Requirement Gathering

Date: 5/8/2024

Project Overview

The Electronic Shopping System (ESS) is a comprehensive e-commerce platform designed to enhance the online shopping experience. It addresses the problem of inefficient and disjointed online shopping processes by providing a user-friendly interface for customers and a robust admin panel for store management. The main objectives are to offer seamless product browsing, efficient shopping cart management, secure checkout, and comprehensive order management for both customers and administrators.

System Scope

The ESS is proposed as a full-scale implementation aimed at providing a complete e-commerce solution. It is intended for use by businesses looking to establish or improve their online retail presence.

Target Audience

The target audience includes:

- **Customers:** Individuals looking to purchase products online.

- **Administrators:** managing the online store.

Modules

1. **User Authentication and Authorization:**

   o   Sign-up, login, password reset, and profile management.

2. **Product Browsing:**

   o   Browse by categories, search, filter, and sort products.

3. **Product Details:**

   o   View detailed information, reviews, and ratings.

4. **Shopping Cart:**

   o   Add, update, and remove products; view total price; proceed to checkout.

5. **Checkout Process:**

   o   Enter shipping/billing information, apply discount codes, choose payment method, complete purchase.

6. **Order Management:**

   o   View order history, track order status, reorder.

7. **Admin Dashboard:**

   o   Overview of sales, orders, user activities, and recent signups.

8. **User Management:**

o CRUD operations for users, role assignment.

9. **Category Management:**

   o Add, edit, delete product categories.

10. **Product Management:**

    o CRUD operations for products, manage details, upload images.

11. **Order Management (Admin):**

    o View, update order statuses, manage details.

12. **Inventory Management:**

    o Track stock levels, receive low stock notifications.

13. **Discount and Coupon Management:**

    o Create, edit, delete discount codes and coupons.

14. **Machine Learning Features:**

    o Personalized recommendations, dynamic pricing, sentiment analysis, visual search.

User Roles

- **Customer:**

  o Permissions: Browse products, manage cart, checkout, view order history, submit reviews.

- **Admin:**

  o Permissions: Manage users, categories, products, orders, inventory, discounts, view reports.

System Ownership

The system is owned by the organization that commissions its development. This could be an academic institution, an e-commerce business, or an individual entrepreneur.

Industry/Domain

The ESS is related to the e-commerce and retail industry.

Data Collection Contacts

Questionnaire for Data Collection

1. What are the primary pain points you face with your current e-commerce platform?

2. How do you manage product listings and inventory currently?

3. What types of products do you sell, and how many different products do you offer?

4. How do you handle customer authentication and account management?

5. What payment methods do you support, and which ones do you plan to add?

6. How do you currently handle order tracking and customer notifications?

7. What kind of reports and analytics are you interested in from the admin dashboard?

8. Do you offer any discounts or coupons, and how do you manage them?

9. How important are personalized recommendations and dynamic pricing to your business?

10. What kind of customer feedback do you collect, and how do you analyze it?