**Automated Web Accessibility Testing: Test Plan & Project Scope Document**

Contents

1. [Introduction](#page3)

2. [Document Objective](#page3)

3. [Scope](#page3)

4. [References](#page3)& Tools

5. Workflow of Automated Tests

6. [Testing Process Overview](#page3)

7. [Testing Strategy](#page4)

8. [Tools](#page4)

9. [Test Environment](#page4)

10. [Test Schedule](#page5)

11. [Deliverable](#page5)

12. [Entry Criteria](#page5)

13. [Suspension Criteria](#page5)

14. [Resumption Criteria](#page5)

15. [Exit Criteria](#page6)

16. [Risk](#page6)

1. Introduction

Web accessibility refers to the inclusive practice of removing barriers that prevent interaction with, or access to websites, by people with disabilities. When sites are correctly designed, developed and edited, all users have equal access to information and functionality.

2. Document Objective

Objective of this Test plan is to define the testing strategies which we are going to use throughout the process and testing tools used for complete testing life cycle of this project.

3. Scope

The website will be tested by its functionality and design against accessibility for all type users. All requirements will divide into modules and for every delivery milestone features will be tested with the complete flow for that delivery.

1. References & Tools
   * Test Cases prepared by QA Owner and approved by QA Lead.
   * Material/ soft copy of requirements provided by client/Team Lead.
   * List of Testing Tools like -

1) Requirement Tracking Tool

2) Bug Tracking Tool

3) Automation Tools

1. Workflow of Automated Tests

A workflow is a series of task to produce a desired outcome, which usually involves several stages or steps. Steps are as follows:

1. *Developers submit new code to github*

* For any kind of new functionality to be added, developers commit their code to github with various scenarios they have worked on to fulfill the demand of project.
* According to the cases defined for the project requirement, code should match all the conditions that will be tested under the test runs.

1. *Code is peer reviewed and merged*

* One developer can never write the whole code meeting all the requirements of the project and hence various developers work on different modules.
* Code written for each module is then discussed, reviewed in the relevant process and then gets merged to integrate the functionality of overall project.
* Integrated code is confirmed once by running the merged code as a new built to be made.

1. *New features are deployed to a test environment*

* According to the functionality demanded in the project, merged code is deployed to test environment which is a prior state of production server.
* Test environment helps us to verify all the cases to be tested and verified before the merged code is deployed to the production.

1. *Jenkins notices that new code has been deployed and runs automated tests*

* The build process is automatically started when a contributor pushes to the respective GitHub repository.
* Login to Jenkins server, it is necessary to enter URL to GitHub repository in the respective text field “GitHub Project”.
* When “Build Triggers” option is called, Jenkins identifies a change is pushed (settings need to be configured)
* Automated tests relevant to the test cases will run which is construction phase (significant testing at each build) and give the test results.

1. *Feedback from the tests is given to developers*

* According to the test results, testers report developers for the failed cases.
* Testers report the bugs found in bug tracking tool to have a track of that particular bug and its follow ups.
* Developers need to follow the bugs reported and fix them accordingly.

1. *Developers fix the problems*

* In Transition phase, testers also test the regression effects and re-test the fixes.
* If the bug reported earlier is found fixed then it will closed else it will be re-assigned to the developer mentioning the failed case.

1. Testing Process Overview

Testing process followed by QA will be categorized into two ways:

* Process to be followed when sufficient time is available for QA.

o Understand complete project requirements and raise queries if any.

o QA will prepare test cases based on the requirement specifications. This will cover all modules and scenarios of all requirements.

o Test cases will be executed by the respective QA member.

1. Retesting of the fixed bugs will be done by respective QA once it is resolved and bug/defect/suggestion's status will be updated accordingly. In certain

cases, regression testing will be done if required.

1. Once all the outstanding bugs/defects are fixed by the developer, code will be deployed. If there is any urgency to deploy the code on client's server before clearing outstanding bugs, System Analyst needs to formally approve it to QA.
2. One round of testing will be done by QA on client's test environment if required. High level test cases will be executed after the release on production.

* Process to be followed when sufficient time is not available for QA:

o Understand the requirements and raise the query if any.

o QA will be doing Ad-hoc testing based on requirements and test scenarios.

1. Retesting of fixed bug will be done by respective QA once it is resolved by respective developer and bug/defect will be updated accordingly. In certain cases, regression testing will be done if required.
2. Once all the outstanding bugs/defects are fixed by the developer, code will be deployed to the client's test it by developer.
   1. One round of testing will be done by QA on client's test environment if required
3. Testing Strategy

For testing the entire system, QA will follow following types of testing.

* + **Functional Testing**: Functional testing is carried out in order to find outunexpected behavior the front end and the back end. The characteristic of functional testing are to provide correctness, reliability and accuracy of the system.
  + **GUI Testing**: GUI testing will include testing the UI part of the system. It will covertest against mock ups, error messages, spelling mistakes etc. Mock ups will also be tested under this as per the requirement.
  + **Responsive Testing**: Front end website will include the responsiveness on Mobile,tablet and desktop.
  + **User Acceptance Testing:** The purpose behind user acceptance testing is toconfirm that system is deployed according to the specified user requirements and is ready for operational use.

1. Tools
   * **Google sheet** will be used for Test cases
   * Devices to verify the **responsive** will be decided as per the scope of project.
2. Test Environment
   * Staging server will be used to test the build. After the complete verification when all/major bugs will be resolved a stable build will be deployed.
   * Once UAT will be done, system will be deployed on production server and a round of testing will be done on Production server

9. Test Schedule

The Key milestone regarding testing is shared below in the table for the project. Milestone dates can be modified except for external deliveries. Any changes in schedule dates must also be highlighted to the QA team.

|  |  |
| --- | --- |
| Key Milestone | Target Date |
| Release 1 | Date(dd-mm-yyyy) |
| Release 2 |  |
| Release (n) |  |

10. Deliverable

The key QA documents deliverable for the project is shared below

|  |  |
| --- | --- |
| Deliverable | Responsibility |
| **Test Plan** | QAwill provide the test cases which will be further verified |
|  | by QA Lead |
|  |  |
| **Test Cases** | QA will provide the test plan which will be verified by QA |
|  | Lead. |
|  |  |
| **Bug Report** | Bug report will be created for all milestones according to the |
|  | requirement otherwise bug details will include in QA report itself. |
|  |  |

1. Entry Criteria
   * The whole source code must be unit tested based on test cases & test scenarios.
   * QA resources have completely understood the requirements/ functionality.
   * Test scenarios and test cases must be reviewed by QA Lead
2. Suspension Criteria
   * The build contains many serious defects which seriously or limit testing progress.
   * Significant change in requirements suggested by client/Team Lead.
   * Software/ Hardware problems.
   * Assigned resources are not available when needed by test team.
3. Resumption Criteria

Resumption will only occur when the problem(s) that caused the suspension have been resolved.

14. Exit Criteria

- No defects over a period of time.

- All the high priority/ severity test cases have been executed.

- Deliverable are ready.

- High Severity/Priority bugs are fixed or discussed in bug triage.

15. Risk

- Communication gap between what is built and what was to be built.