Day 5 - Testing and Backend Refinement - Furniture eCommerce

1. Functional Testing
   1. Test Core Features:
   2. Testing Tools:
      * Postman: For API response testing.
   3. How to Perform Functional Testing:
      * Write test cases for each feature.
      * o Simulate user actions like clicking, form submissions, and navigation.
      * o Validate the output against expected results.
2. Error Handling
   * Implement proper error messages for:
     + Network failures.
     + Invalid or missing data.
     + unexpected server errors.
   * Display fallback UI elements (e.g., "No products available" when the API returns

no data).

1. Performance Testing
   * Identify bottlenecks using tools like Lighthouse, GTmetrix, WebPageTest or

google page speed.

* + Optimize images, minimize JavaScript and CSS, and implement caching

strategies

1. Cross-Browser and Device Testing
   * Test your marketplace on popular browsers (Chrome, Firefox, Safari, Edge) and
   * devices (desktop, tablet, mobile).
2. Security Testing
   * Validate input fields to prevent injection attacks.
   * Use HTTPS for secure communication.
   * Avoid exposing sensitive API keys in your frontend code.
3. User Acceptance Testing (UAT)
   * Simulate real-world scenarios by interacting with your marketplace as a user.
   * Verify that workflows like browsing, searching, and checkout are intuitive and

error-free.

1. Documentation Updates
   * Include Testing Results:
     + Summarize key issues found and how they were resolved.
     + Provide before-and-after screenshots for fixes.
   * Submission Format:
     + o Submit documentation in PDF or Markdown format.
     + o Include test case details, testing tools used, and optimization steps