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(Student Leader Friday 9-12)

# **Day 5 - Testing in My E-commerce Platform**

# **Functional Testing**

Functional testing ensures that all features of the e-commerce platform work as intended. This includes testing:

- Product search, filtering, and categorization.
- Cart operations like adding, removing, and updating items.
- Checkout processes including address entry and payment.

# **Error Handling**

Error handling is critical to ensure a smooth user experience, even when something goes wrong. Key areas include:

- Displaying meaningful error messages for invalid user inputs.
- Handling failed transactions gracefully, with clear instructions for retrying.
- Managing scenarios where APIs or third-party services fail (e.g., payment gateways).

#### Performance

Performance testing ensures that the platform can handle real-world conditions. This involves:

- Simulating high traffic to check the platform's scalability.
- Measuring page load times and optimizing for speed.
- Ensuring fast database queries and API responses.

# **Cross-Browser and Device Testing**

Users access the platform from various browsers and devices. Testing includes:

- Verifying the platform's compatibility with major browsers (e.g., Chrome, Firefox, Safari).
- Ensuring responsiveness on desktops, tablets, and smartphones.
- Fixing layout or functional inconsistencies.

# **Security Testing**

Security is a top priority **for** protecting user data and transactions. This involves:

- Ensuring proper encryption of sensitive data such as passwords and payment details.
- Validating secure authentication mechanisms and access controls.

# **User Acceptance Testing**

User acceptance testing (UAT) focuses on the end-user experience. This process includes:

- Allowing real users to interact with the platform and report issues.
- Gathering feedback on the usability and functionality of the platform.
- Verifying that the platform meets both user expectations and business objectives.

By covering these areas, my e-commerce platform will deliver a reliable, secure, and user-friendly experience.

# **SCREENNSHOTS:**





