**MASAI**

**TEST PLAN**

**Project Name: Orange\_Hrm**



**Contents**  **Page No**

Introduction - 01

Objective - 01-02

Scope - 02

Testable Features - 02-03

Testing Approach - 03

Roles/Responsibilities - 04

Test Schedule - 04

Test Deliveries - 04

Entry and Exit Criteria - 05-08

Tools - 08

Risks and Migration Plans - 08

Approvals - 08

**Introduction**

The aim of this document is to give an overview of the testing approach, strategies and scope for the Orange Hrm website Web application. This document includes details like scope of the project, objective, test schedule, resource allocation, test deliveries and reports.

The primary goal of this test plan is to identify potential defects, ensure the application meets all functional and non-functional requirements, and verify that it delivers the expected user experience across various platforms and devices. The testing will cover multiple aspects such as user interface (UI) design, functionality, performance, security, usability, and compatibility.

By following this structured test plan, the testing team can systematically detect and resolve issues early in the development cycle, ensuring the delivery of a robust, high-quality web application that meets user expectations.

AUT: [https://opensource-demo.orangehrmlive.com/web/index.php/auth/login](file:///C:\Users\Alokm\OneDrive\OrangeHRM\Test%20plan%20on%20The%20New%20York%20times.docx)

**Objectives**

**Functional Objectives:**

1. **Verify User Authentication:**
   * Confirm users can successfully log in with valid credentials.
   * Validate that incorrect credentials produce an appropriate error message.
   * Ensure login attempts with empty fields are handled correctly.
2. **Error Message Display:**
   * Check that appropriate error messages display for invalid inputs.
   * Confirm that the error message is cleared on successful login.
3. **Password Field Masking:**
   * Verify that the password field masks input characters by default.
   * Ensure that a "Show Password" option, if available, correctly toggles password visibility.
4. **Password Recovery Link:**
   * Confirm that the "Forgot Password?" link redirects users to the password recovery page.
   * Validate that password reset emails are sent to the registered email address upon request.

**Security Objectives:**

1. **Prevent Brute-Force Attacks:**
   * Ensure that the system enforces a delay or lockout after multiple consecutive failed login attempts.
   * Check that CAPTCHA is present and functional to protect against bots.
2. **Data Protection:**
   * Verify that copy-paste functionality is disabled for the password field to prevent unauthorized copying.
   * Ensure secure handling of session tokens and cookies for user authentication.
3. **Login Session Security:**
   * Confirm that users are automatically logged out after closing the browser.
   * Verify that the "Remember Me" option, if available, functions as expected and retains the session securely.

**Usability Objectives:**

1. **User Experience and Feedback:**
   * Validate that error messages are clear, specific, and user-friendly.
   * Ensure that all text, labels, and messages on the login page are readable and unambiguous.
2. **Accessibility:**
   * Verify that the login page is accessible via screen readers and keyboard navigation.
   * Check that all interactive elements are correctly labeled for assistive technologies.
3. **UI Consistency:**
   * Confirm that the login page design is consistent with other pages in the application (e.g., colors, fonts, layout).
   * Ensure that the login page displays correctly on different devices and screen sizes (responsive design).

**Performance Objectives:**

1. **Page Load Speed:**
   * Measure and confirm that the login page loads within an acceptable time limit.
   * Ensure that login functionality performs optimally without delays.
2. **Server Load Handling:**
   * Simulate multiple simultaneous login requests and confirm the system handles peak loads without crashing.
   * Check that login response times remain within acceptable limits under load.

**Scope**

1. **User Login Functionality**  
   Verify that users can log in with valid credentials and are denied access with incorrect credentials
2. **Error Message Display**  
   Check that clear, accurate error messages are shown when login fails due to invalid username, password, or empty fields.
3. **Password Masking**  
   Ensure the password field masks characters by default and that any "Show Password" feature works as intended.
4. **Forgot Password Link**  
   Confirm that the "Forgot Password?" link directs users to the password recovery page and that reset emails are sent as expected.
5. **Session Management**  
   Validate that user sessions expire correctly, redirecting users to the login page upon timeout or after closing the browser.
6. **Security Measures**  
   Test security features, such as account lockout after repeated failed login attempts, and the presence of CAPTCHA to prevent bot attacks.
7. **Accessibility Compliance**  
   Ensure the login page meets accessibility standards, including compatibility with screen readers and keyboard navigation.
8. **UI Responsiveness**  
   Verify that the login page is mobile-friendly and displays correctly across various devices and screen resolutions.
9. **Performance Under Load**  
   Simulate multiple simultaneous login attempts to confirm the page can handle peak loads without affecting response time.
10. **Data Protection**  
    Check that sensitive data, such as passwords, is protected by disabling copy-paste in the password field and handling session cookies securely.

**Testing Approach**

* **Testing Types**
* Functional Testing
* UI/UX Testing
* Non-functional Testing
* **Testing Methodolgies**
* Black Box Testing
* White box Testing
* Regression testing
* User Acceptance Testing (UAT)
* **Testing Environment**
* UAT
* Pre-Production
* QA Environment
* Production Environment
* **Operating System**
* Windows 12
* Browser: [ Google Chrome and Microsoft Bing]
* Testing tools: None {It purely going to be manual testing}

**Roles and Responsibilities**

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** | **Responsibilities** |
| Alok Mishra | Test Lead | * Develop test plans and strategies in alignment with project objectives and requirements. * Assign task, set priorities and provide support to team members. * Revies test result and provide feedback to team members. * Monitor and manage risks throughout testing life cycle. |
| Alok Mishra | Testing Engineer | * Understand the customer requirements. * Write the test scenarios and test cases. * Execute the test cases * Performing root cause analysis to identify underlying issues. * Defect tracking and reporting. |

Test Schedule

Below table is containing the dates of the various testing process of the project.

|  |  |
| --- | --- |
| Task | Time Duration |
| Test Plan Creation | Nov 12. 2024 |
| Test Scenario Creation | Nov 12. 2024 |
| Test case creation | Nov 12. 2024 |
| Test case Execution | Nov 13. 2024 |
| Bug report submission | Nov13. 2024 |
| Test summary report submission | Nov 13. 2024 |

**Test Deliveries**

The following are to delivered to the client

|  |  |  |  |
| --- | --- | --- | --- |
| **Deliverables** | **Description** | **Responsible Owner** | **Target Completion Date** |
| Test Plan | Outlines of the testing approach strategies and scope for the web application. | Masai | Nov 13. 2024 |
| Test Cases | Test case created for both functional testing and non-functional testing including UI/IX testing | Masai | Nov 13. 2024 |
| Bug Report | Detailed description of the bugs identifies in different features of the application | Masai | Nov 13. 2024 |

**Entry and Exit criteria for Requirement analysis**

**Entry Criteria:**

1. **Business Requirements Document Available**: High-level business and functional requirements are documented and available for review.
2. **Stakeholders Identified**: Key stakeholders and subject matter experts (SMEs) are identified and available for clarification and discussions.
3. **Initial Project Scope Defined**: The overall project scope and objectives are clear and agreed upon by the stakeholders.

**Exit Criteria:**

1. **Detailed Requirement Specification Created**: Functional and non-functional requirements are clearly documented, reviewed, and approved by all stakeholders.
2. **Requirements Feasibility Assessed**: A feasibility analysis for the requirements has been performed, ensuring they are achievable within the project constraints.
3. **Requirement Traceability Matrix Prepared**: The requirement traceability matrix (RTM) is created to ensure that all requirements are traceable through the project lifecycle

**Entry and Exit Criteria for test planning**

**Entry Criteria:**

1. **Requirements Documentation Finalized**: Functional and non-functional requirements are clearly defined and approved.
2. **Test Environment Ready**: Test environment is set up and verified to support testing activities.
3. **Test Cases Prepared**: Test cases, test scripts, and other necessary test data are ready and reviewed.

**Exit Criteria:**

1. **Test Case Execution Completed**: All planned test cases have been executed, with results documented.
2. **Defect Resolution**: Critical defects are fixed, re-tested, and closed; remaining defects are either acceptable or deferred.
3. **Test Summary Report**: Final test summary report is prepared, reviewed, and approved for closure.

**Entry and exit criteria for test designing**

**Entry Criteria:**

1. **Requirement Specifications Available**: Detailed functional and non-functional requirement documents are available and approved.
2. **Test Strategy Finalized**: The overall test strategy, including types of testing and scope, is well-defined and approved.
3. **Test Environment Specifications Known**: The hardware, software, and network configurations for the test environment are clearly defined.

**Exit Criteria:**

1. **Test Cases and Scripts Prepared**: All necessary test cases and test scripts are written, reviewed, and ready for execution.
2. **Test Data Defined**: Relevant test data is prepared, reviewed, and aligned with the test cases.

**Entry and exit criteria for test executing**

**Entry Criteria:**

1. **Test Cases Approved**: All test cases and test scripts have been reviewed, approved, and are ready for execution.
2. **Test Environment Set Up**: The test environment is fully configured, stable, and verified for testing.
3. **Test Data Prepared**: Required test data has been created and validated for accuracy.

**Exit Criteria:**

1. **Test Case Execution Completed**: All planned test cases have been executed, with their results recorded.
2. **Defects Logged and Tracked**: All identified defects are logged, with critical defects addressed, retested, and closed.
3. **Test Execution Report Generated**: A detailed test execution report, summarizing the results and defects, has been created and reviewed.

**Entry and exit criteria for test closer**

**Entry Criteria:**

1. **Test Execution Completed**: All planned test cases and test cycles have been executed, and the results are documented.
2. **Defects Resolved**: All critical and high-priority defects have been fixed, retested, and closed, or appropriate actions have been agreed upon.
3. **Test Deliverables Ready**: All test deliverables, such as test cases, scripts, logs, and reports, are complete and reviewed.

**Exit Criteria:**

1. **Test Summary Report Approved**: The final test summary report has been created, reviewed, and approved by stakeholders.
2. **Lessons Learned Documented**: Lessons learned during the test process have been identified and documented for future improvement.
3. **Test Artifacts Archived**: All test-related documents and artifacts (e.g., test cases, defect logs, reports) have been stored and archived for future reference

**Tools**

1. Miro Mind Map tool
2. Jira – Project management tool
3. Burp suite – Security Testing
4. Zephyr- Test Management
5. Microsoft Teams – Collaboration

**Risk And Migration Plans**

The Following are the list of risks possible and the ways to solve them.

|  |  |
| --- | --- |
| Risk | Alleviation plans |
| Lack of Automation | Backup Resource Planning |
| No detailed Requirement Analysis | Subject matter experts available for deep understanding of functionalities |

**Approvals**

Masai will send the different types of documents for client approval like below:

* Test Plan
* Test Scenarios
* Reports