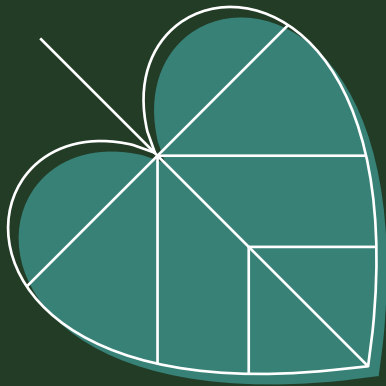


TECHSTYLE SOLUTIONS

Apple store website

Do Thanh Tung

INTRODUCTION



- This project focuses on designing and implementing a user-friendly and functional e-commerce platform specifically tailored for selling Apple products. Through this website, I aim to streamline product management, enhance the shopping experience, and provide a reliable solution for online transactions. The presentation will take you through the project's goals, system design, key features, and testing results, followed by a live demonstration of the website.

GOAL OF THE PROJECT

Develop an e-commerce website using PHP, HTML, CSS, JS and Apache server on Laragon to sell Apple technology products, with intuitive and easy to use interface.

1. Build a system to add, edit, delete and display products by category.
2. Develop a user-friendly interface that allows users to easily browse products and add to cart.
3. Create an administrator account to manage product catalogs and control orders.

FUNCTION REQUIREMENT



1. Function requirement
 - Product Page: Display a list of Apple products by category.
 - Provide a quick product search function.
 - Cart: Add, remove products in the cart.
 - Display total bill and support payment.
 - User Management: Register, log in and manage customer accounts.
 - Administrator account management to add, edit, delete products and orders.
 - Order Management: Handle order status (processing, delivered, canceled).
 - Save order history for each user.



NON-FUNCTION REQUIREMENT

- Performance: The system operates smoothly, processing quickly even when there are many users accessing.
- Security: Encrypt passwords in the database.
- Prevent SQL Injection and XSS.
- Extensibility: Easily add more categories, products or new features in the future.
- Compatibility: Works well on popular browsers such as Chrome, Firefox, Safari.
- Support interface compatible with both mobile devices and desktop computers.



TECHNOLOGY USED

Backend: PHP.

Frontend: HTML, CSS, JavaScript
(Bootstrap supports the interface).

Database: MySQL.

Server: Apache on Laragon.

SYSTEM DESIGN

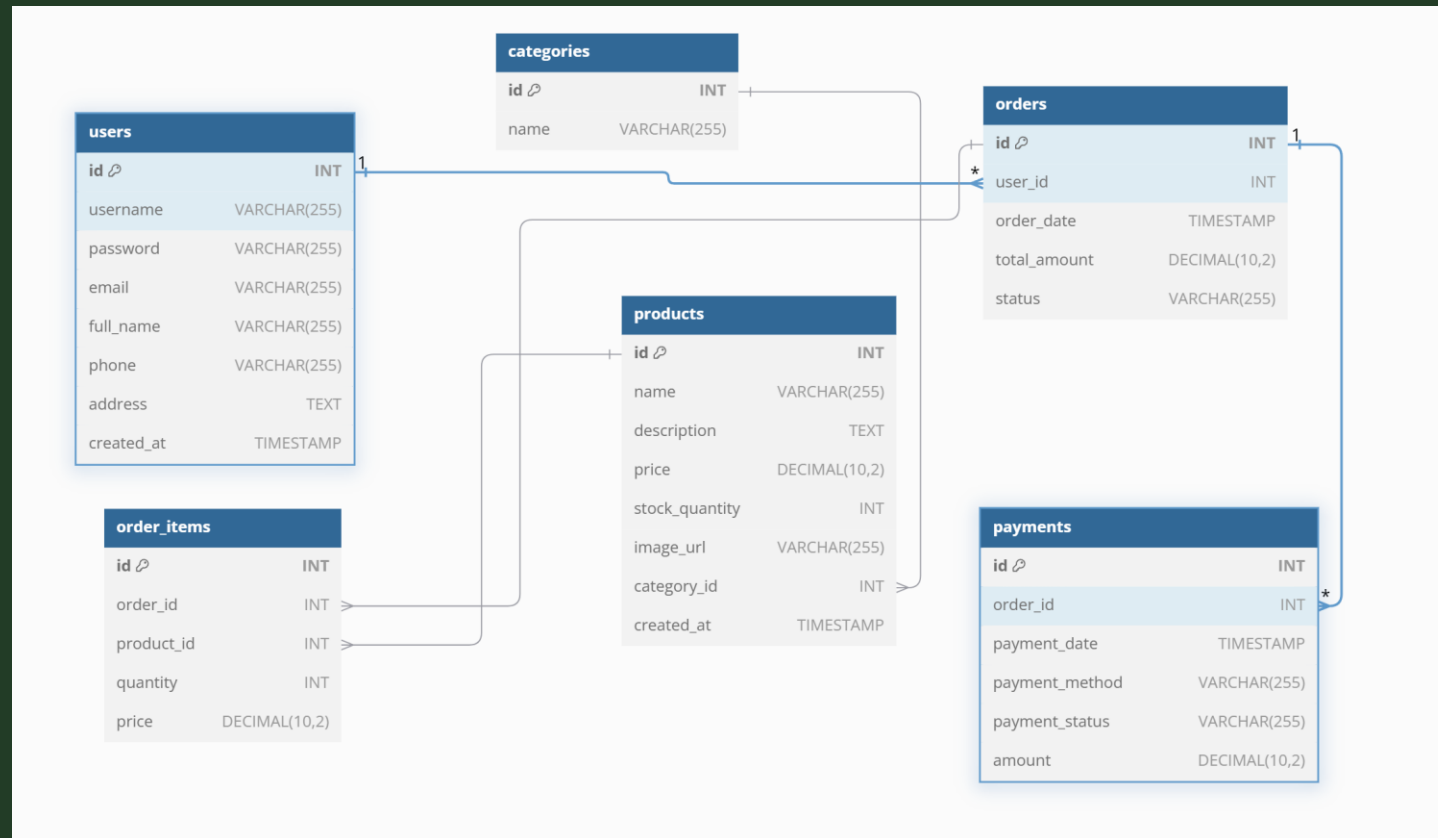
1. ERD

- There are 6 tables for this system:

- *Users*
- *Products*
- *Orders*
- *Order_Items*
- *Payments*
- *Categories*



ERD DIAGRAM



RESULT TABLE IN SQL

The screenshot displays the phpMyAdmin web interface. On the left, a sidebar shows the database structure with 'sdic' selected. The main panel shows the 'Structure' tab for the 'sdic' database. A table of table information is displayed, listing tables like 'categories', 'orders', 'order_items', 'payments', 'products', and 'users' with their respective row counts, storage engines, and sizes. Below the table, there are options to check all tables and a 'Create new table' button.

Server: localhost:3306 » Database: sdic

Structure SQL Search Query Export Import Operations Privileges Routines Events Triggers Designer

Filters

Containing the word:

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> categories	★ Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_0900_ai_ci	16.0 KiB	-
<input type="checkbox"/> orders	★ Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_0900_ai_ci	32.0 KiB	-
<input type="checkbox"/> order_items	★ Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_0900_ai_ci	48.0 KiB	-
<input type="checkbox"/> payments	★ Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_0900_ai_ci	32.0 KiB	-
<input type="checkbox"/> products	★ Browse Structure Search Insert Empty Drop	8	InnoDB	utf8mb4_0900_ai_ci	32.0 KiB	-
<input type="checkbox"/> users	★ Browse Structure Search Insert Empty Drop	9	InnoDB	utf8mb4_0900_ai_ci	48.0 KiB	-
6 tables	Sum	27	InnoDB	utf8mb4_0900_ai_ci	208.0 KiB	0 B

↑ ☐ Check all With selected: ▼

Print Data dictionary

Create new table

Table name: Number of columns:

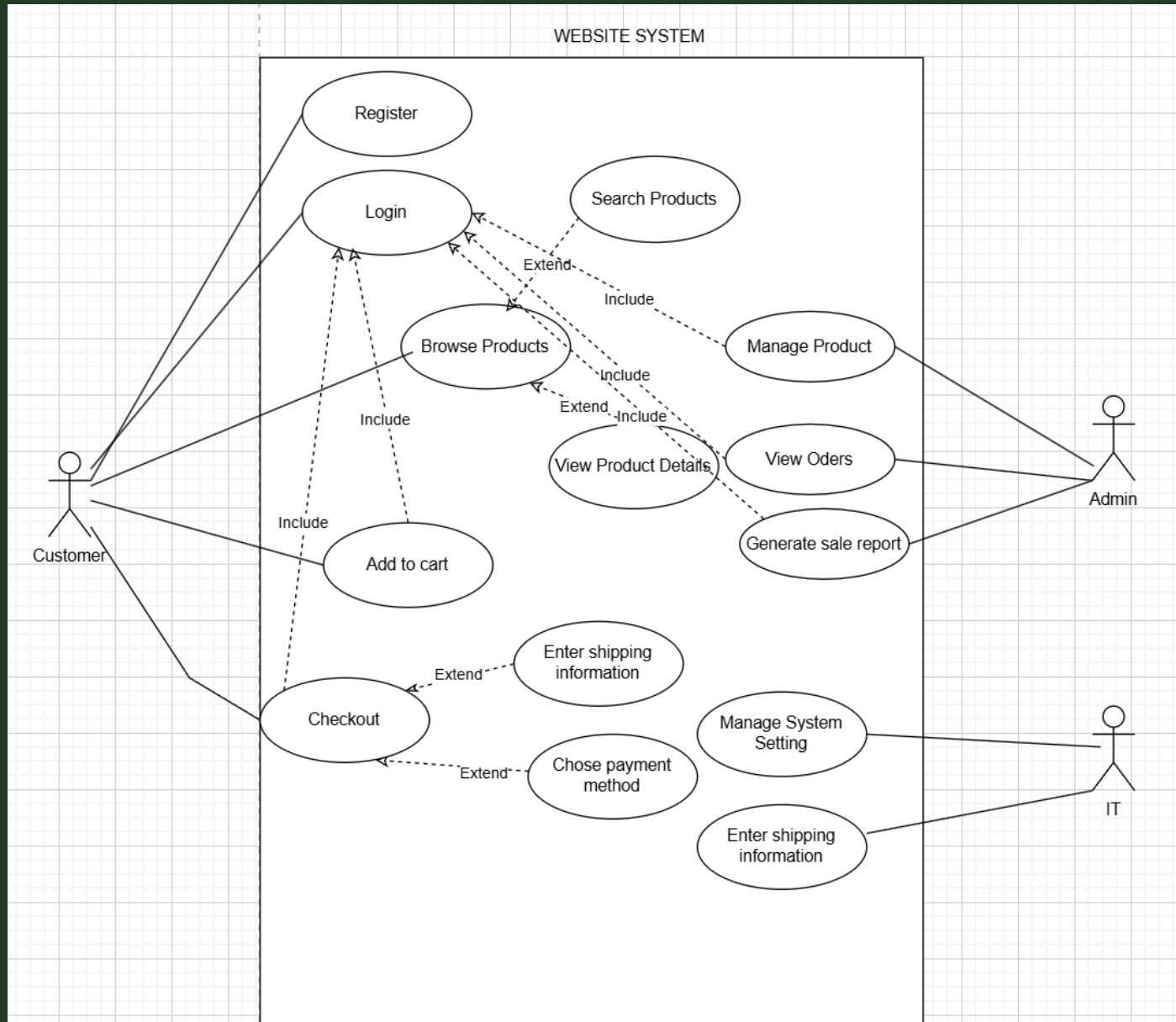
USER CASE

Actors:

- Customers: Search for products, add products to cart, checkout, view order status.
- Administrators: Manage products, manage orders, manage users.
- IT:

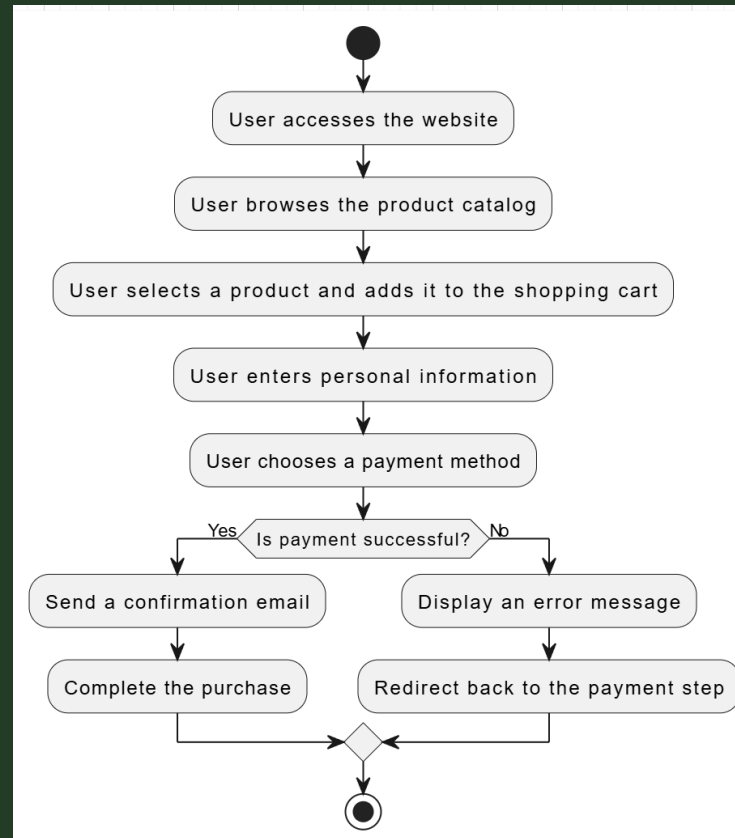
Key use cases:

- Manage cart, process payments, login/register, manage products.

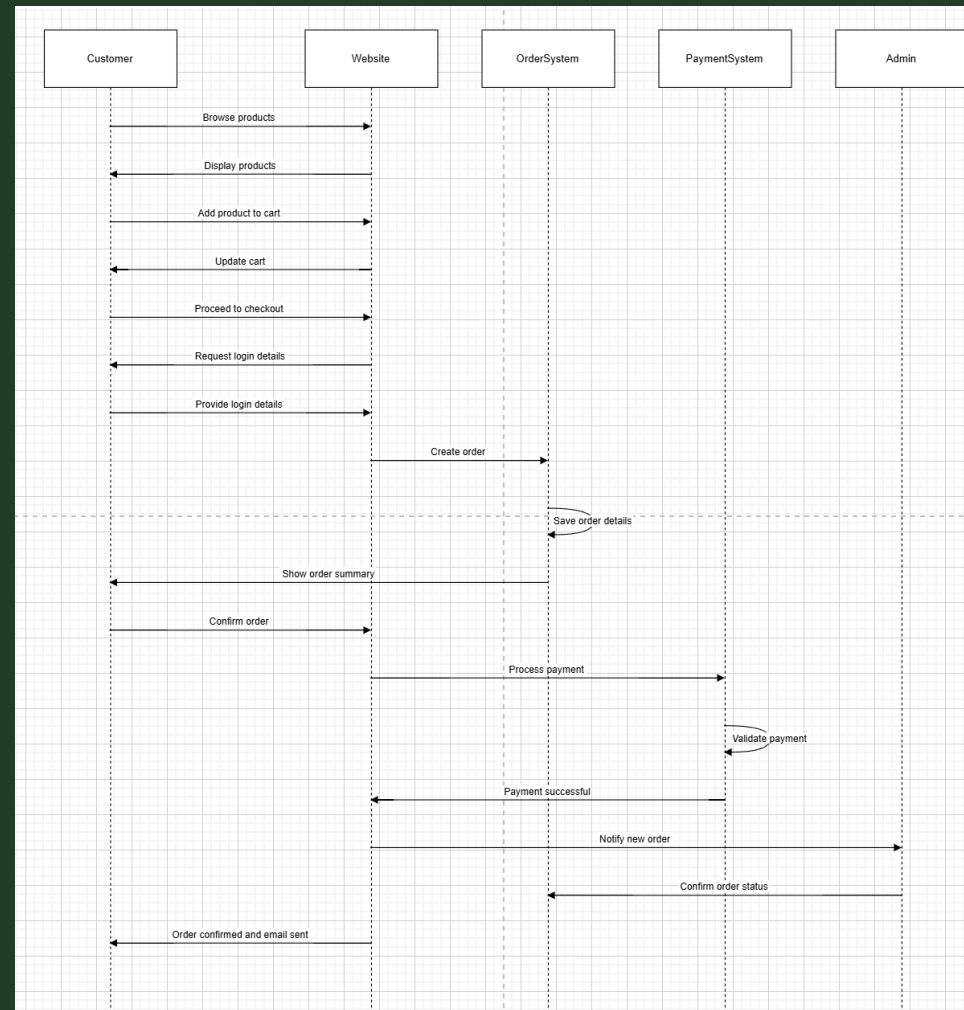


USE CASE DIAGRAM

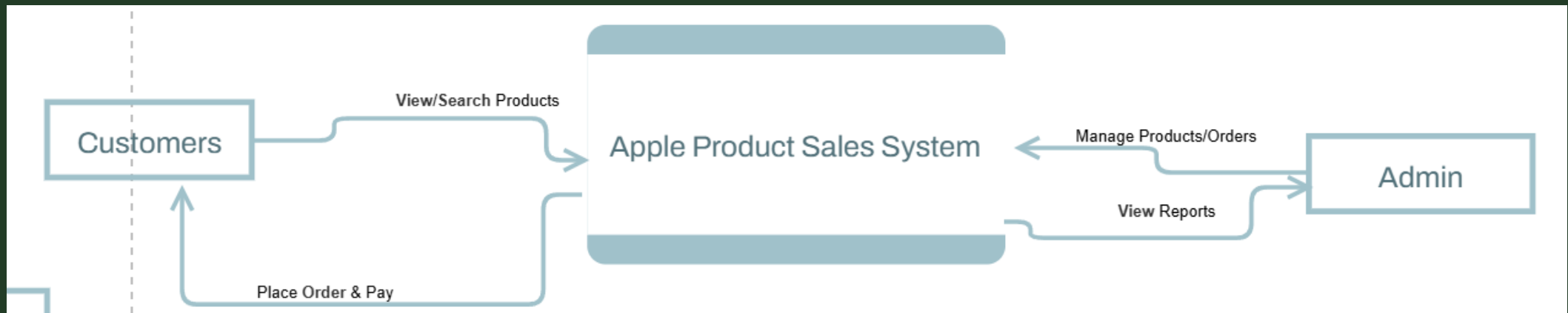
FLOW CHART OF USER BYING PRODUCT



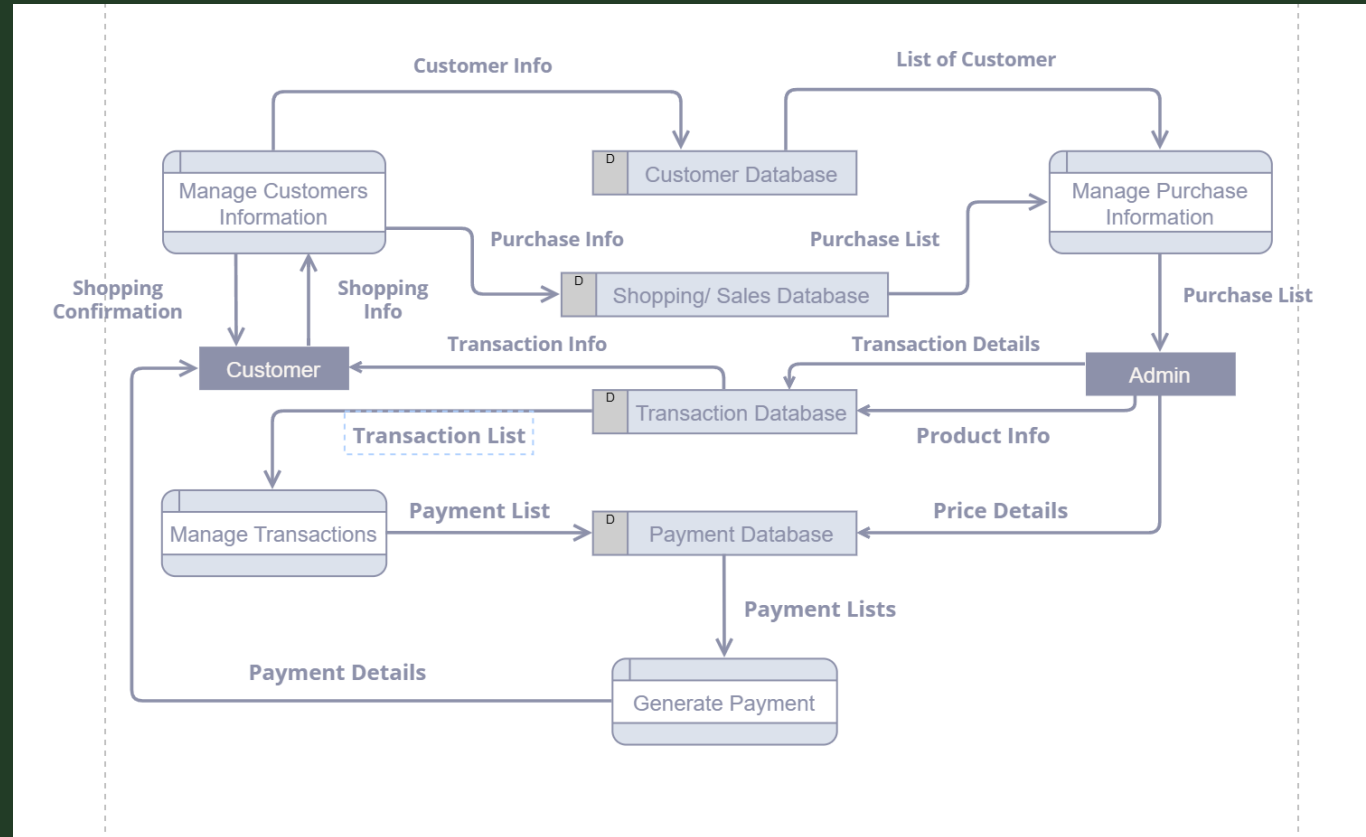
SEQUENCE DIAGRAM



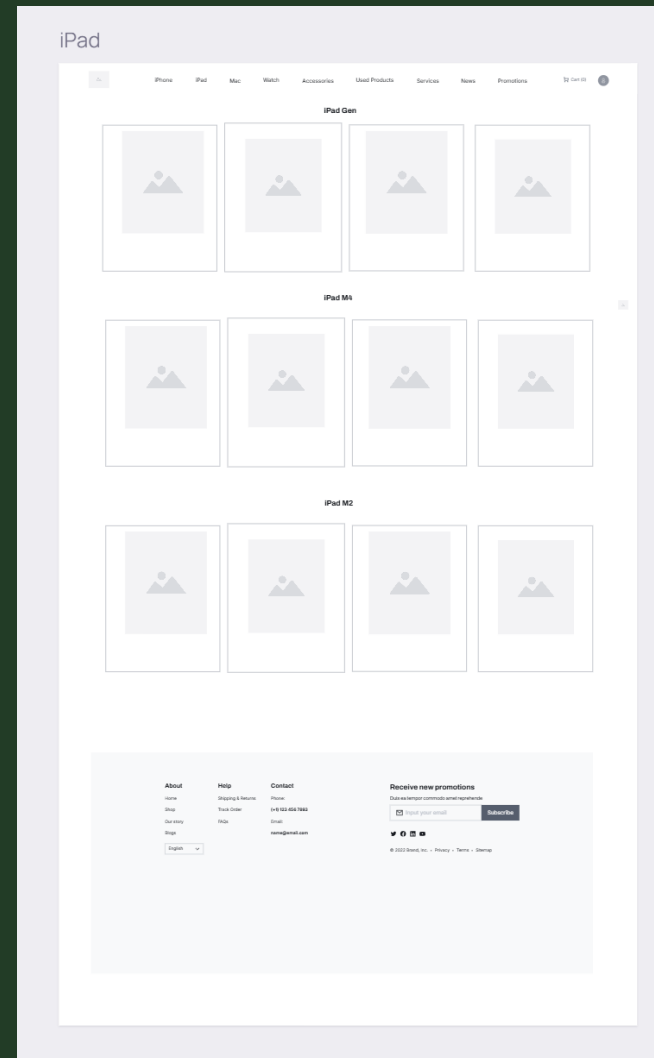
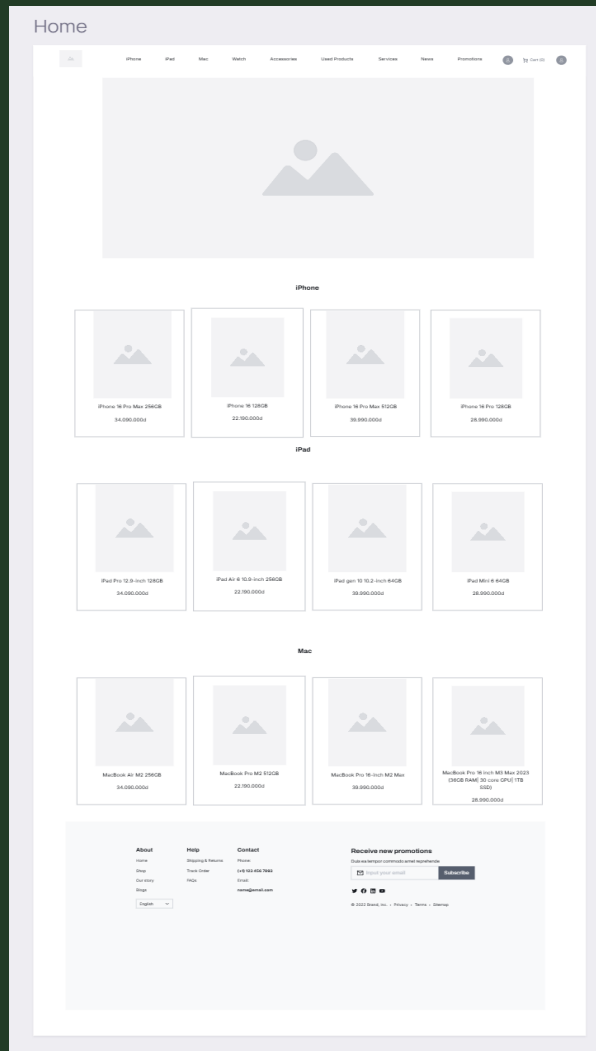
DFD DIAGRAM LEVEL 0



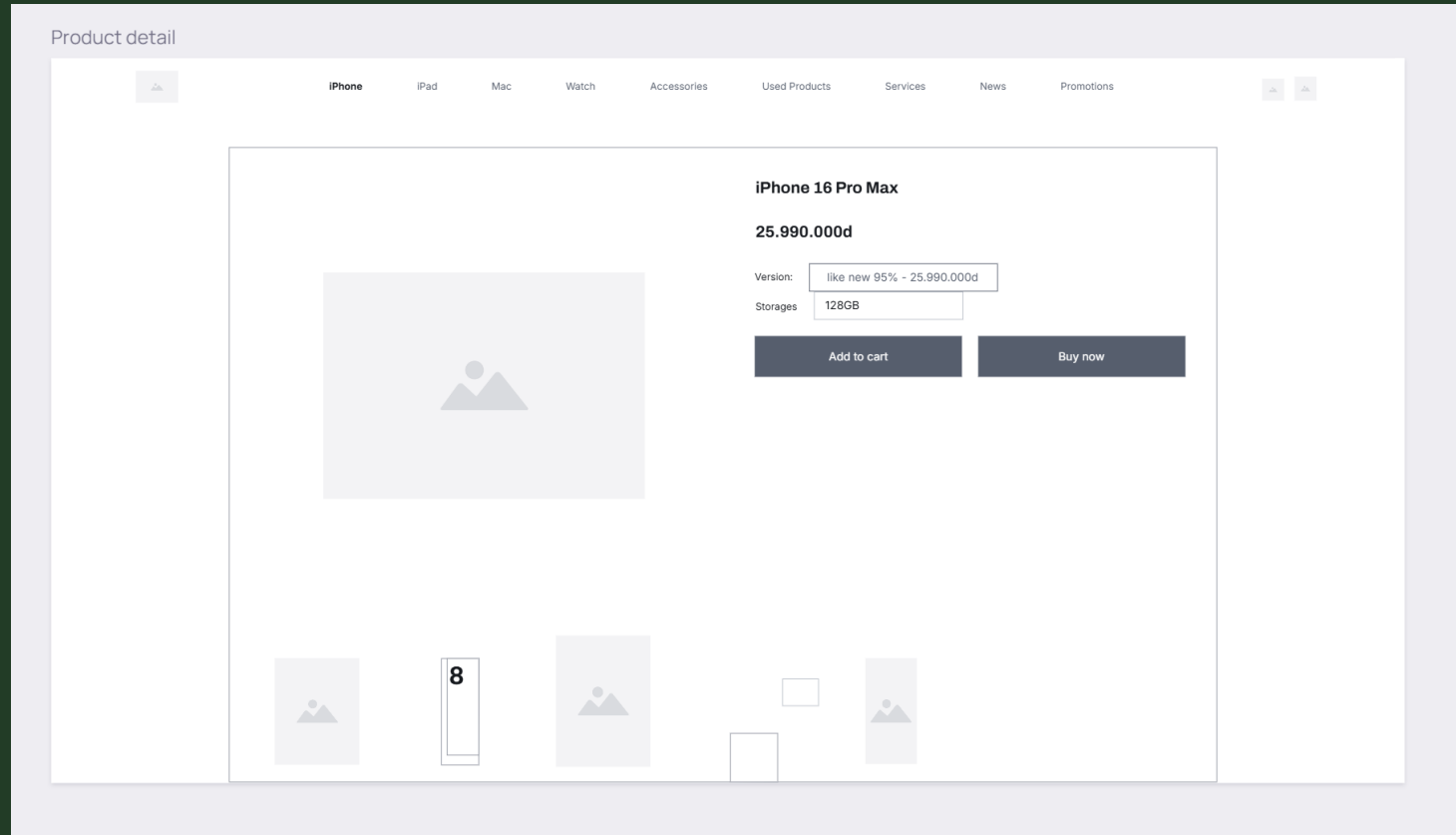
DFD LEVEL 1



WIREFRAME OF HOMEPAGE AND PRODUCT



WIREFRAME OF PRODUCT DETAIL



WIREFRAME CHECKOUT

payment

Payment

Product Information

iPhone 16 - Version:New 100%
Quantity: 4
price:88.760.000d

iPhone 16 Pro Max - Version: like new 95% - 25.990.000d
So luong: 2
price:51.980.000d

Total: 140.740.000d

delivery information

Fullname:

phone number:

Email:

Address:

Confirm

Thanks

Thanks you, User name!

Your purchase is complete!

Information your purchase..

Name:

Phone:

Email:

Address:

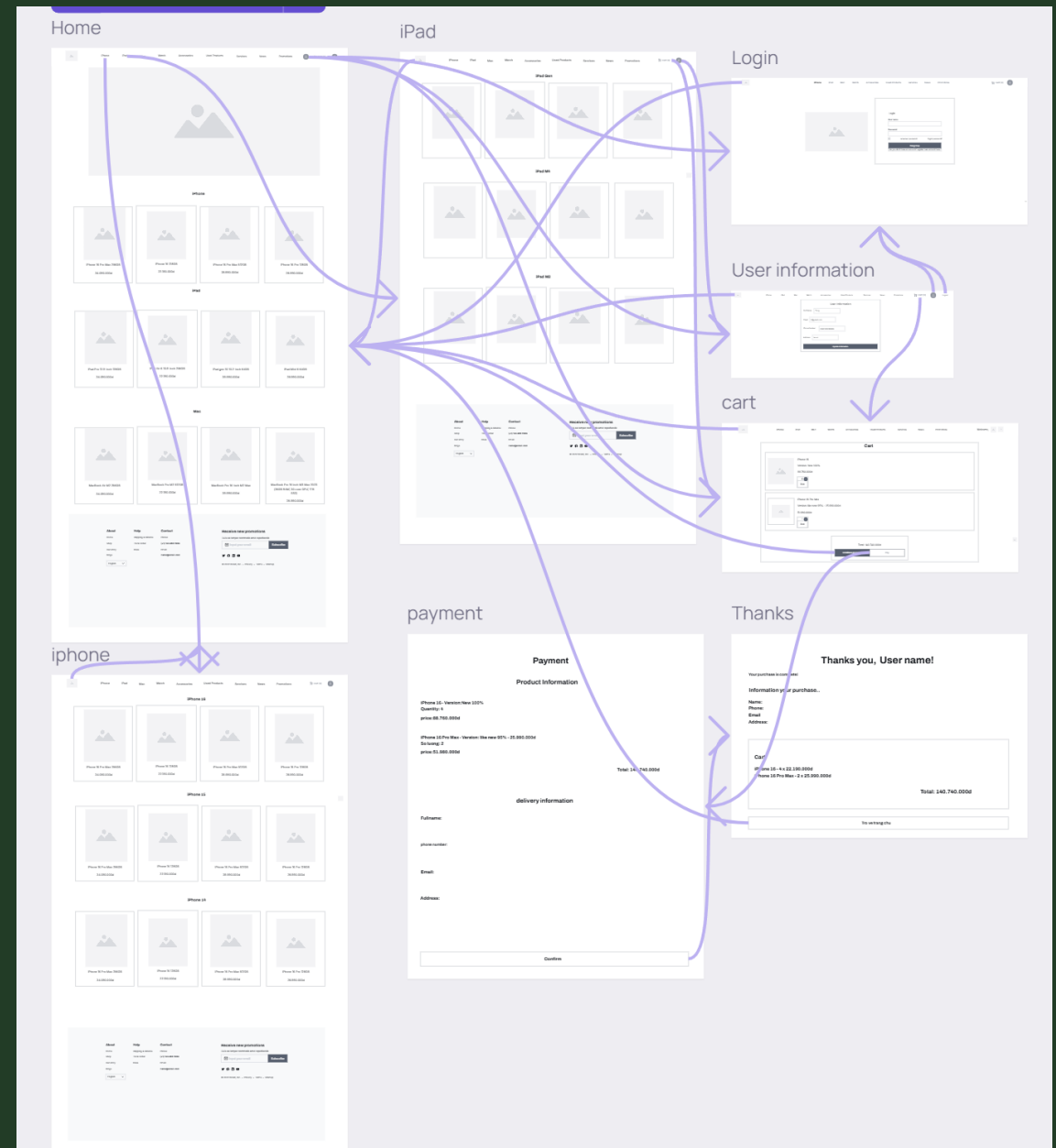
Cart

iPhone 16 - 4 x 22.190.000d
iPhone 16 Pro Max - 2 x 25.990.000d

Total: 140.740.000d

Tro ve trang chu

PROTOTYPE



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Làm được nhiều hơn
trên **Apple iPad**
**Viết tay các ghi chú.
Chuẩn.**

Ưu đãi tới 13 Triệu.
Trả góp 0% chỉ từ 615/tháng. Chỉ từ 7.090.000đ

Mua ngay

Phụ kiện được bán riêng. Ứng dụng có sẵn trên App Store. Nội dung được cung cấp có thể thay đổi.

iPhone



DATA OF PRODUCT

sdic

New

categories

orders

order_items

payments

products

users

sys

Show all

Number of rows: 25

Filter rows: Search this table

Sort by key: None

Extra options

		id	name	description	price	stock_quantity	image_url	category_id	created_at		
<input type="checkbox"/>	Edit	Copy	Delete	2	iPhone 16 128GB	Màn hình 6.1 inch, camera 48MP, bộ nhớ trong 128GB	22190.00	1500	https://example.com/iphone16128.jpg	1	2024-11-24 22:30:11
<input type="checkbox"/>	Edit	Copy	Delete	3	iPhone 16 Plus 128GB	Màn hình 6.7 inch, camera 48MP, bộ nhớ trong 128GB	25490.00	120	https://example.com/iphone16plus128.jpg	1	2024-11-24 22:30:11
<input type="checkbox"/>	Edit	Copy	Delete	4	iPhone 16 Pro 128GB	Màn hình 6.1 inch, camera 48MP, bộ nhớ trong 128GB	28790.00	200	https://example.com/iphone16128pro.jpg	1	2024-11-24 22:30:11
<input type="checkbox"/>	Edit	Copy	Delete	5	iPad Pro 11 inch 128GB	Màn hình 11 inch, bộ nhớ trong 128GB, hỗ trợ Apple...	21990.00	80	https://example.com/ipadpro11.jpg	2	2024-11-24 22:30:11
<input type="checkbox"/>	Edit	Copy	Delete	6	iPad Air 10.9 inch 64GB	Màn hình 10.9 inch, bộ nhớ trong 64GB, chip M1	14990.00	150	https://example.com/ipadair109.jpg	2	2024-11-24 22:30:11
<input type="checkbox"/>	Edit	Copy	Delete	7	iPad Air 10.9 inch 64GB	Màn hình 10.9 inch, bộ nhớ trong 64GB, chip M1	14990.00	150	https://example.com/ipadair109.jpg	4	2024-11-24 22:31:30
<input type="checkbox"/>	Edit	Copy	Delete	9	MacBook Pro M1 13 inch 256GB	Chip Apple M1, màn hình Retina 13 inch, bộ nhớ tro...	32990.00	100	https://example.com/macbookpro_m1_256gb.jpg	3	2024-11-24 22:31:30
<input type="checkbox"/>	Edit	Copy	Delete	10	MacBook Pro M2 14 inch 512GB	Chip Apple M2, màn hình Retina 14 inch, bộ nhớ tro...	43990.00	80	https://example.com/macbookpro_m2_512gb.jpg	3	2024-11-24 22:31:30

↑

☐ Check all

With selected:

Edit

Copy

Delete

Export

Show all

Number of rows: 25

Filter rows: Search this table

Sort by key: None

Query results operations

Print

Copy to clipboard

Export

Display chart

Create view

DATA OF CATEGORIES

The screenshot displays a database management interface. On the left is a sidebar with a tree view containing the following items: 'sdhc', 'New', 'categories', 'orders', 'order_items', 'payments', 'products', 'users', and 'sys'. The 'categories' item is selected.

The main area shows the data for the 'categories' table. At the top, there is a control bar with the following elements: a 'Show all' checkbox, 'Number of rows: 25' with a dropdown arrow, 'Filter rows: Search this table' with an input field, and 'Sort by key: None' with a dropdown arrow.

Below the control bar is a section titled 'Extra options'. It contains a table with the following data:

				id	name			
<input type="checkbox"/>		Edit		Copy		Delete	1	Smartphone
<input type="checkbox"/>		Edit		Copy		Delete	2	Tablet
<input type="checkbox"/>		Edit		Copy		Delete	3	MacBook
<input type="checkbox"/>		Edit		Copy		Delete	4	iPad

Below the table, there is a section titled 'Query results operations'. It contains the following elements: a 'Check all' checkbox, 'With selected:' with a dropdown arrow, and buttons for 'Edit', 'Copy', 'Delete', and 'Export'.

At the bottom, there is a bar with the following elements: a 'Show all' checkbox, 'Number of rows: 25' with a dropdown arrow, 'Filter rows: Search this table' with an input field, and 'Sort by key: None' with a dropdown arrow.

Below the bar is a section titled 'Query results operations'. It contains the following elements: a 'Print' button, a 'Copy to clipboard' button, an 'Export' button, a 'Display chart' button, and a 'Create view' button.

CART

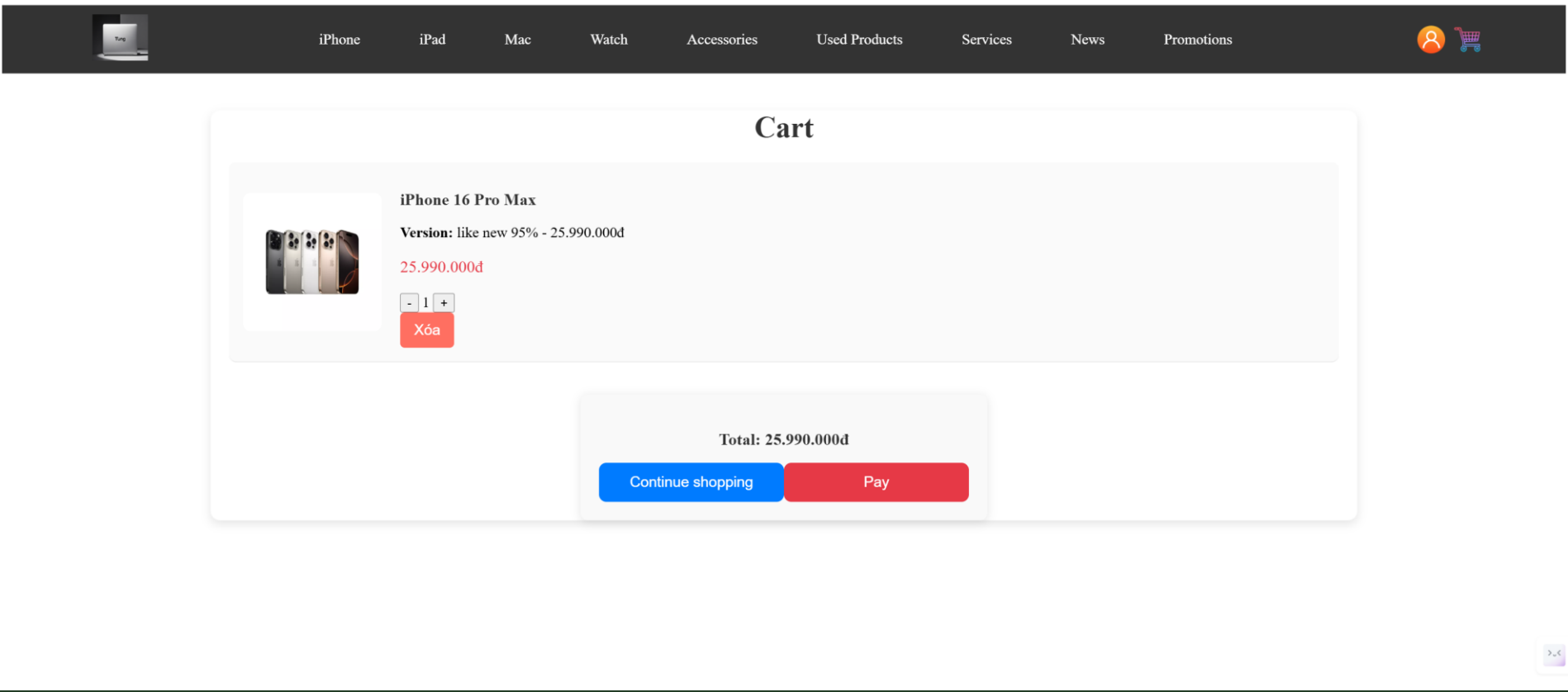
Add products to cart:

- Users can add products to cart with just one click.
- Show the quantity of products in cart in the top right corner.

Manage cart:

- Users can increase/decrease quantity or remove products from cart.
- Total price is calculated automatically.

CART







LOGIN SITE

- Users need to register an account to place an order.
- Provide login feature for customers who already have an account.



LOGIN SITE

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Login


User name:

Password:

☐ Remember password [Forgot password?](#)

Login




[Do you don't have an account? Register new account here](#)




REGISTER SITE

- Customer can register account by personal like email, phone number, fullname, birthdate, etc.
- So, information will be save in SQL of website.

REGISTER SITE

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Register

Fullname:

Gender:

☐ Male ☐ Female

Birth Date:

E-mail:

Phone:

Username:

Password:

Register

DATA OF USER INFORMATION

sdic

New

categories

orders

order_items

payments

products

users

sys

Show all

Number of rows: 25

Filter rows: Search this table

Sort by key: None

Extra options

				id	username	password	email	full_name	phone	address	created_at	role
<input type="checkbox"/>	Edit	Copy	Delete	1	thanh tung kya	0000	thanh tung kya@example.com	Thanh Tung Kya	0901234567	123 Example Street, Hanoi, Vietnam	2024-11-23 10:00:00	user
<input type="checkbox"/>	Edit	Copy	Delete	2	john_doe	password123	john.doe@example.com	John Doe	0382440202	456 Sample Road, Ho Chi Minh City, Vietnam	2024-11-23 11:30:00	user
<input type="checkbox"/>	Edit	Copy	Delete	3	jane_smith	qwerty456	jane.smith@example.com	Jane Smith	0923456789	789 Another Street, Da Nang, Vietnam	2024-11-22 09:15:00	user
<input type="checkbox"/>	Edit	Copy	Delete	4	alice_wang	alicepass789	alice.wang@example.com	Alice Wang	0934567890	321 Some Avenue, Hai Phong, Vietnam	2024-11-21 08:45:00	user
<input type="checkbox"/>	Edit	Copy	Delete	5	bob_lee	boblee321	bob.lee@example.com	Bob Lee	0945678901	654 Random Street, Hue, Vietnam	2024-11-20 14:00:00	user
<input type="checkbox"/>	Edit	Copy	Delete	8	tung	0000	tung@gmail.com	Do Tung	00000	ha noi	NULL	user
<input type="checkbox"/>	Edit	Copy	Delete	9	tungtung	0000	tt@gmail.com	Tung	0382330204	ha noi	NULL	user
<input type="checkbox"/>	Edit	Copy	Delete	10	hanh	0000	hanh@gmail.com	Hanh	0202020	tp hcm	NULL	user
<input type="checkbox"/>	Edit	Copy	Delete	11	admin	0000	admin@gmail.com	Do Thanh Tung	1111111	Ha Noi	NULL	admin

Check all

With selected:

Edit

Copy

Delete

Export

Show all

Number of rows: 25

Filter rows: Search this table

Sort by key: None

Query results operations

Print

Copy to clipboard

Export

Display chart

Create view

CHECK OUT SITE

- Allow customers to fill in payment information and place an order.
- Display order details after payment.

Payment

Product Information

iPhone 16 - Version: New 100%
Quantity: 2
Price: 44,380.000đ

iPhone 16 Pro Max - Version: like new 95% - 25,990.000đ
Quantity: 2
Price: 51,980.000đ

Total: 96.360.000đ

delivery information

Fullname:

phone number:

Email:

Address:

Confirm

BILL PAGE

Thanks you, Tung!

Your order has been confirmed and will be delivered soon.!

Oder information:

Fullname: Tung

Phone: 038233333

Email: thanhtungkya@gmail.com

Address: BTEC

Cart:

iPhone 16 - 2 x 22.190.000đ

iPhone 16 Pro Max - 2 x 25.990.000đ

Total: 96.360.000đ

[Go back Home page](#)

DATA OF BILL WHEN USER CHECK OUT

sdlc

New

categories

orders

order_items

payments

products

users

sys

Show all

Number of rows:

25

Filter rows:

Search this table

Sort by key:

None

Extra options

id

order_id

payment_date

payment_method

payment_status

amount

Edit

Copy

Delete

1

1

2024-11-24 22:32:39

Credit Card

Pending

32990.00

Edit

Copy

Delete

2

2

2024-11-24 22:32:39

PayPal

Completed

50980.00

Check all

With selected:

Edit

Copy

Delete

Export

Show all

Number of rows:

25

Filter rows:

Search this table

Sort by key:

None

Query results operations

Print




Copy to clipboard

Export

Display chart

Create view

ADMIN MANAGER PRODUCT

iPhoneiPadMacWatchAccessoriesUsed ProductsServicesNewsPromotions

Magane product

[Add more product](#)

STT	name of product	price	Categoris	Quanity	Actions
1	iPhone 16 128GB	22.190 ^d	Smartphone	1500	edit Delete
2	iPhone 16 Plus 128GB	25.490 ^d	Smartphone	120	edit Delete
3	iPhone 16 Pro 128GB	28.790 ^d	Smartphone	200	edit Delete
4	iPad Pro 11 inch 128GB	21.990 ^d	Tablet	80	edit Delete
5	iPad Air 10.9 inch 64GB	14.990 ^d	Tablet	150	edit Delete
6	iPad Air 10.9 inch 64GB	14.990 ^d	iPad	150	edit Delete
7	MacBook Pro M1 13 inch 256GB	32.990 ^d	MacBook	100	edit Delete
8	MacBook Pro M2 14 inch 512GB	43.990 ^d	MacBook	80	edit Delete

ADMIN EDIT PRODUCT

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Edit product information

product name

iPhone 16 128GB

product price

22190.00

Categories

Smartphone



Quantity

1500

Update product

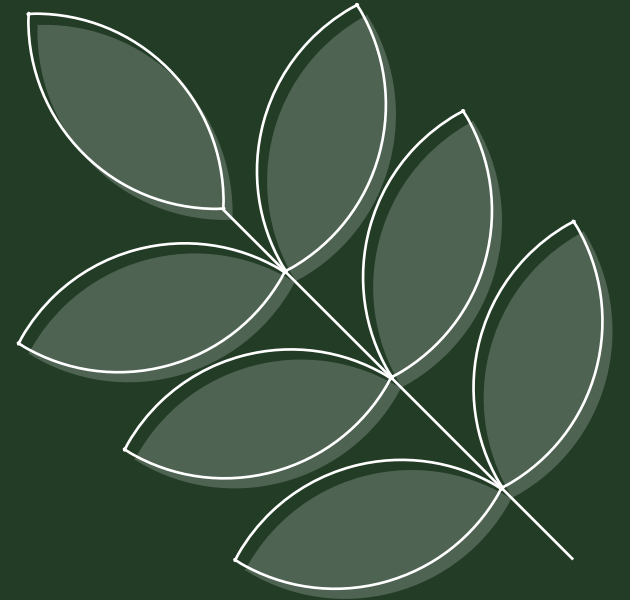
ARCHITECTURE

Tri-Tier Architecture:

- Front-end: HTML, CSS, JavaScript (Bootstrap).
- Back-end: PHP logic processing application.
- Database: MySQL data storage system.

CONCLUSION

The product and order management system operates effectively, fully meeting the requirements set. Successfully integrated an intuitive interface and functions such as shopping cart, payment, and user management. Gain a deeper understanding of how frontend and backend work together. Improve your database and application security skills.



THANKS FOR
WATCHING



Thank you to all the teachers and friends who have supported and guided me during the project.



A special thank you to the audience for their interest and listening to the presentation.