IT 314: Lab 3 - Group 19
Project: Ecommerce Cloth Retailer

Functional Requirements:

1. **Login- Logout**

   Basic user authentication for uniquely identifying a particular user.

2. **Categories**

   Divide the list of items under different categories such as men, women and kids.

3. **Filter - Sort**

   To eliminate the non-required items from the vast list of items.

4. **Search Bar**

   To search for any particular item.

5. **Profile Page**

   The information about the saved addresses, debit/credit cards, mobile numbers and other user information.

6. **Feedback**
   Customer Feedback

7. **Payment Gateway**

   To pay for the order.

8. **Confirmation Email/Sms**
   Email/SMS sent after the order has been placed to the end-users.

9. **Admin Page**
   For the Retailer Users to add the products for sale

Non-functional Requirements:

1. **Security**
   - Payment - the payment will require a two-factor authentication where a user will confirm the payment via a notification on the app and notification/OTP on the confirmed mobile phone so no one else but the user can order with his/her permission
   - User data - User data will be encrypted and stored in our servers and will be only accessible to the website owners given that the user is allowed to share his/her information.

2. **Response time**

   The web application should have less response time. It mainly depends on the database used and the server types/server numbers to which it is assigned.

3. **Efficiency And Maintainability**

   The backend of our system should be able to allocate resources to our application for performing tasks. As our backend manages many users so the user requests should be routed to appropriate servers in order to give back fast responses.

4. **Data Integrity And Retention**

   Retention refers to managing the loss of data and at this stage our system needs to have resources that prevent such circumstances.

5. **Responsiveness**

   The web app should run on all platforms available and should fit accordingly for better user experience.

Domain Requirements :

1. **Discount-sale- Jumbotron**

   An eye-catching element for the home page of the user which may describe the trends, sales, discount offers and latest updates

2. **Dynamic Cart Navbar**

   A special UI feature which enables users to see the number of products in their cart

3. **Product Description Page**

   A page that describes a particular product, it's available variations in sizes, colours etc.

4. **Past Orders**

   Users can see their past order history.

5. **Track Orders**

   To check and track the status of the orders by users.

6. **Wishlist**

   Personalised collection of products that specific users want to be available on the website.

7. **Membership → Classes**

   Different types of membership based on user activities on the website to increase engagement and proportional purposes. Certain privileges will be provided for people at a level of membership.

8. **Promotional Emails**

   Alerts and emails regarding new products, sale, price reduction in the wishlist items of the user etc

9. **Personalized Feed**

   Recommend products based on past searches and orders of the user to improve the user experience on the website.

10. **Dynamic Pricing**

    price of a particular item changes according to the increase/decrease in the popularity of a product at a particular time.

11. **Virtual Try-on: Body Shaping**

    The users can enter their body shapes and approximate dimensions based on which they can see how a certain garment would look on them, and decide whether they want to buy it or not.

12. **Customize clothes:**

    The user can choose between certain templates, palettes and design options to make their own clothes.