

SKECHER System online

Software Requirement Specification (SRS)

GROUP: Group 6 S1G2

NAME	NO.MATRIC
MUHAMAD HANIF BIN AYUB	B032410517
KOH HAU RUI	B032410568
ROSLINE TIMA ANAK WILLIE	B032410570
NADA AHMED	B032420176

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1. Overall Description

1. Product Perspective

Skechers Malaysia Online Store is a web-based e-commerce platform focused exclusively on selling footwear. The system consists of several interconnected components:

- A user interface for browsing and purchasing shoes.
- A product and user database.
- A content management system (CMS) for managing items and promotional banners.
- A payment gateway integration for secure online transactions.
- An order tracking system for customers.

What are you Looking for?

SEARCH PRODUCTS...

×



2. Product Functions

The main functionalities of the system include:

- Displaying shoes by category (Men, Women, Kids).
- Filtering products by size, color, and price.
- Searching for specific items.
- Adding items to a shopping cart.
- Creating an account and signing in.
- Completing online payment transactions.
- Viewing and tracking order status.
- Showcasing ongoing promotional offers (e.g., Mid-Year Sales, Discounts).

3. User Characteristics

The system serves the following types of users:

- **Customers:** Can browse, search, purchase products, and track their orders.

- **Administrators:** Manage inventory, update offers, handle order records, and view sales reports.
- **Support Staff:** Respond to customer inquiries via email or live chat.

Each user role has different access permissions within the system.

4. Operating Environment

The website is designed to run on:

- Major web browsers (Chrome, Safari, Edge, etc.)
- Desktop and mobile operating systems (Windows, macOS, Android, iOS)
- Responsive design for various screen sizes
- Secure payment gateways (Visa, MasterCard, and Malaysian local options)

5. General Constraints

The UI must be mobile-friendly and responsive.

- All payment processes must be securely encrypted (SSL/TLS).
- Website performance should remain smooth even under high traffic.
- Legal compliance with Malaysia's personal data protection policies is required.
- Server and platform limitations may apply depending on hosting and CMS used.

6. References

- Comparable e-commerce sites such as Zalora and Nike Malaysia
- General UI/UX design principles and e-commerce best practices
- *IEEE SRS formatting guidelines*

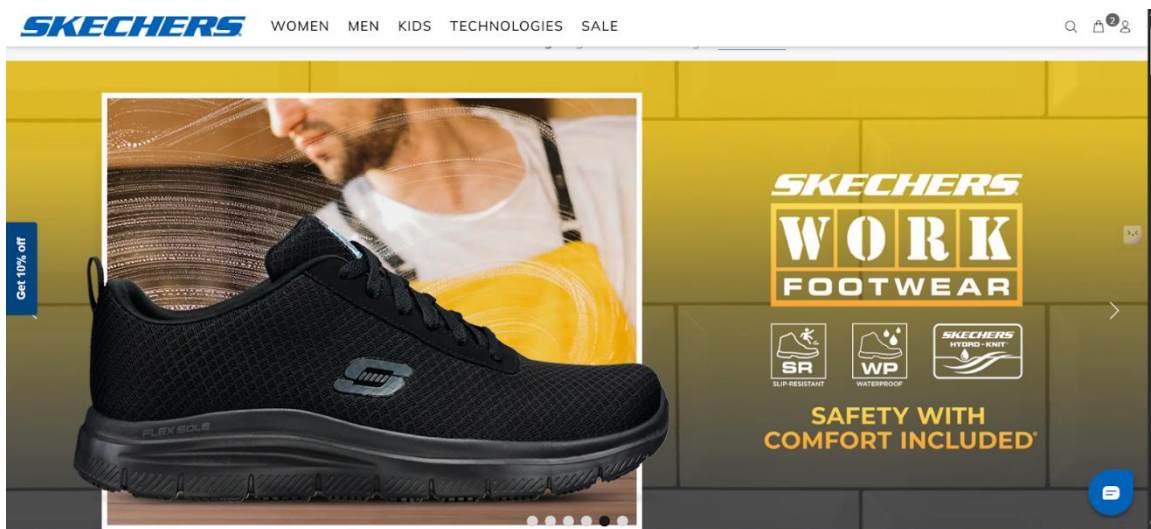
- [Skechers Malaysia Official Website](#)

2. External Interface Requirements

1. User Interfaces

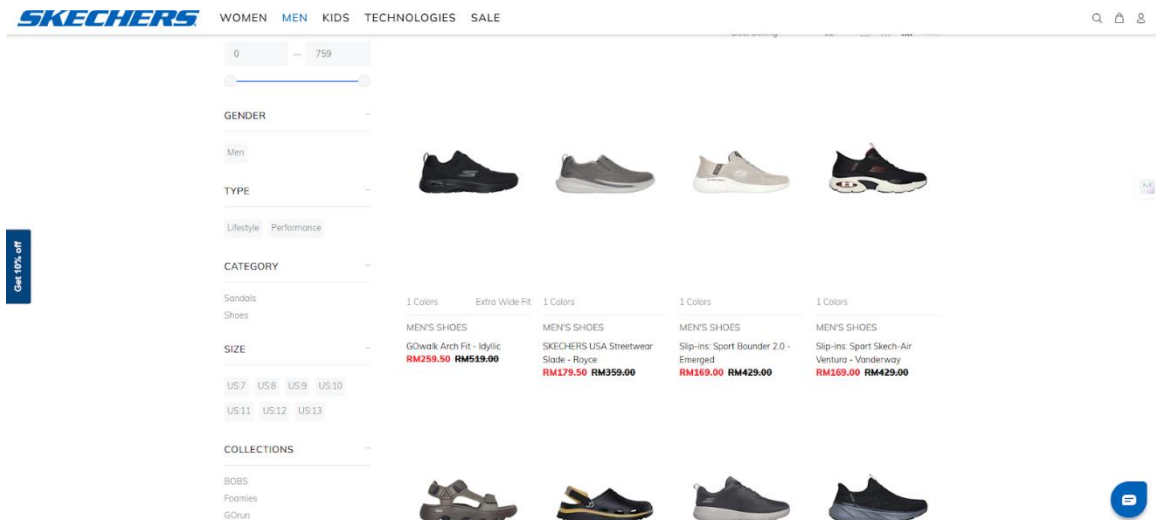
2.1.1 Logical Characteristics:

The Skechers Malaysia website offers a modern, clean, and user-friendly interface designed to make online shopping fast, smooth, and accessible to all users. It follows Skechers' global brand identity, using consistent colors, fonts, and layouts across all pages.



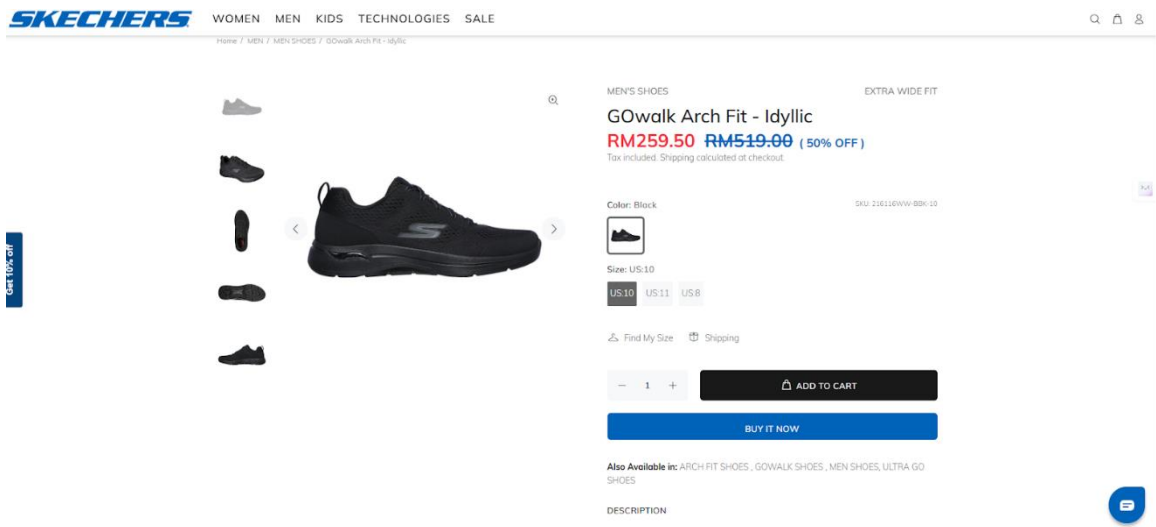
1. Home Page Interface

Displays a large rotating banner with promotions, followed by product categories (e.g., Men, Women, Kids). Navigation is supported by a top menu bar and a search bar.



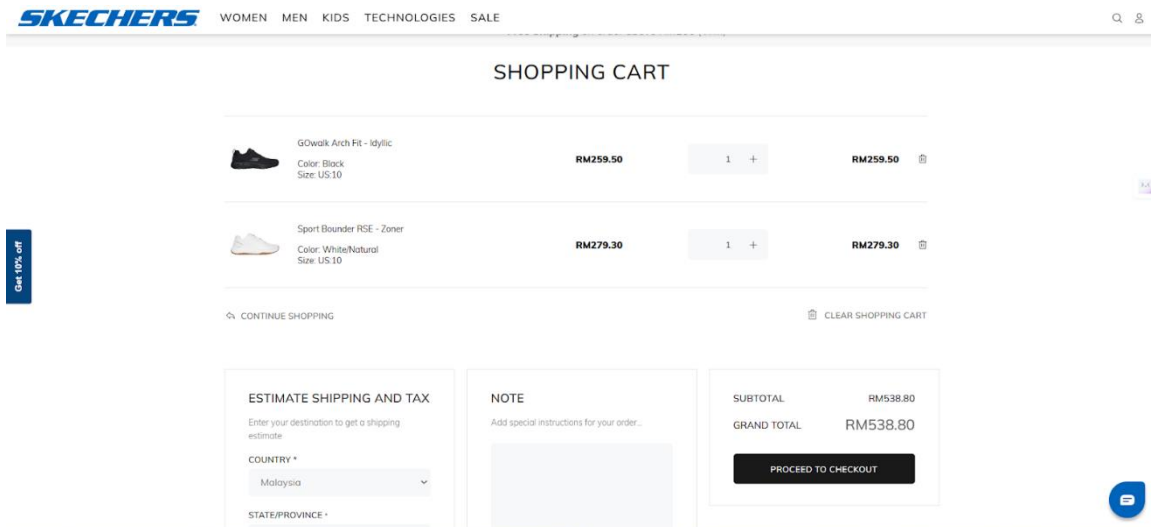
2. Product Listing Page

Grid layout with filters for size, price, category, and color. Includes quick view, price, and ratings.



3. Product Detail Page

Shows product images, sizes, price, description, and Add to Cart And Wishlist buttons.



4. Cart Page

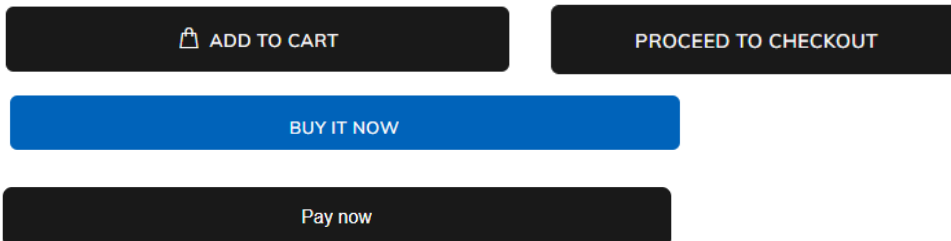
Lists selected items, quantity options, and checkout button. A summary of prices and shipping is shown.



5. Search Bar

allows users to quickly find products by typing keywords such as product names, categories (e.g., “men’s sneakers”), styles, or SKU numbers.

2.1.2 GUI Standards



Buttons

Standard buttons include

- Add to Cart

- Checkout
- Cancel
- BUY
- PAY

Email
adwdawd

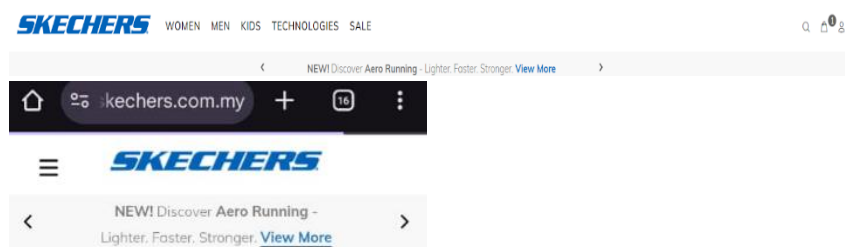
Enter a valid email

- Incorrect email or password.

Error message

show all error messages are short and clear.

- invalid email address
- Payment failed. Please try again
- Item is out of stock



Navigation Bar

On mobile, the navigation bar transforms into a hamburger menu

- **Search Bar**
- **Cart Icon**
- **User Icon / Login**
- **Category Links**

2. Hardware Interfaces

2.2.1 Client-Side Hardware Interfaces

Component	logical characteristics	physical characteristics
Display	Displays web content rendered via browser compositor.	Integrated screens and LCD screen
Local Storage/Cache	Used for saving session data, preferences, and caching assets locally for faster loading.	Device storage, browser cache, cookies
Input Devices	User input is captured and processed through browser APIs (e.g., click, type, voice input).	Keyboard and Mouse
User Device	Renders the website through a web browser. Sends/receives data using HTTP(S).	Smartphones, tablets, laptops, desktops (iOS, Android, Windows)
Network Interfaces	Enables communication between the browser and web servers over HTTPS (TLS-secured).	Wi-Fi, Ethernet, 4G/5G

2.2.2 Server-Side Hardware Interfaces

Component	Logical Characteristics	physical characteristics
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Web Servers	Handle incoming HTTP requests, render dynamic content, and return responses to users.	Linux-based virtual machines or containers
Cache Servers	Temporarily store session data, cart items, and frequently accessed content.	High-speed RAM-based systems
Backup Systems	Regularly backup database and file system data to prevent loss from failures or attacks.	Physical or cloud-based redundancy storage (RAID, remote replication)
File Storage Servers	Serve large media files such as product images, banners, and downloadable assets.	RAID-enabled hard drive arrays or cloud object storage


3. Software Interfaces

Description	Description
Supported OS	Linux-based servers, Windows, macOS, Android, iOS
Client Platforms	Compatible with all modern browsers (Chrome, Firefox, Safari, Edge) supporting HTML5, CSS3, and JavaScript (ES6). Usable on desktop, tablet, and mobile.
Payment Gateway	Visa, MasterCard – supports Credit/Debit Cards, eWallets, Online Banking
Web Server	Nginx 1.18+ or Apache 2.4+
Browser Requirements	HTML5, CSS3, JavaScript ES6 compatibility

Database	MySQL 8.0 or PostgreSQL 13+ for structured data management
Shipping Integration	DHL eCommerce – provides real-time delivery info and tracking


4. Communications Interfaces

Skechers Malaysia's website includes communication tools that allow users to connect with the system and customer support through secure online channels. These features are mainly accessed via the official Skechers Malaysia website, which requires an internet connection and a compatible web browser to function properly. When users interact with the platform—for example, by placing an order, requesting support, or submitting inquiries—their information is securely transmitted to the backend using industry-standard protocols like HTTPS. The system also supports web-based forms such as the “Contact Us” page, where users can input their concerns or requests. These forms are handled by the server in real time to ensure timely responses.




ENQUIRIES

+603 - 27791333
Email: inquiry@skechersmal.com
Drop us a message - we're here to help.



SKECHERS MALAYSIA

Suite 18.02-08, Level 18,
Menara Exchange 106, Lingkaran TRX,
Tun Razak Exchange,
55188 Kuala Lumpur, Malaysia



WORK TIME

Mondays to Fridays
from 9am to 6pm
*Excluding public holidays

SEND MESSAGE

Email communication is integrated into the system for sending order confirmations, password reset links, and promotional materials. This is achieved through trusted email services like SendGrid or internal SMTP servers. In some cases, users may also reach out via direct email or receive follow-up responses from customer service representatives.

Additionally, the website communicates with third-party systems—such as payment gateways (e.g., TNG eWallet, Online Banking) and logistics providers (e.g., DHL eCommerce)—using secure APIs to process transactions and provide

real-time shipping updates. These communication features ensure that user interactions are properly routed, tracked, and responded to with reliability and data security.

3. Functional Requirements

Users/Stakeholders	Function	Description
Customers	Free sign up for user	Users as customers can sign up and create an account to start shopping, without the need for manual verification.
Customers	Login process	After signing up, the user can log in using email and password to access their profile, cart, and order history.
Customers	Browse products	Users can view available products by category, size, and price for easier shopping experience.
Customers	Add to cart	Allows users to add selected Skechers products into a shopping cart for purchase.
Customers	Make payment	Users can proceed to checkout and complete the transaction using online payment methods like credit, debit card or e-wallet.
Customers	Track order	Users can track their order status such as processing, shipped or delivered from their account dashboard.
Admin (Staff)	Manage inventory	Admin can add, update, or delete product information such as stock level, price, and product description.
Admin	View sales reports	After completing the registration process, user able to log into the information system

Users/Stakeholders	Function	Description
Customers	Free sign up for user	Users as customers can sign up and create an account to start shopping, without the need for manual verification.
Customers	Login process	After signing up, the user can log in using email and password to access their profile, cart, and order history.
Admin	Manage user accounts	Admin has access to view, deactivate, or assist with user account issues.
Admin	Process refunds/returns	Admin can process customer refund or return requests according to return policies
Delivery Staff	Update delivery status	Delivery team can update order status to reflect real-time delivery progress.
Customer	Log out process	After completing the purchase process, the user may choose to log out of the system or continue shopping.

4. Other Nonfunctional Requirements

1. Performance Requirements

Skechers Malaysia website must meet key performance requirements for seamless user experience under varying conditions. All pages must load within 2

seconds on a 10 Mbps connection to maintain minimum waiting time and reduced bounce rates, especially during traffic periods. The checkout must not exceed 10 seconds to prevent cart abandonment during sales traffic periods. Search queries for up to 100 products should return a 1-second result for quicker usability on all devices. The system should handle 10,000 concurrent users with less than 3-second page loads during promotions. API calls should have an average of less than 500 milliseconds for smooth integrations. These standards ensure satisfaction and scalability, which guide good design decisions.

2. Safety and Security Requirements

The e-commerce site for Skechers Malaysia needs to follow the Personal Data Protection Act 2010 (PDPA) regulations concerning the collection, processing, and storage of data within commercial transactions. This includes gaining user consent for collecting data, restricting data usage to the stated objectives, implementing robust access control systems, providing access and correction functionalities and allowing user modifications to their personal details. The site should utilize secure protocols such as SSL(Secure Sockets Layer) for data-in-transit encryption and if credit card information is collected must comply with Payment Card Industry Data Security Standard (PCI DSS) and associated online payment handling safeguards. To protect the user's online shopping experience, regular security audits, strong protective identity confirmation methods and timely application for software updates.

3. Capacity

The Skechers Malaysia website needs significant storage capacity to manage a detailed catalog containing thousands of footwear and apparel products alongside sophisticated images, descriptions, pricing, and inventory levels. Moreover, it must save user information including account details, order history and possible user-generated content like reviews. Storage requirements might

currently sit between a few gigabytes to several terabytes, depending on the amount of products and users. To support growing storage needs, the infrastructure should be scalable, utilizing cloud technology capable of automatically adjusting to increased data volumes due to a growing customer base and product offerings. This enables the website to handle expanding business requirements without compromising speed and performance.

4.4 Usability

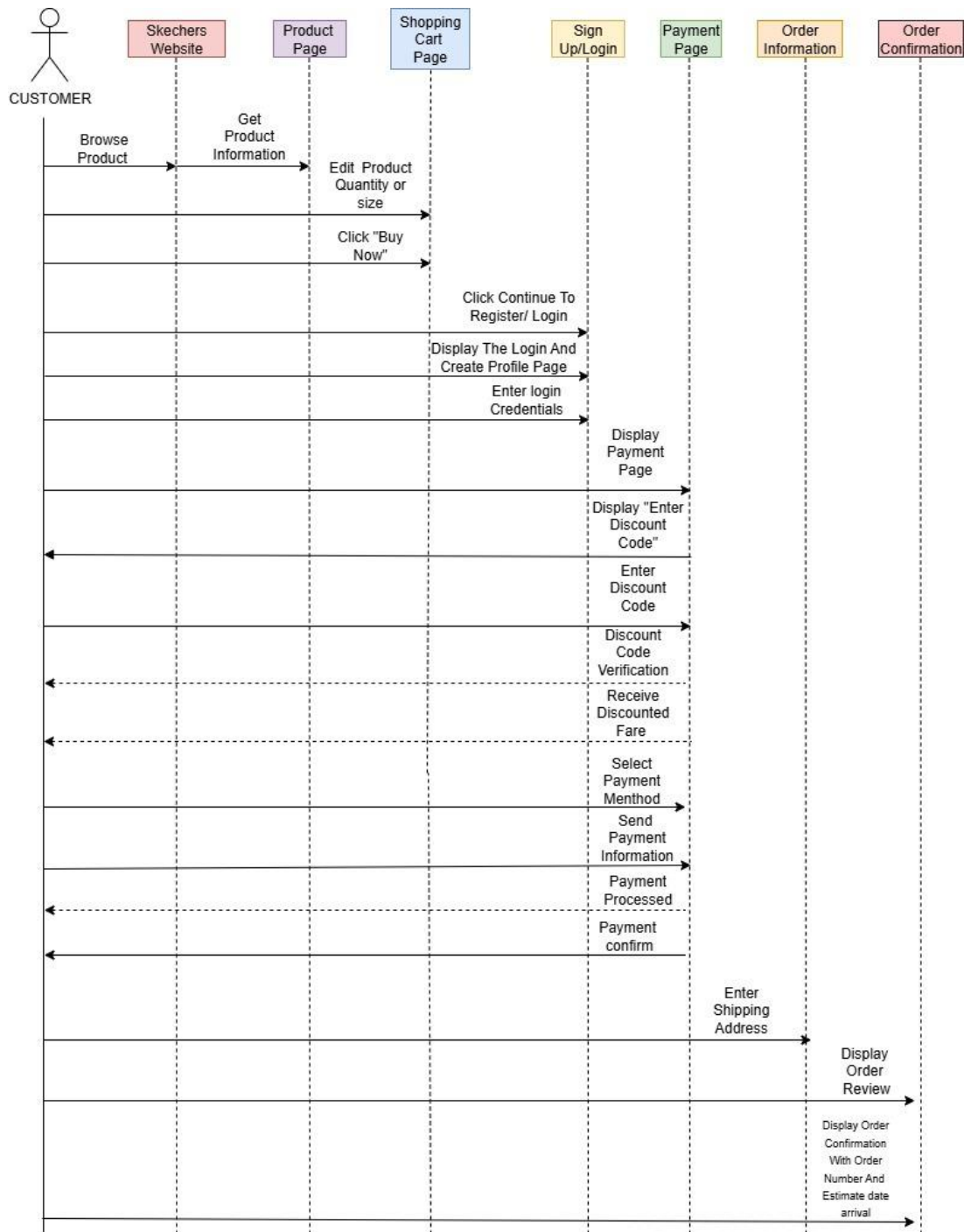
The Skechers Malaysia website should have an easy-to-use, intuitive interface, with clear navigation, easily accessible product information and easy checkout. It should also be web design best practice-based, including responsive design for mobile use, fast loading times, and accessibility for disabled users. Periodic user testing and gathering feedback must be conducted to identify areas for improvement and improve the user experience. With an emphasis on usability, the website ensures that consumers are able to browse, select and purchase products at ease, enhancing satisfaction and encouraging repeat visits.

4.5 Compatibility

The web server for the Skechers Malaysia website has to be equipped with proper hardware specifications like sufficient CPU power, memory and disk space in order to support expected traffic and data processing requirements. On the client side, the website should also be compatible with widely used web browsers like Google Chrome, Mozilla Firefox, Safari and Microsoft Edge in their latest versions. It must also be responsive, with good user experience across various devices, such as desktops, laptops, tablets and phones, with screen

sizes ranging from the tiny mobile screen to large desktop monitors. Adhering to web accessibility standards such as WCAG 2.1 makes the website usable for individuals with disabilities, supporting inclusivity.

5. Sequence Diagram



Appendix

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SKECHERS
WORK
FOOTWEAR



SLIP RESISTANT



WATERPROOF



SKECHERS
HYPER-KNIT

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COMFORT INCLUDED**

