

WINNER TENNIS SPORTWEARS

**Jiajun Liu
Changsheng Tian
Anup Chapain
Pradeep Kandy**



INTRODUCTION

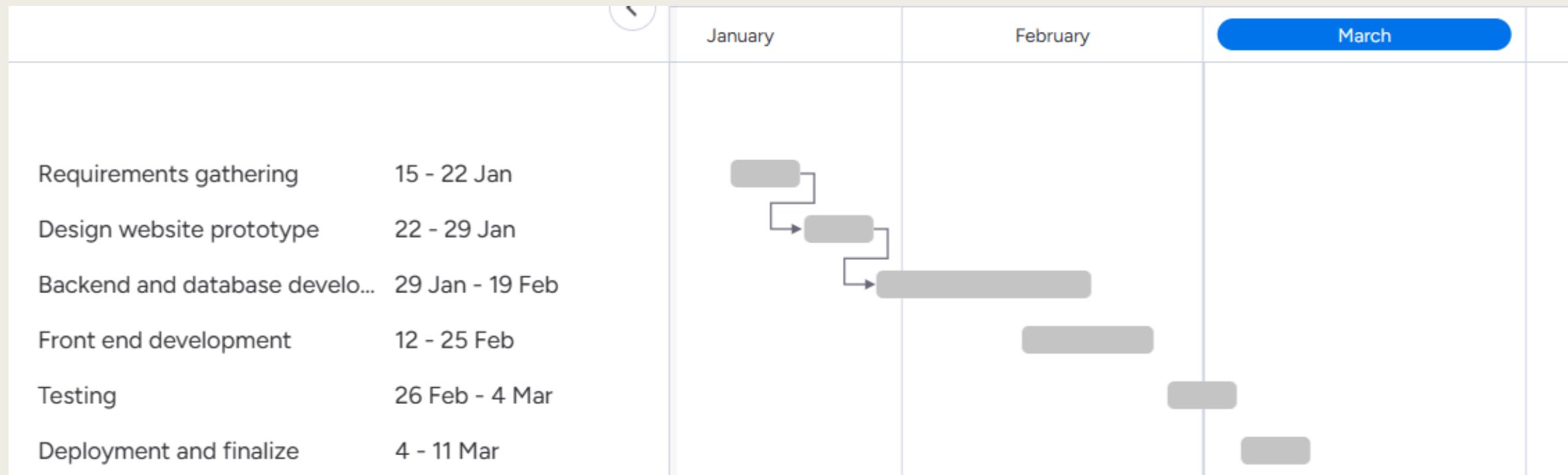
The project Role

Name	Role
ChangSheng Tian	Full-stack programmer
Jiajun Liu	Team Leader, Full-stack programmer
Anup Chapain	Front-end programmer
Pradeep Kandy	Software Tester

Motivation and Purpose

- Provide the professional Tennis clothes and shoes
- Provide the product with an affordable price
- Some products often have the discounted prices
- Accept the refund request within 2 weeks
- Cheap delivery fees

Project Timeline



Backend Implementation

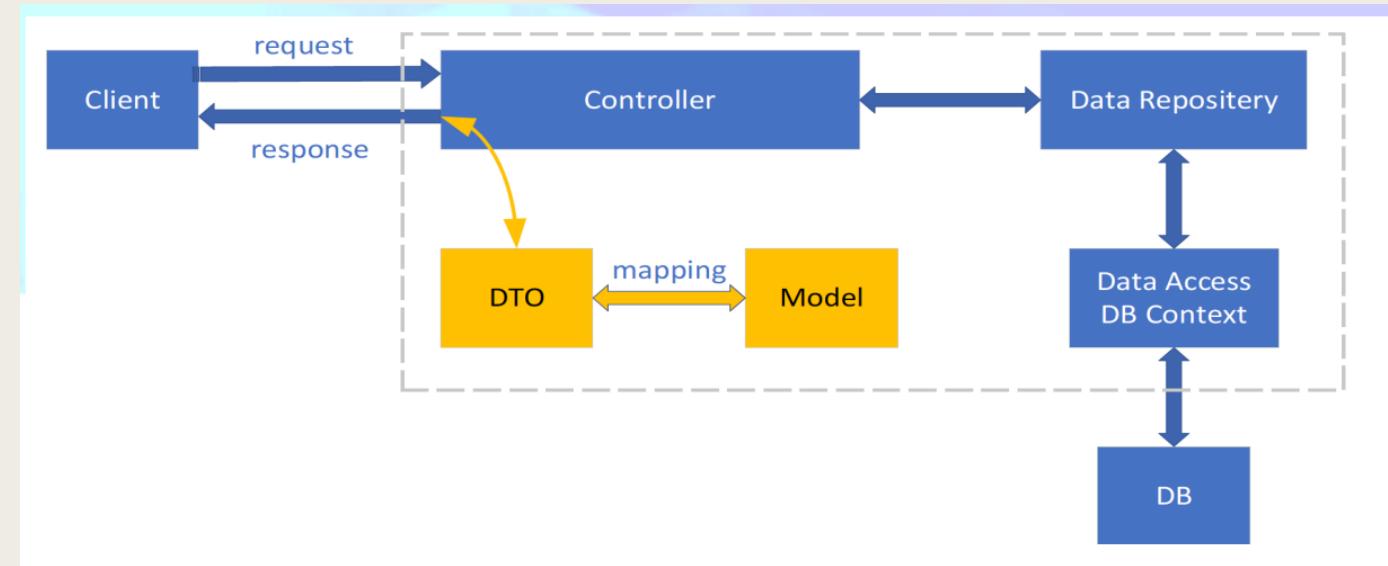
- Technology

- C#

- ASP.NET Core

- Entity Framework Core

- Web API



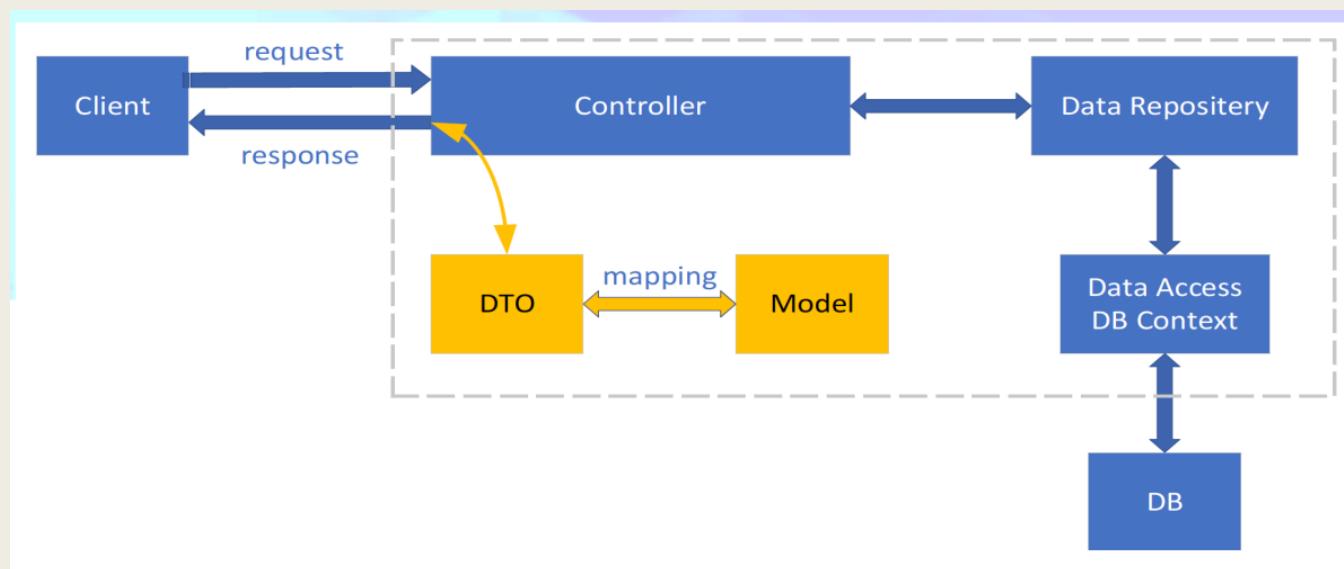
- Software

- Visual Studio

- SQLite Studio

- Swagger

Backend Implementation Cont.



The components of Implementation of Web API

Data Model: The data objects in the database

Data Access: The link between data storage and functions

Database

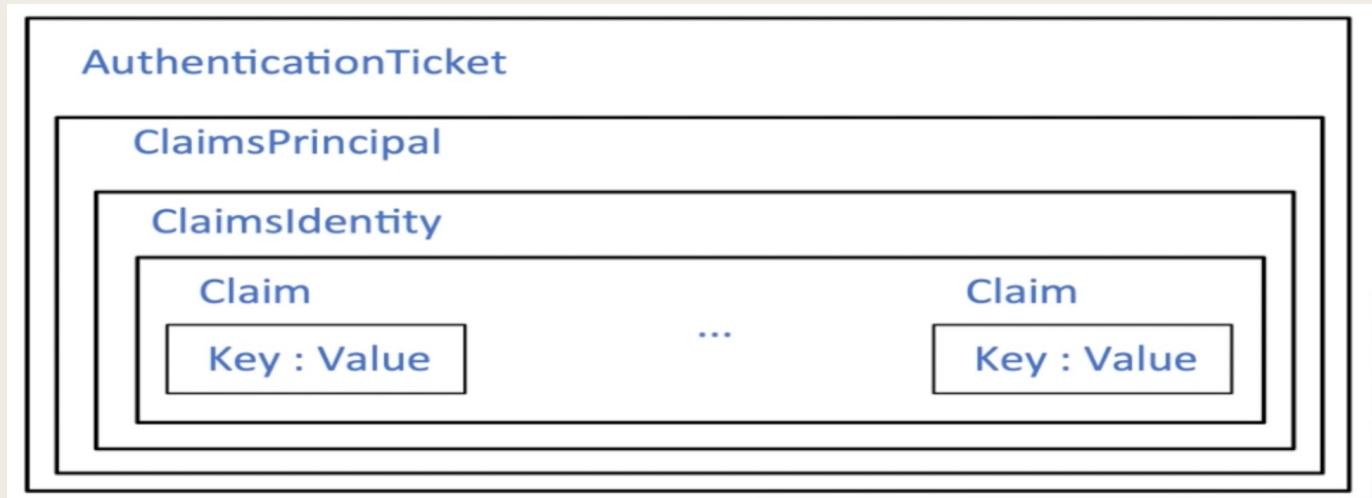
Data Repository: An interface and the implementation function of the interface

Data Transfer Object (DTO)

Controller: API Endpoints to handle the requests

Authentication and Authorization

- Claim-based Security
 - User will get the Authentication ticket after login
 - One or more claims in the authentication ticket
 - The claim will be used to authorization
 - We add the login status variable for both admin and customers
 - The login status variable used for authorization.



Home Page

Shop Delivery Method Refund Product Category

Shopping Cart Orders Logout

Products



adidas Mens Club 9
Inch Short

Original Price: \$NZ
45

Current Price:
\$NZ22.5



New Balance Mens
696v5 4E Tennis
Shoes

\$NZ 100



Asics Womens Gel
Challenger Tennis
Shoes

\$NZ 200



Customer Registration

Register

First Name

Please Enter First Name

Last Name

Please Enter Last Name

Address

Please Enter Address

Phone Number

Please Enter Phone Number

Email

Please Enter Email

Password

Please Enter Password

Register

If you have a account, please [login](#)

Login Page

Winner

Shop Delivery Method Refund Product Category

What do you want?

Search

Shopping Cart Orders **Login**

Login

Email

Please Enter Email

Password

Please Enter Password

Login

If you do not have a account, please
[register](#)

Product Category

Winner

Shop Delivery Method Refund Product Category  What do you want? Search Shopping C

- All Products
- Men Clothes
- Men Shoes
- Women Clothes
- Women Shoes



Products



New Balance Mens
696v5 4E Tennis
Shoes
\$NZ 100

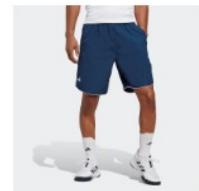


Asics Womens Gel
Challenger Tennis
Shoes
\$NZ 200

**adidas Mens Club 9
Inch Short**
Original Price: \$NZ
49

Product Category

Winner

[Shop](#)[Delivery Method](#)[Refund](#)[Product Category](#)[All Products](#)[Men Clothes](#)[Men Shoes](#)[Women Clothes](#)[Women Shoes](#)

adidas Mens Club 9 Inch Short

Original Price: \$NZ 49

Current Price: \$NZ24.5

Products



Nike Court Dri-Fit Advantage Slam Lemon Men Polo

\$NZ 86.55



TENNIS HEAT RDY FREELIFT PRO POLO SHIRT

Original Price: \$NZ 125

Current Price: \$NZ100

Search options

Winner

Shop Delivery Method Refund Product Category



Search

Shopping Cart Orders Login

Products



New Balance Mens
696v5 4E Tennis
Shoes

\$NZ 100

Product Details

Winner

[Shop](#)[Delivery Method](#)[Refund](#)[Product Category](#)[Search](#)[Shopping Cart](#)[Orders](#)[Login](#)

New Balance Mens 696v5 4E Tennis Shoes

\$NZ100

[Add to the Shopping Cart](#)

Description

Stay ready when you're on the court with the New Balance 696v5, featuring a full-length NDurance outsole for superior grip on hard courts. These tennis shoes include a synthetic and mesh upper for durability and have a locked-in feel and reliable fit to help you feel confident through every match.

Leave Product Review

Leave Your Product Review

Username

Please Enter your Username

Rating

Please Enter your rating number (between 0 to 5)

Comment

Please leave your product comments

Submit your product review

Product Reviews

Username: Anonymous

Comment: The product is good

Rate: 5 out of 5

Delivery Methods

Winner

[Shop](#) [Delivery Method](#) [Refund](#) [Product Category](#)

[Shopping Cart](#) [Orders](#) [Login](#)

Delivery Method



Online Delivery

When the customer choose the online delivery, they will be charged for extra \$5 NZ dollar.

Pick Up

When the customer choose the pick up, there will be no extra fees charged.

Purchase Product/Add to Cart

Winner

Shop Delivery Method Refund Product Category

What do you want?

Search

Shopping Cart Orders Logout



adidas Mens Club 9 Inch Short

Original Price: \$NZ45

Current Price: \$NZ22.5

Blue

Small

1

Add to the Shopping Cart

Description

There's nowhere to hide on court. So when the match takes a turn for the intense, these adidas AEROREADY shorts help you keep your cool. They're made of lightweight ripstop fabric with mesh inserts that keep the air flowing.

Added to Shopping Cart

Winner

This page says
Added successfully!

OK

Shop Delivery Method Refund Product Category

Shopping Cart Orders Logout



adidas Mens Club 9 Inch Short

Original Price: \$NZ49

Current Price: \$NZ24.5

Select the Color

Select the Size

Please Enter the Quantity

Add to the Shopping Cart

Description

There's nowhere to hide on court. So when the match takes a turn for the intense, these adidas AEROREADY

Display Shopping Cart and checkout

Shop Delivery Method Refund Product Category

Shopping Cart Orders Logout

Shopping Cart



adidas Mens Club 9 Inch Short

Quantity: 2
Price: NZ\$24.5

Total: **NZ\$49**

Select Delivery Method:

Checkout

Orders Page

Winner

Shop Delivery Method Refund Product Category

What do you want?

Search

Shopping Cart Orders Logout

Past Orders

Order ID: 11

Date: 16/03/2024

- Name: adidas Mens Club 9 Inch Short
Price: 22.5
Quantity: 1
- Name: New Balance Mens 696v5 4E Tennis Shoes
Price: 100
Quantity: 1
- Name: Nike Court Dri-Fit Advantage Slam Lemon Men Polo
Price: 86.55
Quantity: 3
- Name: Nike Court Dri-Fit Advantage Slam Lemon Men Polo
Price: 86.55
Quantity: 1

Total: NZD\$473.70

Dilevered

Refund status: accept

Order ID: 22

Date: 16/03/2024

- Name: adidas Mens Club 9 Inch Short
Price: 22.5
Quantity: 4
- Name: Asics Womens Gel Challenger Tennis Shoes
Price: 200
Quantity: 2

Total: NZD\$490.00

Picked up

Refund status: reject

Refund Page

Winner

[Shop](#) [Delivery Method](#) [Refund](#) [Product Category](#)

[Shopping Cart](#) [Orders](#) [Logout](#)

Refund Policy

The refund policy is when products are purchased within 14 days, the customer can apply for an online refund request by inputting the order ID, and the reason, and then the refund request will be processed by the administrator.



[APPLY FOR REFUND](#)

Refund Form

Winner

Shop Delivery Method Refund Product Category

What do you want?

Search

Shopping Cart Orders Logout

Refund Form

Order ID

Please Enter Order ID

Refund Reason

Refund Reason

Submit the refund form

Admin Page

Winner

[Shop](#)[Delivery Method](#)[Refund](#)[Product Category](#)[Search](#)[Edit Product](#)[Process Refund](#)

Admin Version

[Orders](#) [Logout](#)[Shopping Cart](#)

Products



**adidas Mens Club 9
Inch Short**

Original Price: \$NZ
45

Current Price:
\$NZ22.5



**New Balance Mens
696v5 4E Tennis
Shoes**

\$NZ 100



**Asics Womens Gel
Challenger Tennis
Shoes**

\$NZ 200



Admin Page options

Winner

Shop Delivery Method Refund Product Category

What do you want?

Search

[Edit Product](#) [Process Refund](#)

Products



adidas Mens Club 9
Inch Short

Original Price: \$NZ
45

Current Price:
\$NZ22.5



New Balance Mens
696v5 4E Tennis
Shoes

\$NZ 100



Asics Womens Gel
Challenger Tennis
Shoes

\$NZ 200



Admin Version

Orders Logout

Shopping Cart

[Add Product](#)

[Update Product](#)

[Delete Product](#)

Add Product

Winner

Admin Version

Shop Delivery Method Refund Product Category

What do you want?

Search

Edit Product

Process Refund

Orders Logout

Shopping Cart

Add Product

Product Name

Please Enter Product Name

Description

Please Enter Description

Category

Please Enter Category

Price

Please Enter Price

Quantity

Update Product

Winner

Shop Delivery Method Refund Product Category

What do you want?

Search

Edit Product Process Refund

Admin Version

Orders Logout

Shopping Cart

Update Product

Product ID

Please Enter Product ID

Product Name

Please Enter Product Name

Description

Please Enter Description

Category

Please Enter Category

Price

Please Enter Price

Delete Product

Delete Product

Product ID

Please Enter Product ID

Delete Product

Process Refund

Winner

Admin Version

[Shop](#)[Delivery Method](#)[Refund](#)[Product Category](#)[Search](#)[Edit Product](#)[Process Refund](#)[Shopping Cart](#)[Orders](#)[Logout](#)

Refund Request

Refund ID	Customer ID	Order ID	Refund Reason	Status	
4	1	11	The product is with poor quality	This refund request has been processed.	Delete
6	1	22	The product does not meet the expectation	This refund request has been processed.	Delete
9	1	23	I change my mind	Accept Reject	Delete

Front End

- HTML
- CSS
- Java Script

Outline of Implementation:

CSS file has been maintained separately and is been linked by :

```
<link rel="stylesheet" href="index.css">
```

- `<link>`: This HTML tag is used to link external resources to a web page. In this case, it's used to link a stylesheet.
- `rel="stylesheet"`: The `rel` attribute specifies the relationship between the current document and the linked resource. When set to "stylesheet", it indicates that the linked resource is a CSS (Cascading Style Sheets) file.
- `href="index.css"`: The `href` attribute specifies the URL (or path) to the external CSS file. In this case, the file named "index.css" is expected to be in the same directory as the HTML file.

When a browser encounters this `<link>` tag, it fetches the "index.css" file and applies its styles to the HTML content. This allows us to separate our styling (CSS) from our content (HTML), making it easier to maintain and update our website's design.

Outline of Implementation:

- Javascript file has been maintained separately as well and is associated by:
 - `<script src="index.js"></script>`
- **<script> Tag:**
 - The `<script>` tag is an HTML element used to embed **executable code or data** within a web page.
 - It dynamically alters the content, manages form validation, and manipulates page styles, enhancing user interactivity and experience.
- **src Attribute:**
 - The `src` attribute specifies the **URL of an external script file** that the browser should load and execute.
 - When you include a `<script>` tag with a `src` attribute, the browser fetches the specified JavaScript file from the given URL and runs it.
 - In our case, the external JavaScript file is named “index.js” and is expected to be in the same directory as our HTML file.
- **Purpose:**
 - By linking an external JavaScript file using the `src` attribute, you can:
 - **Reuse** the same JavaScript code across multiple pages of your website.
 - **Separate concerns:** Keep your HTML content separate from your JavaScript logic.
 - **Improve maintainability:** Make changes to the script in one place (the external file) rather than duplicating it on every page.

Consistency of Display:

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

- <meta charset="UTF-8" >:
 - This meta tag specifies the character encoding for the web page.
 - UTF-8 stands for **Unicode Transformation Format 8-bit** and is a widely used character encoding.
 - It supports a vast range of characters from various languages and scripts.
 - By setting the charset to UTF-8, you ensure that your web page can display text in different languages correctly.
 - <meta name="viewport" content="width=device-width, initial-scale=1.0" >:
 - This meta tag controls how the web page is displayed on different devices, especially mobile devices.
 - It has two important attributes:
 - **name="viewport"**: Indicates that this meta tag is related to the viewport settings.
 - **content="width=device-width, initial-scale=1.0"**:
 - **width=device-width**: The width of the viewport should match the device's screen width.
 - **initial-scale=1.0**: The initial zoom level when the page is loaded should be 1.0 (no zoom).
- By using this meta tag, we create a responsive design that adapts well to various screen sizes, ensuring a better user experience.

<div> tag (Divide and rule manipulate)

■ <div> Tag:

- Represents a **division or section** in an HTML document.
- Acts as a **container** for other HTML elements.
- Styled with **CSS** or manipulated using **JavaScript**.
- We have used it to group related content!

<label>

- <label> Tag:
- The <label> tag is used to create a **label** for an HTML form element.
- It associates the label text with a specific input field, making it more accessible and user-friendly.
- The **for** attribute specifies which input element the label corresponds to.

Eg:<label for="Price">Price</label>

```
<a onclick="showHome()">Shop</a>
```

- **<a> Tag with onclick:**
- Represents an **anchor (link)** element in HTML.
- The **onclick** attribute specifies a **JavaScript function** to execute when the link is clicked.
- In this case, clicking the “Shop” link triggers the **showHome()** function.

```
<input id="Search" type="text" onkeyup="search()" placeholder="What do you want?">
  <button type="submit" onclick="search()>Search</button>
```

- This code snippet is not directly related to AJAX (Asynchronous JavaScript and XML).
- However, the `onkeyup` and `onclick` attributes invoke functions (`search()`) asynchronously, which is a concept similar to AJAX.
- AJAX typically involves making asynchronous requests to a server to update parts of a web page without reloading the whole page.

What is the Fetch API?

- The Fetch API provides a **JavaScript interface** for making **network requests** (such as fetching data from a server) asynchronously.
- `const FetchPromise = fetch(`https://localhost:8080/api/GetProductsByName/${word}`)`
- **fetch()** Function:
 - The **fetch()** function is part of the **Fetch API**.
 - It is used to make **network requests** (usually HTTP requests) to retrieve resources from a server.
 - In your example, it fetches data from the specified URL.
- **URL:**
 - The URL in your snippet is "`https://localhost:8080/api/GetProductsByName/${word}`".
 - The `${word}` part is a **template literal** that allows you to insert a variable value into the URL.
 - The actual value of word will be substituted when the fetch request is made.
- **Promise:**
 - The **fetch()** function returns a **promise**.
 - Promises represent the eventual completion (or failure) of an asynchronous operation.
 - You can use `.then()` or `async/await` to handle the response when the promise resolves.

Limitations and challenges

- We encountered issues with storing multiple product records for one order.
- The payment gateway has not been integrated for making payment.
- Since our website has not been deployed in the cloud server, people need the integrated development environment to run the whole project to use our website.

Solution to the problems

- We solved the issue of multiple products stored in one order by using JSON data type, like {"3", 1}, and “3” means the product ID, 1 is the quantity.
- Payment processing module can be integrated by purchasing third-party services. They provide API for this purpose in the future.
- The AWS can be used as a cloud service provider to support the deployment for our website in the future.

Project outcomes

- The parallel development of various aspects sometimes demanded us to re-iterate the process.
- We understood the value of established design principles and more specifically "agile".
- As a team, we learnt the value of proper communication.
- The concept of "synergic result" came to life.

Thank you