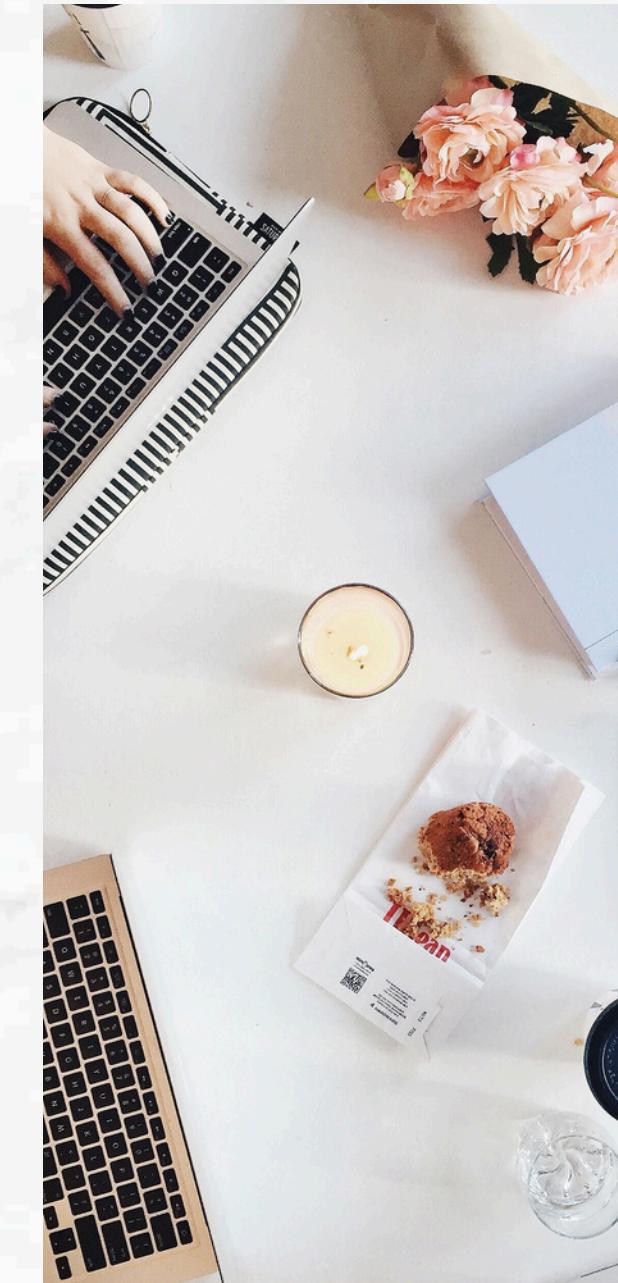
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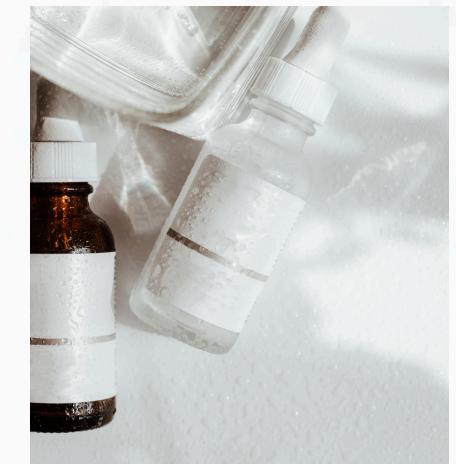
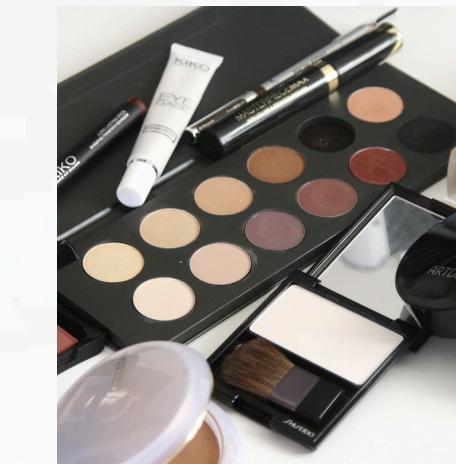


1. Introduction

Project Requirement, Project Plan, Languages & Tools

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Project Requirement



Comprehensive Tracking

capable of keeping detailed records

Efficient Search Capabilities

search based on various types

Effective Data Processing

handle large volumes of data

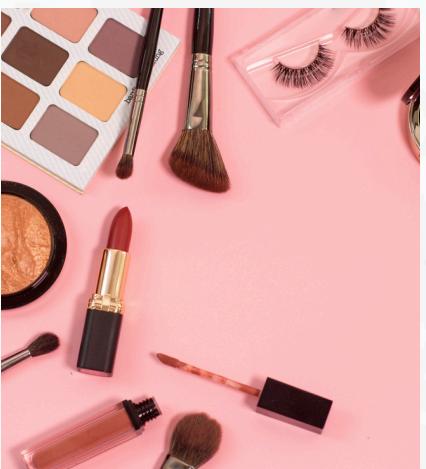
Product Optimization and Visualization

features for generating product charts

Improved Service Quality

streamlining operations, reducing the potential for errors

Languages & Tools



VSC

IDE for developing and maintaining the system's codebase

Docker

A platform ensuring the system can be deployed consistently

Ruby On Rails

A web application framework enabling rapid development of the system

Command Line Interface

Used for executing various development through command-line operations

Github

A web-based platform for version control and collaborative software development

PROJECT PLAN



2. User Story

As a cashier,
I want to create an order for a customer
So that the customer can purchase their desired
products.

- The system should allow cashiers to search for and select products, and customers to add to the order.
- When an order is created successfully, it cannot be updated or deleted.

As a cashier,
I want to store customer information
So that I can quickly access their details for
future order.

- The system should allow cashiers to input and save customer information, including name and phone number.
- The system should allow cashiers to update or delete customer information when needed.

As an inventory manager,
I want to manage the inventory
So that I can keep track of stock levels and
ensure products are available for customers.

- The system should allow employees to add, edit, and delete products from the inventory.
- The system should automatically update stock levels when an order is created or canceled.

2. User Story

As the store manager,
I want to generate sales reports
So that I can analyze sales performance and
provide management with accurate data.

- The system shall provide options to filter sales data by various parameters such as product category, date range, and sales region.
- The system shall allow sorting of the sales data by different fields such as product name, revenue, and units sold.

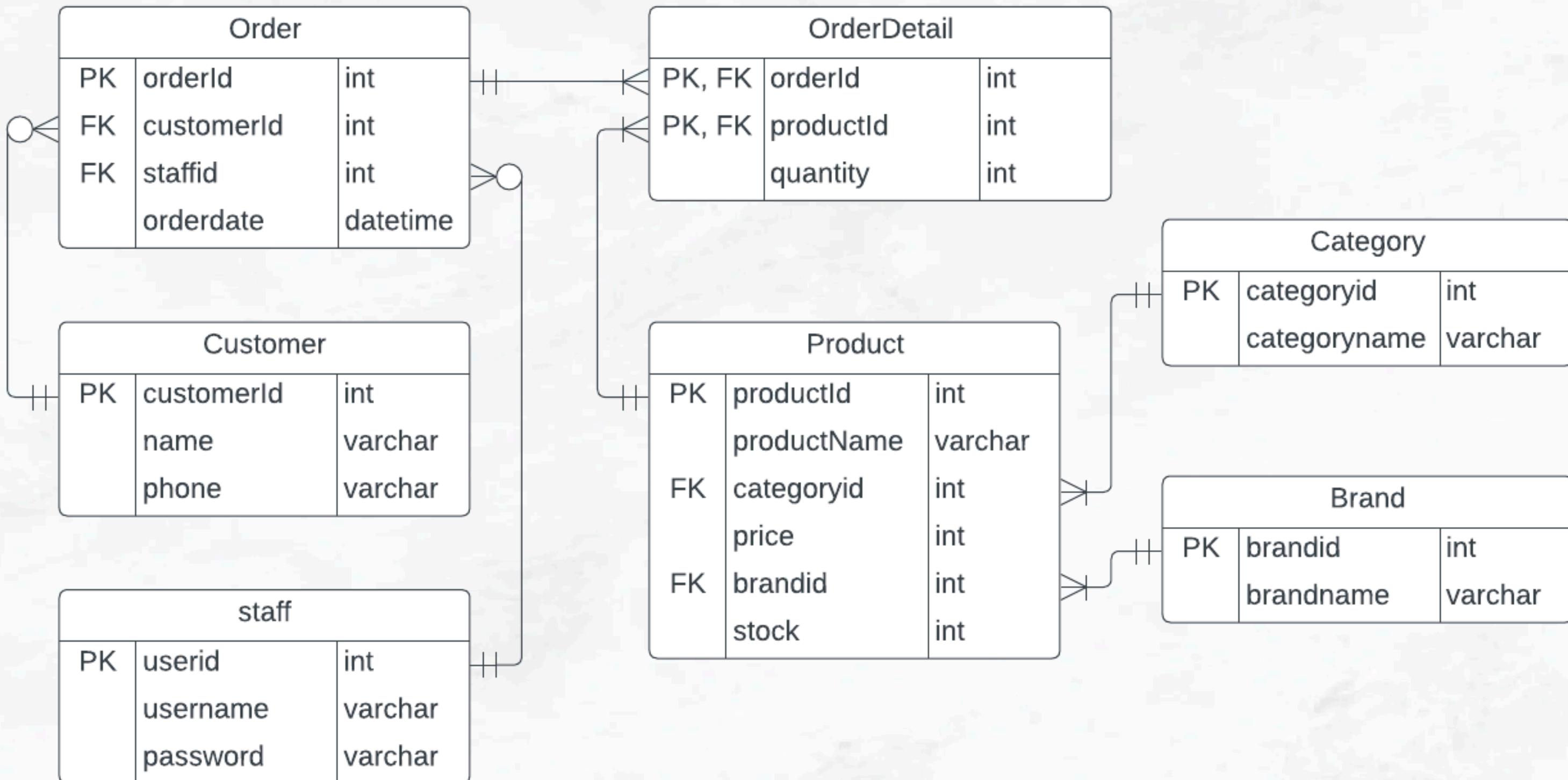
As a store manager,
I want the system to have an intuitive user interface
So that employees can quickly learn and
perform tasks efficiently.

- Common tasks such as creating orders and updating customer information should be easily accessible from the main dashboard.

As a store manager,
I want the system to handle a high volume of
simultaneous transactions efficiently
So that customers experience minimal delays.

- The average response time for common user actions (e.g., placing an order, searching for a customer) should be less than 500 milliseconds.

3. Database design





4. Implementation

Data validation, System Flow, Project Showcase

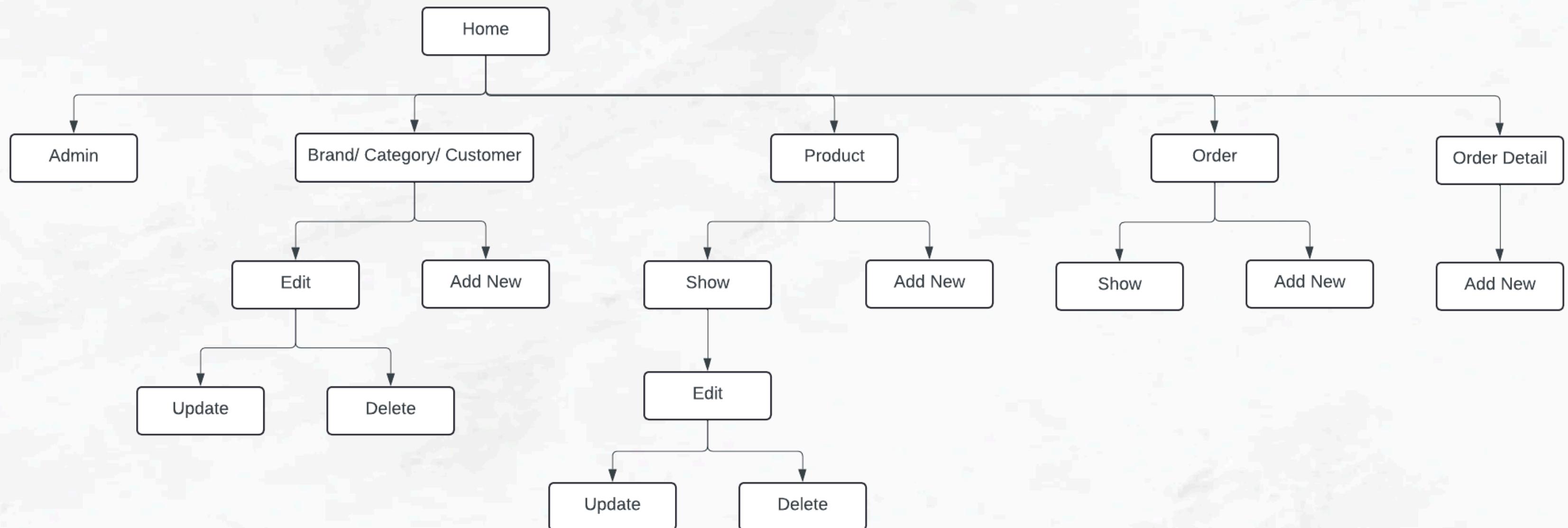
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Data Validation

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Table	Validation
Brand	<ul style="list-style-type: none">- Brand must has name- Name of brand must be unique
Category	<ul style="list-style-type: none">- Category must has name- Name of category must be unique
Staff	<ul style="list-style-type: none">- Each staff account must has name and password- Username of each staff must be unique
Customer	<ul style="list-style-type: none">- Customer must has customer name and phone number- Phone number of customer must be unique- Phone number of customer must contain 10 digits
Product	<ul style="list-style-type: none">- Product must has name- Stock and price of product must be a number and greater than or equal to 0
OrderDetail	<ul style="list-style-type: none">- Quantity of each product in an order must be greater than 0 and cannot exceed its stock number- Stock will be updated when there's an order created

System Workflow



Brand	Category	Product	Order	Order Detail	Customer
All Orders					
Order					
Order Date:					
2024-05-22 11:43:00 UTC					
Customer:					
Ha Trang					
Staff:					
hatrang783					
Order Details:					
Product	Unit price	Quantity	Total price		
Dior Addict 107	910.000 VND	1	910.000 VND		
Double Wear Stay-in-Place Makeup SPF 10	1.600.000 VND	1	1.600.000 VND		

Product

Productname: Dior Addict 107
Price: 910.000 VND
Stock: 8
Category: Lips
Brand: Dior



Project Showcase

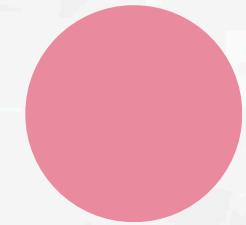
Product

Productname: Mascara Maybelline Hypercurl Waterproof
Price: 168.000 VND
Stock: 24
Category: Eyes
Brand: Maybelline



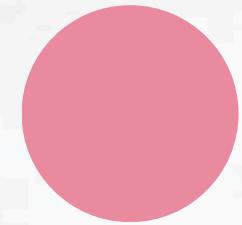
Productname	Category	Brand	Price	Stock	
Mascara Maybelline Hypercurl Waterproof	Eyes	Maybelline	168.000 VND	24	Show
Double Wear Stay-in-Place Makeup SPF 10	Face	Estee Lauder	1.600.000 VND	5	Show
Dior Addict 106	Lips	Dior	900.000 VND	8	Show

5. Discussion



Improvements

- Photo Upload
- Automatic Stock Deduction
- Product Search by Name
- User Interface Improvements
- Product Price Formatting
- Order Page Details



Limitations

- Create Order Details that are linked to the Order creation process.
- Fancy dashboard with graph.
- Deploy the application to the cloud
- Require user to login before visiting (Authentication)

6. Conclusion

Summary

- The user-friendly interface
- Uploading photos, updating stock levels, and searching engine.
- User authentication for authorized personnel

Future plan

- Implementing Order Details
- Developing reports with graphical representations
- Deploying the application to the cloud



Thanks for
listening !

Group 4