EYouth X DEPI Project

Requirements Gathering

Supervised by Eng/Abdelrahman Osama

Project name: OpenCart User Experience & Testing Initiative

Team number: 3

Team Names:

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1. Functional Requirements

The website "AwesomeQA OpenCart" provides an e-commerce platform with the following key functionalities:

a. User Management

- User Registration and Login
- Forgot Password / Password Reset
- Profile Management

b. Product Catalog

- Product Search and Filtering
- Viewing Product Details
- Adding Products to Wishlist

c. Shopping Cart & Checkout

- Adding/Removing Products from Cart
- Viewing Cart Summary
- Applying Discount Codes / Coupons
- Checkout Process (Shipping & Payment Integration)

d. Order Management

- Order Placement & Confirmation
- Order Tracking
- Order Cancellation & Returns

e. Payment Integration

- Support for Multiple Payment Gateways (Credit Card, PayPal, etc.)

- Secure Payment Processing

f. Admin Panel

- Product Management (Add, Edit, Delete Products)

- User Management

- Order Management

- Sales Reports

2. Non-Functional Requirements

Non-functional requirements define the quality attributes of the system, such as performance, security, and usability. For this website, the non-functional requirements may include:

a. Performance:

- The website should load within 2-3 seconds under normal traffic conditions.

- The system should handle up to 1,000 concurrent users without performance degradation.

b. Security:

- All user data (especially payment information) must be encrypted using HTTPS.

- Implement measures to prevent SQL injection, XSS (Cross-Site Scripting), and CSRF (Cross-Site Request Forgery) attacks.

- Regular security audits and updates to address vulnerabilities.

c. Usability:

- The website should be responsive and work seamlessly on desktops, tablets, and mobile devices.

- The user interface should be intuitive, with clear navigation and minimal clicks to complete tasks (e.g., checkout process).

d. Scalability:

- The system should be able to scale horizontally to accommodate increased traffic during peak times (e.g., holiday sales).

e. Availability:

- The website should have 99.9% uptime, with a disaster recovery plan in place.

3. Identify User Stories & Use Cases

User stories describe how different users interact with the website. Here are some examples:

User Stories:

1. **As a customer**, I want to **register an account** so that I can save my personal information and track my orders.

2. **As a customer**, I want to **search for products** by keyword or category so that I can find what I'm looking for quickly.

3. **As a customer**, I want to **add products to my cart** and proceed to checkout so that I can complete my purchase.

4. **As a customer**, I want to **view my order history** so that I can track past purchases.

5. **As an admin**, I want to **manage products** (add, edit, delete) so that I can keep the product catalog up to date.

Use Cases:

1. **Use Case: User Registration**

   - **Actor**: Customer

   - **Precondition**: User is not logged in.

- **Steps**:

    1. User clicks on "Register."

    2. User fills in the registration form (name, email, password).

    3. User submits the form.

    4. System sends a confirmation email.

    5. User confirms their email address.

- **Postcondition**: User account is created, and the user is logged in.

2. **Use Case: Checkout Process**

    - **Actor**: Customer

    - **Precondition**: User has items in the cart.

    - **Steps**:

        1. User clicks on "Checkout."

        2. User enters shipping details.

        3. User selects a payment method.

        4. User confirms the order.

        5. System processes the payment and generates an order confirmation.

    - **Postcondition**: Order is placed, and the user receives an order confirmation.