**MASAI**

**TEST PLAN**

**Project Name: Vision Script Web Application**



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**Introduction**

The aim of this document is to give an overview of the testing approach, strategies and scope for the vision script 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://www.visionscript.in>

**Objectives**

**1. Validate Functional Requirements**

Ensure that the Vision Script web application meets all specified functional requirements, including core features such as visual data processing, script functionality, and user interaction workflows.

**2. Ensure Usability and User Experience**

Assess the application’s user interface (UI) and user experience (UX) design to confirm that it is intuitive, easy to navigate, and accessible to the target audience. This includes testing for responsiveness, layout consistency, and overall usability across different devices.

**3. Verify Cross-Browser and Cross-Platform Compatibility**

Ensure the application functions properly on all major browsers (Chrome, Firefox, Safari, Edge, etc.) and across different platforms (Windows, macOS, Linux, Android, iOS). Compatibility testing will ensure a consistent experience for all users.

**4. Test Performance and Scalability**

Evaluate the application's performance under varying levels of load, ensuring that it operates efficiently and responsively under normal and peak conditions. This includes testing load times, responsiveness, and resource usage.

**5. Identify and Resolve Security Vulnerabilities**

Conduct security testing to detect and mitigate potential vulnerabilities, including protection against data breaches, unauthorized access, and other security threats.

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**6. Verify Integration with External Systems and APIs**

Test the integration of Vision Script with third-party services, APIs, or external systems to ensure seamless communication and data exchange without causing application failures or inconsistencies.

**7. Ensure Data Accuracy and Integrity**

Verify that the application handles data accurately and maintains data integrity throughout different processes, such as data input, processing, and storage.

**8. Validate Accessibility Compliance**

Ensure the application complies with accessibility standards (e.g., WCAG) to provide an inclusive experience for users with disabilities, including screen reader support and keyboard navigation.

**9. Confirm Bug Resolution**

Track and retest bugs discovered during development and testing phases, ensuring that they are resolved and do not reappear in future versions.

**10. Verify Application Stability**

Test for application stability under continuous use and varying conditions, ensuring that it runs without crashes, memory leaks, or other critical failures.

These objectives guide the testing process, ensuring that the Vision Script web application is reliable, secure, and performs well across different environments.

**Scope**

The scope of this test plan covers the end-to-end testing of the Vision Script web application, ensuring its functionality, performance, security, and usability. This includes testing the core features, integration points, and compatibility with different environments and devices.

**Testable Features:**

1. Logo
2. Home
3. Editor

* HTML text box
* CSS editor box
* Vision Script box
* Output shown panel
* Console panel

1. Documentation

* Light and dark mode
* Tutorials contents

1. Our Team

* Contact Us
* Help Desk

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1. Login
2. Signup
3. Dark mode
4. More follow platform
5. About us
6. Read More
7. Functionality
8. Help desk

**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}

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**Roles and Responsibilities**

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** | **Responsibilities** |
| Gyana prakash Khandual | 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. |
| Gyana prakash Khandual | 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 | Oct 02. 2024 |
| Test Scenario Creation | Oct 02. 2024 |
| Test case creation | Oct 02.2024 – Oct 03. 2024 |
| Test case Execution | Oct 03. 2024 |
| Bug report submission | Oct 03. 2024 |
| Test summary report submission | Oct 03. 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 | Oct 03. 2024 |
| Test Cases | Test case created for both functional testing and non-functional testing including UI/IX testing | Masai | Oct 04. 2024 |
| Bug Report | Detailed description of the bugs identifies in different features of the application | Masai | Oct 04. 2024 |

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**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.

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**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.
3. **Traceability Matrix Updated**: Requirements traceability matrix is updated to ensure coverage of all requirements by 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.

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1. **Defects Resolved**: All critical and high-priority defects have been fixed, retested, and closed, or appropriate actions have been agreed upon.
2. **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

Testin will only continue to the next steps once these approvals are done.

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