Nova India Clothing Website

A Project Report

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of

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Acknowledgement

We would like to express our sincere gratitude to all who have been part of the journey in conceptualizing, developing and bringing the **Clothing website** to life. This Project stands for the collective effort and dedication of numerous individuals and we wish to acknowledge their invaluable contributions.

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We are also grateful for the steadfast support and direction that our internal mentors and distinguished faculty members have given us. We would like to sincerely thank them for their support and guidance, without which the realization of this project would have been a lot more difficult undertaking.

Our Heartfelt Thanks goes to all the Faculty Members of **DCS**, **IIICT**.

Lastly, we would like to express our sincere thanks to all individuals, be it through direct involvement or indirect assistance, for their collective contributions to this project.

THANK YOU



CERTIFICATE

This is to certify that the project titled "Nova India Clothing Website" is the bona fide work carried out by **Kajal Savita**(IU2182820154), a student of IMCA SEM-VI during the academic year 2023-24, in partial fulfilment of the requirements for the award of the degree of Master of Computer Application.

Internal Guide Signature:	Head of Dept. Signature:
Date:	Date:



CERTIFICATE

This is to certify that the project titled "Nova India Clothing Website" is the bona fide work carried out by **Atul Sengar (IU2182820155)**, a student of IMCA SEM-VI during the academic year 2023-24, in partial fulfilment of the requirements for the award of the degree of Master of Computer Application.

Internal Guide Signature:	Head of Dept. Signature:
Date:	Date:



CERTIFICATE

This is to certify that the project titled "Nova India Clothing Website" is the bona fide work carried out by **Darshi Shah (IU2182820156)**, a student of IMCA SEM-VI during the academic year 2023-24, in partial fulfilment of the requirements for the award of the degree of Master of Computer Application.

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INTRODUCTION

- Our final year project revolves around creating a stunning online presence for the Nova India a brand that epitomizes elegance, innovation, and the unique narrative that every individual weaves through their personal style.
- Today, it's our pleasure to introduce you to a fashion journey that goes beyond mere clothing; it's an exploration of identity and style.
- At the heart of Nova India is the commitment to not just offer garments but to curate a lifestyle.
- Nova India stands for more than just trends. It's about embracing one's identity
 through fashion, celebrating the uniqueness that each individual brings to the table.
 Our brand philosophy is rooted in the belief that style is a powerful language, and
 every garment tells a story.
- Discover how Nova India seamlessly integrates technology with the art of fashion.

Existing system

- **Product Catalog Management:** This includes features for adding, updating, and organizing product listings. It may also include options for categorizing products, managing variants (such as sizes and colors), and setting pricing.
- **User Account Management:** Users should be able to create accounts, log in, and manage their profiles. This might include features like saved addresses, order history, and wish lists.
- **Shopping Cart and Checkout:** A shopping cart allows users to add items for purchase, while the checkout process involves entering shipping and payment information. It's essential for this process to be smooth and intuitive to minimize cart abandonment.
- **Search and Filtering:** Users should be able to easily find products through search functionality and filtering options based on criteria like size, color, price range, and brand.
- Responsive Design: The website should be optimized for various devices and screen sizes, ensuring a seamless experience for users on desktops, laptops, tablets, and smartphones.
- Product Pages: Each product should have a dedicated page displaying detailed information, including images, descriptions, pricing, and availability. Additional features might include customer reviews, related products, and social sharing buttons.
- Payment Processing: Secure payment gateways should be integrated to accept various payment methods (credit/debit cards, PayPal, etc.) and ensure the security of customers' financial information.
- **Customer Support:** Providing channels for customer inquiries, such as live chat, email support, or a help center, can improve customer satisfaction and resolve issues quickly.

Problem areas of existing system

1. User Interface (UI) and User Experience (UX):

- Cluttered or confusing interface design leading to difficulties in navigation.
- Poorly organized product categories or filters making it hard for users to find what they're looking for.
- Slow loading times or unresponsive design leading to user frustration.

2. Mobile Responsiveness:

- Lack of optimization for mobile devices, resulting in a poor user experience for mobile shoppers.
- Issues with layout or functionality on different screen sizes and resolutions.

3. Product Information and Descriptions:

- Incomplete or inaccurate product descriptions leading to ambiguity or dissatisfaction.
- Low-quality product images or inconsistent image sizes affecting the presentation of products.

4. Search Functionality:

- Ineffective search algorithms resulting in irrelevant or inaccurate search results.
- Lack of autocomplete or search suggestions making it harder for users to find products.

5. Checkout Process:

- Complicated or lengthy checkout process leading to cart abandonment.
- Limited payment options or insecure payment gateways deterring users from completing purchases.

6. Inventory Management:

- Issues with stock availability or inaccurate inventory tracking leading to out-ofstock items being displayed as available.
- Inefficient handling of backorders or pre-orders causing delays in fulfilling customer orders.

7. Security Concerns:

- Vulnerabilities in the website's security infrastructure exposing customer data to potential breaches or theft.
- Lack of secure connections (HTTPS) or compliance with data protection regulations (e.g., GDPR).

8. Customer Support:

- Insufficient customer support options or slow response times to inquiries or complaints.
- Lack of self-service features for common issues such as order tracking or returns.

9. Performance Optimization:

- Slow loading times or high server response times affecting the overall performance of the website.
- Unoptimized images or code impacting page load speed and user experience.

10. SEO and Marketing:

- Poor search engine optimization (SEO) to low visibility in search engine results.
- Ineffective marketing strategies resulting in low traffic or conversion rates.

11. Analytics and Insights:

• Limited or inaccurate data analytics make it difficult to understand user behavior and make informed decisions for improvement.

Need for the new system

- Online Presence: A website provides a global platform for your clothing brand to showcase its products and reach a wider audience. It allows potential customers from around the world to discover and explore your brand.
- **Brand Visibility:** Having a website increases your brand's visibility. It allows you to establish an online identity and present your brand's story, mission, and values. This can help create a stronger connection with your target audience.
- **E-Commerce Opportunities:** A website allows you to sell your clothing products online, providing a convenient and accessible way for customers to make purchases. This opens up new revenue streams and expands your customer base beyond physical store locations.
- **24/7 Accessibility:** Unlike physical stores with specific operating hours, a website is accessible 24/7. This means that potential customers can browse and make purchases at any time, increasing the chances of making sales.
- **Market Expansion:** With an online presence, you can reach customers in different geographic locations. This can be especially beneficial for small or local clothing brands looking to expand their market and customer base.
- Marketing and Advertising: A website serves as a powerful marketing tool. You can use it to run promotional campaigns, share updates about new collections, and engage with your audience through various digital marketing strategies. Social media integration can further amplify your brand's reach.
- Credibility and Professionalism: A well-designed and functional website enhances the credibility and professionalism of your clothing brand. It provides a central hub for customers to learn more about your brand, view your products, and contact you.
- **Customer Convenience:** Online shopping offers convenience to customers. They can browse through your clothing collections, read product descriptions, and make purchases from the comfort of their homes. This convenience can lead to higher customer satisfaction and loyalty.

Proposed System

1. User Registration and Authentication:

- Allow users to register for an account or log in using email, social media accounts, or guest checkout.
- Implement password hashing and encryption for secure authentication.

2. Product Catalog Management:

- Create a user-friendly interface for adding, updating, and categorizing products.
- Include features for uploading product images, descriptions, prices, sizes, colors, and inventory levels.

3. Search and Filtering Functionality:

- Develop a robust search engine with autocomplete suggestions and advanced filtering options.
- Enable users to filter products by category, brand, size, color, price range, and other attributes.

4. Product Detail Pages:

- Design visually appealing and informative product detail pages.
- Display high-quality images, detailed descriptions, sizing charts, and customer reviews.

5. Shopping Cart and Checkout Process:

- Implement a streamlined shopping cart system with the ability to add, edit, and remove items.
- Offer a one-page checkout process with guest checkout options and multiple payment methods (credit/debit cards, PayPal, etc.).
- Provide order summary, shipping options, and delivery estimates during checkout.

6. User Account Management:

- Allow users to view order history, track shipments, and manage personal information.
- Enable users to save favorite items, create wishlists, and receive personalized recommendations.

7. Responsive Design:

- Ensure the website is fully responsive and optimized for various devices, including desktops, laptops, tablets, and smartphones.
- Prioritize mobile-friendly design elements for seamless browsing and shopping experiences on smaller screens.

8. Inventory Management:

- Implement real-time inventory tracking to prevent overselling and backorders.
- Automatically update product availability based on purchases and restocks.

9. Shipping and Delivery:

- Integrate with shipping carriers to provide accurate shipping rates and delivery options.
- Offer free shipping thresholds, expedited shipping options, and international shipping for a global audience.

10. Customer Support:

- Provide multiple channels for customer support, including live chat, email, and phone support.
- Develop a comprehensive FAQ section and knowledge base to address common inquiries.
- Implement a ticketing system to track and resolve customer issues efficiently.

11. Security Features:

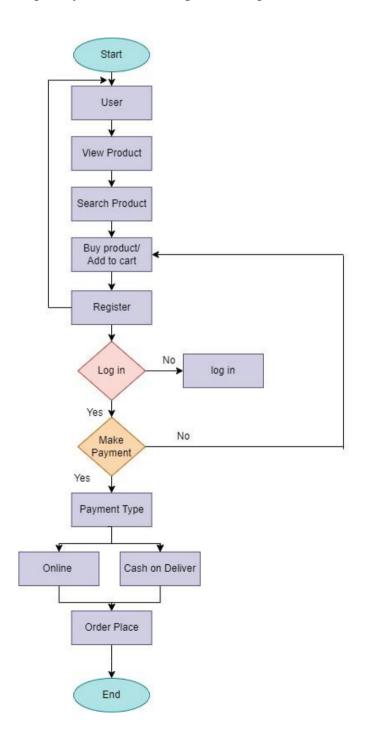
- Secure the website with SSL encryption to protect sensitive data during transactions.
- Regularly update security patches and conduct vulnerability assessments to prevent data breaches.
- Comply with data protection regulations such as GDPR to safeguard user privacy.

12. Analytics and Reporting:

- Integrate with analytics tools to track website performance, user behavior, and sales metrics.
- Generate reports on key performance indicators (KPIs), conversion rates, and customer demographics to inform business decisions.

System Flow Diagram

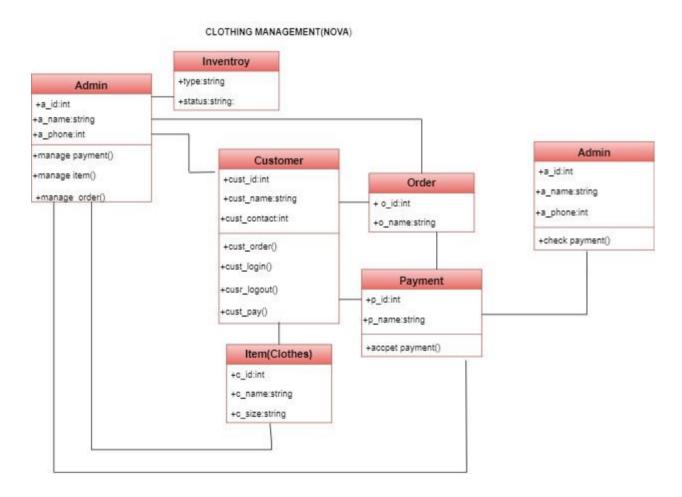
- A System Flow Diagram is a visual representation of the flow of information and processes within a system.
- It uses symbols, shapes, and arrows to illustrate how the data, actions, and interactions move between various components of the system.
- It provides a high-level overview of the system's functionality.
- It breaks down complex systems into manageable components.



UML Diagrams (Class, Activity, Sequence, Use case Diagram)

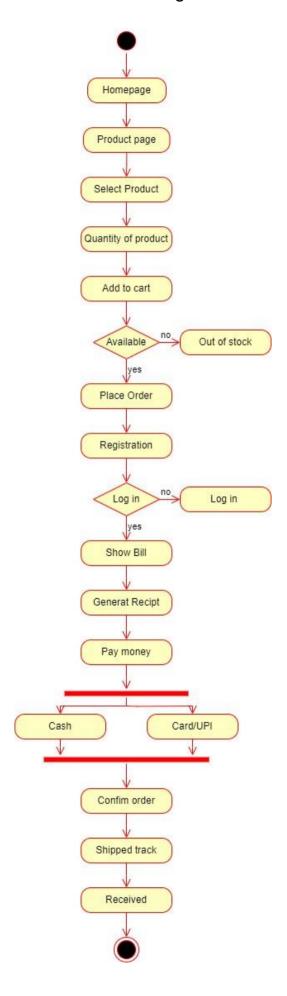
Class Diagram

- A class diagram is a type of UML (Unified Modeling Language) diagram used to represent the structure and relationship of classes or objects within a system.
- It provides a visual overview of the system's class, their attributes, methods, and how they relate to each other.
- Class diagrams help in designing, understanding, and documenting software systems by showing the static structure of the system.



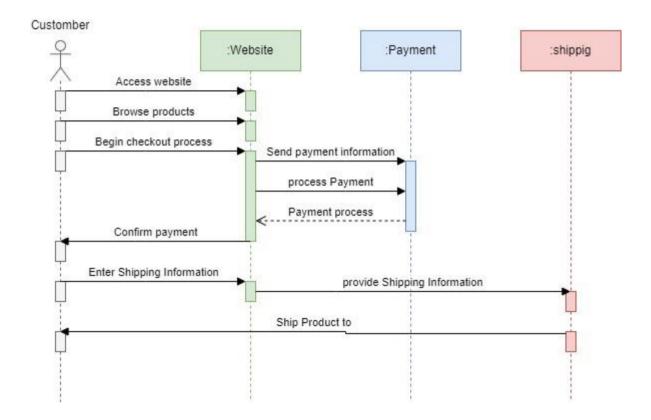
Activity Diagram

- An Activity Diagram is a UML (Unified Modeling Language) diagram used to represent the flow of activities or processes within a system.
- It visually depicts the steps, actions, decisions, and transitions in a system or a specific use case.
- These diagrams help to analyze, document, and improve processes, making them an essential tool for business process modelling and software development.



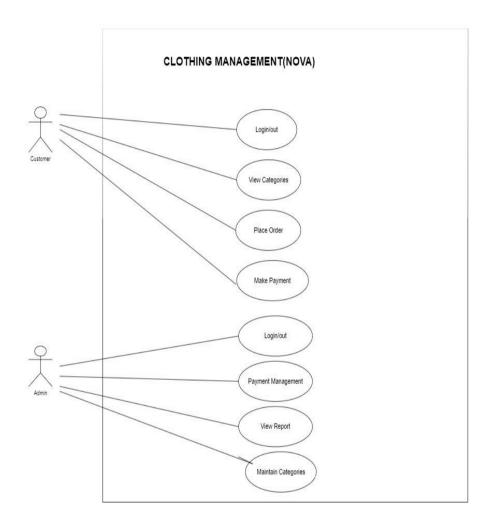
Sequence Diagram

- A Sequence Diagram is a UML (Unified Modeling Language) diagram used to visualize and document interactions between different objects or components within a system.
- It illustrates the order and timing of messages exchanged among these elements to achieve a specific task or scenario.
- Sequence Diagrams are particularly valuable for understanding the dynamic behavior of a system.



Use case Diagram

- A Use Case Diagram is a visual representation in the Unified Modeling Language (UML) that depicts the interactions between a system and its users or external entities.
- It illustrates the various ways users interact with a system and the system's responses.
- Actors are represented as stick figures, and use cases are depicted as ovals with lines connecting them to indicate interactions.



DATA DICTIONARY

MASTER TABLE

USER:

No	Name	Datatype	Constraint	Description
1	uid	int(11)	Primary key	Stands for user id
2	user_name	varchar(15)		Stands for name of user to be created in website
3	password	varchar(10)		Stands for password of user
4	name	varchar(15)		Stands for name of user

PRODUCTS:

No.	Name	Datatype(size)	Constraint	Description
1	pid	int(5)	Primary key	Stands for products id
2	pname	varchar(255)		Stands for products name
3	price	int(4)		Stands for products price
4	image	varchar(255)		Stands for products image
5	product_detail	varchar(500)		Stands for products detail
6	quantity	int(3)		Stands for products quantity

DATA DICTIONARY

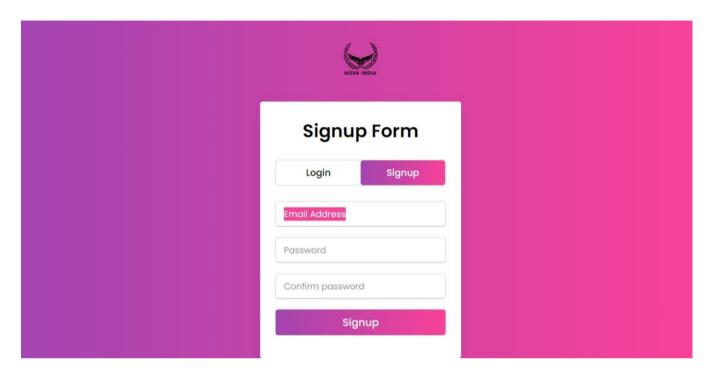
TRANSACTION TABLE

ORDER:

No	Name	Datatype	Constraint	Description
1	o_id	int(5)	Primary Key	Stands for order item's id
2	pid	int(5)	Foreign Key	Stands for product id
3	Quantity	int(3)	Foreign Key	Stands for Quantity of products
4	total_price	int(5)		Total amount

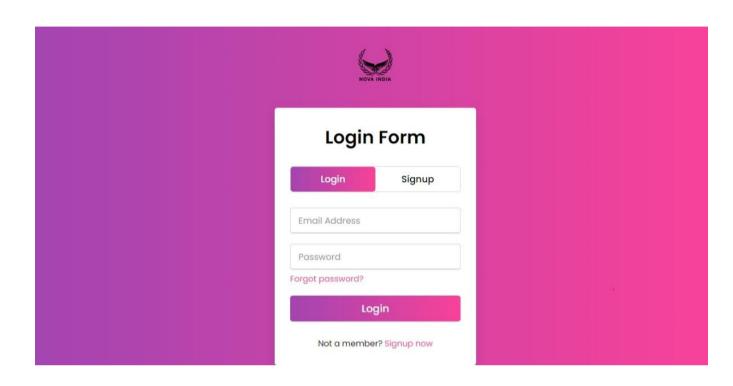
DESIGN

SIGN-UP PAGE:



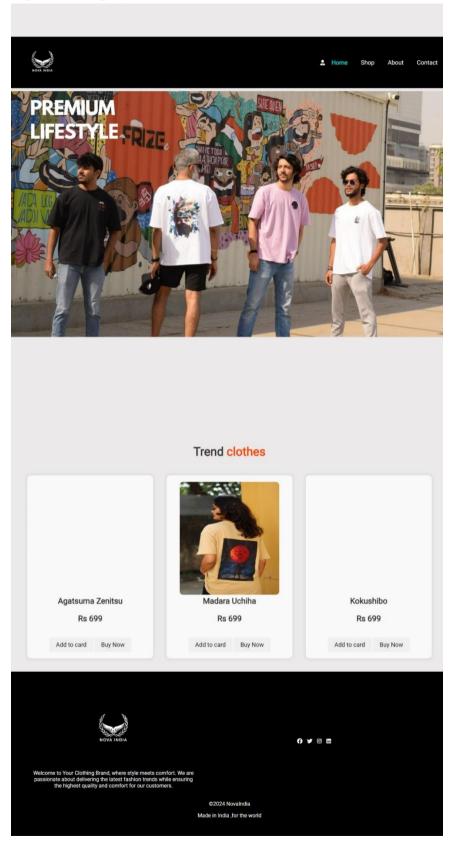
DESIGN

LOGIN PAGE:



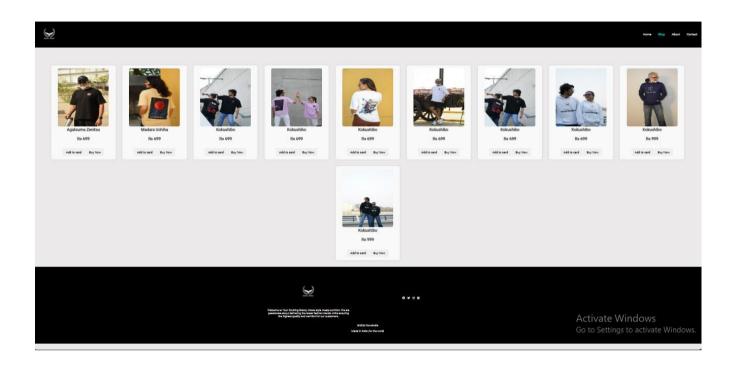
DESIGN

HOME PAGE:



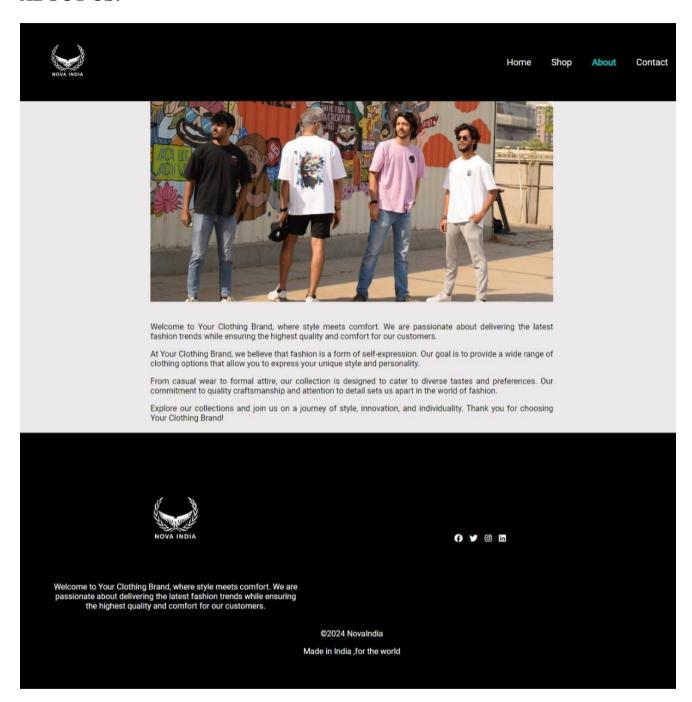
DESIGN

SHOP PAGE:



DESIGN

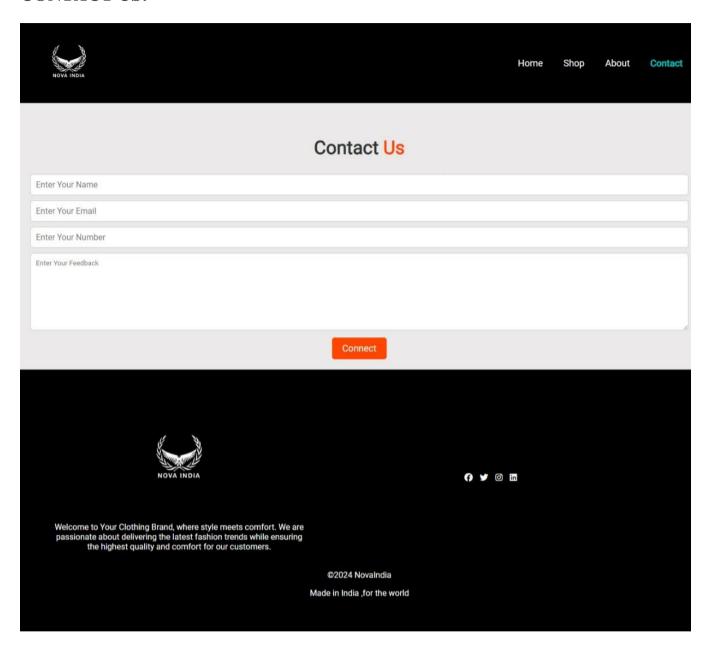
ABOUT US:



INDUS UNIVERSITY Page 27

DESIGN

CONTACT US:



INDUS UNIVERSITY Page 28

TEST CASES & TEST PLAN

LOG-IN:-

T_ID	PAGE	DATA	EXPECTED RESULT	ACTUAL RESULT	Description
1	LOG IN	USERNAME, PASSWORD	HOME PAGE	HOME PAGE	PASSED
2	LOG IN	USERNAME, PASSWORD NOT ENTERED PROPERLY	ERROR: PLEASE FILL OUT DETAILS	PLEASE FILL OUT DETAILS	PASSED

TEST CASES & TEST PLAN

SIGN-UP:

T_ID	PAGE	DATA	EXPECTED RESULT	ACTUAL RESULT	Description
1	SIGN UP	NAME, USERNAME, PASSWORD	HOME PAGE	HOME PAGE	PASSED
2	SIGN UP	NAME, USERNAME, PASSWORD NOT ENTERED PROPERLY	ERROR: PLEASE FILL OUT DETAILS	PLEASE FILL OUT DETAILS	PASSED

TEST CASES & TEST PLAN

ORDER:

T_ID	PAGE	DATA	EXPECTED RESULT	ACTUAL RESULT	Description
1	ORDER	PLACE ORDER ON CART	VIEW PRODUCT	VIEW PRODUCT	PASSED
2	ORDER	PLACE ORDER ON CART	ERROR: PLEASE FILL OUT DETAILS	CART IS EMPTY	PASSED

Future Work

- **1. Virtual Wardrobe:** Implement a virtual wardrobe feature where users can mix and match clothing items virtually to create outfits. This can enhance user engagement and help customers visualize how different pieces would look together.
- **2. Size Recommendation Tool:** Develop a size recommendation tool that uses machine learning algorithms to suggest the best size for customers based on their measurements and past purchases. This can reduce returns due to sizing issues and improve customer satisfaction.
- **3. Interactive Product Descriptions:** Enhance product descriptions with interactive elements such as 360-degree views, videos showcasing the fabric's texture and drape, and tooltips providing additional information about materials and care instructions.
- **4. AI-Powered Styling Recommendations:** Utilize artificial intelligence to analyze customers' style preferences and past purchases to provide personalized styling recommendations. This can include suggesting complementary items to complete an outfit or recommending new arrivals based on their fashion taste.
- **5. AI-Powered Customer Service:** Implement AI-powered chatbots to provide instant assistance to customers, answer frequently asked questions, and handle basic inquiries. This improves customer service efficiency and ensures round-the-clock support for website visitors.

Bibliography

With the help of these tools we have learnt a lot of many things and apply the similar logics and knowledge in my web application development process.

Draw.io: https://app.diagrams.net/Git hub: https://github.com/

Font awesome: https://fontawesome.com/
 Tailwind css: https://tailwindcss.com/