Test plan
Swag_Labs

1. Test Plan Identification

- Project Name: SwagLabs Functional Testing
- Version: 1.0
- Test Lead: [------]
- Test Team: [Radwa Sayed , Ahmed Nabil]
- Start Date: [25/9/2024]
- End Date: [Estimated end date]

2. References

· SwagLabs UI Design Guidelines
· Testing Standards and Guidelines

3. Test Items

Features to be Tested:

The following features of the Swag Labs website will be tested to ensure the application functions correctly under various scenarios:

1. **Login Functionality**:
    - Validate both successful and unsuccessful login attempts.
    - Test error handling for incorrect login credentials (e.g., invalid username/password combinations).
    - Ensure password masking and proper session management.

2. **Logout Functionality:**
    - Verify that users can log out successfully.
    - Ensure session termination and no data persistence after logout.

3. **Adding Items to Cart:**
    - Validate the process of adding multiple items to the cart.
    - Ensure proper updates in the cart total when items are added or removed.

4. **Checkout Process**:
    - Test the entire checkout workflow, from entering shipping information to processing payment.

5. **Product Browsing:**
    - Test the ability to browse products across different categories.
    - Verify that product details (e.g., name, description, price) are displayed correctly.
    - Check user interactions with product filters, sorting, and search functionalities.

Data to be Used:

- Test data for product search, registration, and purchase scenarios (Sample customer data)

4. Test Approach

- **Testing Techniques:**
  - **Exploratory Testing:**

    Unstructured testing where testers navigate the website without predefined cases or scripts to discover potential issues. The focus will be on:

    - Discovering bugs in less frequently tested areas.
    - Uncovering unexpected user behaviors.
    - Ensuring the user interface functions correctly under various scenarios.
    - Key areas to explore include the cart, checkout, and filtering products.

  - **Risk-Based Testing:**

    prioritize areas of the website that are likely to fail or have the highest impact if they do. These areas include:

    - **Checkout Process**: Ensuring accurate calculations for taxes, shipping, and totals.
    - **Login/Logout Process**: Ensuring session security, including timeout handling and invalid credentials.

  - **User Experience (UX) Testing:**

    Assess the site's ease of use and overall customer journey.

  - **Compatibility Testing:**

    Ensures that the website works smoothly across different environments. We will test on:

    - **Devices**: Desktop
    - **Operating Systems**: Windows.
    - **Browsers**: Chrome, Firefox (include specific versions as needed).
    - **Screen Resolutions**: Ensuring the site scales well on varying screen sizes (e.g., 1024x768, 1920x1080).
    - **Network Conditions**: Testing the site under different network speeds (4G, WiFi).

- **Testing Levels:**
    - Integration testing
    - System testing
    - Acceptance testing

5. Test Deliverable ‘s

- Test Plan
- Test Cases
- Test Scripts (Automation)
- Test Results
- Defect Reports

6. Test Environment

- Hardware: [List of required hardware, e.g., computers, mobile devices]
- Software: [List of required software, e.g., web browsers, operating systems]
- Network: [Network requirements, e.g., internet connection]

7. Responsibilities

- Test Lead: Oversee the testing process
- Test Team: Execute test cases, report defects
- Developers: Address defects, provide necessary information.

8. Risks and Mitigation

- Risk 1: insufficient test data
- Mitigation: create a comprehensive test data set
- Risk 2: unavailable of formal SwagLabs Functional Requirements Specification (FRS)
- Mitigation: adopt a combination of the following test approaches that helped To discover defects and identify potential issues.

9. Exit Criteria

- 100% test case coverage:

  - All planned test cases have been executed.
  - At least **95% of all test cases** must pass successfully, ensuring that the major functionalities of the website work as expected.

- No high-priority defects: No critical or major defects are outstanding.
- Functional requirements are met: The application meets all defined functional requirements. including successful login, product search, adding items to cart, and completing a purchase.
- User Experience (UX):
  - No **critical UX issues** should remain. All key user flows (login, browsing, checkout) must be intuitive, and usability feedback should be addressed in priority areas like mobile responsiveness, navigation, and ease of payment.