

# SwagLabs Test Plan

**Project Name |** SwagLabs Website

**Test Lead Name |** Bassam Mostafa Abozaid

**Test Members Names |**

1. Mohammed Hytham Mohammed
2. Zeyad Samy Shalaby
3. Asmaa Abdelhakem Arafa
4. Norhan Anwar Younis

**Number of User Stories |** 5

**Types of Testing Used |** Static, Manual, API, Automation

**Total Estimated Time |** 6 weeks

## Risks

1. Inadequate test coverage leading to undetected critical defects.
2. Delays in test execution due to environment or dependency issues.
3. Data security vulnerabilities that may be exploited.
4. Integration issues between frontend and backend components.
5. Limited resources or unavailability of key team members.

## Risks Handling

1. Implement thorough test planning and maintain detailed test coverage to minimize undetected defects.
2. Establish backup environments and contingency plans to avoid delays from environment issues.
3. Perform regular security testing and enforce strong data protection measures.
4. Conduct integration testing early and often to detect issues between frontend and backend.
5. Allocate backup resources and cross-train team members to handle unexpected absences.

## User Stories:-

| No of user story | User Story Name                  | Assigned Tester          |
|------------------|----------------------------------|--------------------------|
| 1                | User Login & Authentication      | Asmaa Abdelhakem Arafa   |
| 2                | Product Browsing & Search        | Zeyad Samy Shalaby       |
| 3                | Add to Cart & Cart Management    | Norhan Anwar Younis      |
| 4                | Checkout & Order Placement       | Mohammed Hytham Mohammed |
| 5                | User Logout & Session Management | Bassam Mostafa Abozaid   |

## Test Activities: -

1. **Writing Test Cases:** Create detailed manual and automated test cases based on user stories and requirements.
2. **Bug Reporting:** Log identified defects in the bug tracking system, including steps to reproduce and severity levels.
3. **Summary Report:** Provide a comprehensive summary report after test cycles, highlighting test coverage, defects, and overall product quality.

## Stakeholder Analysis

| Stakeholder                                | Role  | Responsibilities  | Expectations                                   |
|--|---|---|--|
| Project Manager                            | Oversees the entire project timeline and deliverables | Approve milestones, monitor progress, and ensure coordination | Timely delivery and quality assurance          |
| Test Lead – Bassam Mostafa Abozaid         | Coordinates all testing activities                    | Assign tasks, review test cases and reports                   | Comprehensive testing coverage                 |
| Developers                                 | Implement and fix application issues                  | Resolve reported defects and verify fixes                     | Clear and actionable defect reports            |
| Testers – (Asmaa, Mohammed, Zeyad, Norhan) | Execute test cases and log bugs                       | Perform manual and automation testing                         | Stable test environment and clear requirements |
| End Users                                  | Use and evaluate the SwagLabs website                 | Provide usability feedback                                    | Smooth, fast, and secure user experience       |

## Database Design

**Objective:** To define the database structure supporting SwagLabs functionalities.

Main Entities :

| Table Name    | Key Fields  | Description                                    |
|---------------|---|--|
| Users         | User_ID, Username, Password, Email, Role                  | Stores user information and access credentials |
| Products      | Product_ID, Product_Name, Price, Category, Stock_Quantity | Contains product catalog data                  |
| Cart          | Cart_ID, User_ID, Product_ID, Quantity                    | Temporary storage for user-selected products   |
| Orders        | Order_ID, User_ID, Total_Amount, Order_Date, Status       | Tracks customer orders                         |
| Order_Details | OrderDetail_ID, Order_ID, Product_ID, Quantity, Price     | Details for each item in an order              |

### Relationships:

- One **User** → Many **Orders**
- One **Order** → Many **Order\_Details**
- One **Product** → Many **Order\_Details**
- One **User** → One **Cart**

## UI/UX Design

**Goal:** Create an intuitive and visually appealing user interface to enhance user satisfaction.

### Key Screens

1. **Login Page** – Minimal login form with “Forgot Password” link.
2. **Home Page** – Displays product grid, categories, and search bar.
3. **Product Details Page** – Shows image, description, and “Add to Cart” button.
4. **Cart Page** – Lists selected products, quantities, total price, and checkout option.
5. **Checkout Page** – Contains payment details and order summary.
6. **Confirmation Page** – Displays order confirmation message and reference number.
7. **Logout Function** – Ends user session securely.

### UX Principles

- Consistent color palette and branding
- Responsive layout (desktop and mobile)
- Clear navigation and hierarchy
- Fast performance and optimized images
- Accessible design (readable fonts, contrast)