# Software Project II requirements

# 1- Login

## 1. Access Login Page:

# As a user, I want to access the login page:

- Acceptance Criteria:
  - When I navigate to the app, I should see a clearly labeled "Login" option in the navigation menu.
  - Clicking on the "Login" option should direct me to the login page where I can enter my credentials.

# Login as Authenticated User:

## As a user, I want to login as an authenticated user:

- Acceptance Criteria:
  - On the login page, I should see input fields for entering my email/username and password.
  - After entering valid credentials and clicking "Login," I should be authenticated and redirected to the homepage.
  - If my credentials are invalid, I should see an error message indicating the issue.

# 3. Redirect to Register Page:

# As a user, I want the option to get redirected to the register page:

- Acceptance Criteria:
  - If I am not logged in and try to access a protected page, I should be automatically redirected to the login page.
  - On the login page, there should be a clear option or link to "Register" for new users.
  - Clicking on "Register" should redirect me to the registration page.

#### Reset Password:

#### As a user, I want to reset my password:

- Acceptance Criteria:
  - On the login page, there should be a "Forgot Password?" link.

- Clicking on this link should take me to a password reset page where I can enter my email.
- After submitting my email, I should receive an email with a password reset link.
- Clicking the reset link should allow me to set a new password for my account.

# 2- Register

# Register Using Personal Information:

# As a user, I want to register using my personal information:

- Acceptance Criteria:
  - On the registration page, I should see fields to enter my First Name, Last Name, Email, Phone Number, Company (optional), and Address.
  - All fields should be clearly labeled and have proper validation checks.
  - After entering valid information and clicking "Register," I should receive a verification email to complete the registration process.

#### Receive Verification Email:

# As a user, I want to receive a verification email for registration:

- Acceptance Criteria:
  - After submitting my registration information, I should receive an email to verify my email address.
  - The email should contain a verification link that, when clicked, confirms my registration and activates my account.
  - If I do not receive the email, there should be an option to resend the verification email on the registration page.

# 3- Home

# As a Guest User:

### View Featured Listings:

- As a guest, I want to see featured listings on the homepage so that I can quickly browse popular products.
- Acceptance Criteria:
  - Featured listings are displayed prominently.
  - Each listing includes a product image, name, price, and rating.

#### **Explore Categories:**

- As a guest, I want to easily navigate through different product categories.
- As a guest, I can search for a specific product using a search bar
- Acceptance Criteria:
  - Categories are displayed clearly on the homepage.
  - Clicking on a category takes me to a page with relevant products.

#### View Top Offers:

- As a guest, I want to see current offers and discounts to find good deals.
- Acceptance Criteria:
  - A section dedicated to top offers is visible on the homepage.
  - Each offer includes a product image, discount percentage, and validity period.

# As a Registered User:

Do all of the guest user features + the following:

## Sign In / Sign Up:

- As a registered user, I want the option to sign in or sign up directly from the homepage.
- Acceptance Criteria:
  - Clear options to sign in or sign up are available.
  - Sign-in form includes fields for email/username and password.

#### Quick Access to Cart and Wishlist:

- As a registered user, I want easy access to my shopping cart and wishlist.
- Acceptance Criteria:
  - Icons or links for cart and wishlist are visible at the top of the homepage.
  - Clicking on these icons takes me directly to my cart or wishlist page.

#### Save Favorite Items:

 As a registered user, I want to be able to save items to my favorites for quick access later.

- Acceptance Criteria:
  - A "Add to Favorites" button is available on each product listing.
    Saved items appear in my account's "Favorites" section

# 4- Profile:

# As a Registered User:

## View Profile Information:

- As a registered user, I want to view and edit my profile information.
- Acceptance Criteria:
  - Profile page displays my name, email, shipping address, and contact information.
  - Option to edit and update profile details is available.

#### View Order History:

- As a registered user, I want to see a history of my past orders.
- Acceptance Criteria:
  - A section on the profile page lists all previous orders.
  - Each order includes details such as order number, date, items purchased, total amount, and status.

# Manage Payment Methods:

- As a registered user, I want to add, remove, or edit my payment methods.
- Acceptance Criteria:
  - Payment methods like credit/debit cards, PayPal, etc., are displayed.
  - Options to add new cards or remove existing ones are available.

# Update Password:

- As a registered user, I want to be able to change my account password.
- Acceptance Criteria:
  - A section on the profile page allows me to change my password.
  - Password change process includes verification steps for security. (
    Could be by just entering the old password)

### View Saved Addresses:

- As a registered user, I want to view and manage my saved shipping addresses.
- Acceptance Criteria:
  - Saved addresses are displayed with labels (e.g., Home, Work, etc.).

• Option to add new addresses and delete existing ones is available.

# View and Manage Wishlist:

- As a registered user, I want to view and manage the products in my wishlist.
- Acceptance Criteria:
  - Wishlist items are displayed with product details and images.
  - Options to add items to cart from wishlist and remove items are available.

#### View and Manage Reviews:

- As a registered user, I want to see and manage the reviews I've submitted for products.
- Acceptance Criteria:
  - A section on the profile page lists my submitted reviews.
  - Option to edit or delete reviews is available for each entry.

# 5- Cart

# As a Registered User:

#### View Cart Items:

- As a registered user, I want to view all the items I've added to my cart.
- Acceptance Criteria:
  - Cart page displays a list of products with images, names, prices, quantities, and total prices for each item.
  - Subtotal of all items in the cart is visible.

## **Update Quantity of Items:**

- As a registered user, I want to be able to update the quantity of items in my cart.
- Acceptance Criteria:
  - Each item in the cart has an input field or buttons to increase/decrease the quantity.
  - Updated quantities immediately reflect the new total price for that item.

#### Remove Items from Cart:

- As a registered user, I want the option to remove items from my cart.
- Acceptance Criteria:
  - Each item in the cart has a "Remove" button or icon.

 Clicking "Remove" removes the item from the cart and updates the subtotal.

# Apply Coupon Codes:

- As a registered user, I want the ability to apply coupon codes to avail discounts.
- Acceptance Criteria:
  - Cart page includes a field to enter coupon codes.
  - Applying a valid coupon updates the total amount reflecting the discount.

## Proceed to Checkout:

- As a registered user, I want a clear and easy option to proceed to checkout.
- Acceptance Criteria:
  - A prominent "Checkout" button is visible on the cart page.
  - Clicking "Checkout" takes me to the checkout process with my cart items retained.

#### Confirm and Place Order:

- As a customer, I want a clear and secure "Place Order" button to complete my purchase.
- Acceptance Criteria:
  - A prominent "Place Order" or "Complete Purchase" button is visible on the checkout page.
  - Clicking the button submits the order, processes payment, and provides a confirmation.

#### As a Guest User:

#### Add Items to Cart:

- As a guest user, I want to add items to my cart for later purchase.
- Acceptance Criteria:
  - Each product listing includes an "Add to Cart" button.
  - Clicking "Add to Cart" adds the item to the cart without requiring login.

#### View and Edit Cart:

- As a guest user, I want the option to view and edit the items in my cart during my session.
- Acceptance Criteria:

- A temporary cart is created for the guest session.
- Guest users can view, update quantities, and remove items from their temporary cart.

#### Convert to Registered User:

- As a guest user with items in the cart, I want the option to easily convert to a registered user.
- Acceptance Criteria:
  - A "Create Account" or "Sign Up" option is provided on the cart page.
  - Guest users can create an account and merge the guest cart with the new account.

# 6- Product

#### As a Customer:

#### View Product Details:

- As a customer, I want to view detailed information about the product.
- Acceptance Criteria:
  - Product page displays product name, description, images, price, availability, and specifications.
  - Additional sections for reviews, ratings, and related products are included.

#### Add to Cart:

- As a customer, I want the option to add the product to my cart for purchase.
- Acceptance Criteria:
  - An "Add to Cart" button is prominently displayed on the product page.
  - Clicking "Add to Cart" adds the product to my cart with default options (such as size or color).

#### Rent Product:

- As a customer, I want the option to rent the product instead of purchasing it.
- Acceptance Criteria:
  - A "Rent" button is available alongside the "Add to Cart" button.
  - Clicking "Rent" opens a modal or page with rental duration options and pricing.

 Selecting a rental option adds the product to the cart with the chosen rental period.

#### **Customize Product:**

- As a customer, I want the ability to customize certain aspects of the product.
- Acceptance Criteria:
  - Products that are customizable display options such as size, color, material, etc.
  - Dropdown menus, color swatches, or input fields allow me to select customization preferences.
  - Price adjusts dynamically based on selected customization options.

#### View and Add Reviews:

- As a customer, I want to read reviews of the product and add my own review.
- Acceptance Criteria:
  - A section on the product page displays existing reviews and ratings.
  - Option to add a review with a rating and comments is available.

#### Save for Later:

- As a customer, I want to save the product to a wishlist for future reference.
- Acceptance Criteria:
  - A "Save for Later" or "Add to Wishlist" button is present on the product page.
  - Clicking the button adds the product to my wishlist for easy access later

#### **Share Product:**

As a customer, I want to share the product with friends or on social media.

# Restrictions:

- 1. The frontend should be implemented using NextJS
- The backend should be implemented using NestJS
- 3. The backend should follow the typical NestJS structure
- 4. For the project architecture the project should imply the microservice architecture

- 5. Communication between services should be handled using Kafka
- 6. The data should be stored in a database preferrably MongoDB (if you have any other ideas please reach out to get your approval)

# Bonus:

- 1. An ERP simple system should be implemented and accessed to check for supply order management etc.
- 2. The communication with the system should be handled by Kafka
- 3. Your application should be Dockerized (Can be ran through the container)
- 4. Your application should look professional