**TEST PLAN**

**Spotify – Web Player (https://open.spotify.com/)**

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1. **INTRODUCTION**

Customer wants a perfect website, which passed the full cycle of testing. Given the specificity of the site it is very important to have the same quality and the site.

The Test Plan has been created to facilitate communication within the team members. This document describes approaches and methodologies that will apply to <https://open.spotify.com> site.

It includes the objectives, scope, testing types, test responsibilities, test principles, entry and exit criteria, schedule major milestones. This document has clearly identified what the test deliverables will be.

1. **QUALITY OBJECTIVES**

The objective of the test is to verify that the functionality of <https://open.spotify.com> works according to the specifications. Testing will be focused on meeting the business objectives, cost efficiency, and quality.

The testers will execute and verify the test scripts, identify, report and retest all high and medium severity defects per the entrance criteria, prioritize lower severity defects for future fixing.

Any changes, additions, or deletions to the requirements document, Functional Specification, or Design Specification will be documented and tested at the highest level of quality allowed within the remaining time of the project and within the ability of the test team.

The final product of the test is twofold:

* a production-ready software;
* a set of stable test scripts that can be reused for Functional test execution.

1. **SCOPE**

Functions to be tested:

* Functional testing of the main page
* Smoke testing of modules: “Main page”, “Sign Up”, “Log In”, “Menu”, “Search”, “Playlist”, “Liked songs”
* Performance
* Security
* API

1. **TEST APPROACH**

The project is using an agile approach, with weekly iterations. At the end of each week the requirements identified for that iteration will be delivered to the team and will be tested.

There will be common, consistent procedures for all teams supporting testing activities. Testing will be divided into distinct phases, each with clearly defined objectives and goals. Testing processes will be well defined, yet flexible, with the ability to change as needed. Testing environment and data will emulate a production environment as much as possible. There will be entrance and exit criteria.

1. **TEST STRATEGY**

**5.1 QA role and responsibility in test process**

* Understand requirements.
* Writing and executing Test cases.
* Preparing Requirement Traceability Matrix (RTM).
* Reviewing Test cases, RTM.
* Defect reporting and tracking.
* Retesting and regression testing.
* Bug Review meeting.
* Preparation of Test Data.
* Coordinating with QA Lead for any issues or problems encountered during test preparation/execution/defect handling.

**5.2. Entry and Exit Criteria**

The entry criteria refer to the desirable conditions in order to start test execution.

Entry criteria:

* All test hardware platforms should be successfully installed, configured, and functioning properly,
* All the necessary documentation, design, and requirements information should be available that will allow testers to operate the system and judge the correct behavior,
* All the standard software tools including the testing tools should be successfully installed and functioning properly,
* Proper test data is available,
* The test environment such as, lab, hardware, software, and system administration support should be ready,
* QA resources have complete understanding of the requirements,
* QA resources have sound knowledge of functionality,
* Reviewed test scenarios, test cases and RTM.

The exit criteria are the desirable conditions that need to be met in order to proceed with the implementation.

Exit criteria:

* 100% Test Scripts executed,
* A certain level of requirements coverage has been achieved,
* No high priority or severe bugs are left outstanding,
* All high-risk areas have been fully tested, with only minor residual risks left outstanding,
* All expected and actual results are captured and documented with the test script,
* All defects logged in Jira,
* The schedule has been achieved.

**5.3** **Testing types.**

5.3.1 GUI Testing:

GUI testing will include testing the UI part of the report. It covers users Report format, look and feel, error messages, spelling mistakes, GUI guideline violations.

5.3.2 Exploratory testing :

Exploratory testing will include a type of software testing where Test cases are not created in advance but QA check system on the fly. QA may note down ideas about what to test before test execution.

5.3.3 Positive testing:

Positive testing will include the type of testing that can be performed on the system by providing the valid data as input. It checks whether an application behaves as expected with positive inputs.

5.3.4 Negative testing:

Negative testing will include a method of testing an application or system that ensures that the plot of the application is according to the requirements and can handle the unwanted input and user behavior. Invalid data is inserted to compare the output against the given input. Negative testing is also known as failure testing or error path testing. When performing negative testing exceptions are expected.

5.3.5. Manual Functional Testing

Manual Functional testing will be performed to check the functions of application. The functional testing is carried out by feeding the input and validates the output from the application. Manual Functional testing will be executed after Exploratory test is completed.

5.3.6 Automation Testing

This test focuses on creating automation scripts based on manual test cases. This test will be carried out after manual testing is done and all critical issues are resolved.

5.3.7 Performance Testing

This test is performed to measure the speed, responsiveness, stability of the site and how well the page is built for optimal performance. This test will be carried out after manual testing is done and all critical issues are resolved.

5.3.8 Security Testing

This test is performed to reveal current or potential security vulnerabilities. This test will be carried out after manual testing is done and all critical issues are resolved.

5.3.9 API Testing

API tests are performed to determine if the developed APIs meet the expectations when it comes to the functionality, performance, reliability and security of the website. This test will be carried out after manual testing is done and all critical issues are resolved.

**5.4 Bug life cycle:**

All the issues found while testing will be logged into JIRA.



**5.5 Bug Severity and Priority Definition**

Severity and Priority fields are both very important for categorizing bugs and prioritizing if and when the bugs will be fixed. The bug Severity and Priority levels will be defined as outlined in the following tables below. Testing will assign a severity level to all bugs. The Test Lead will be responsible to see that a correct severity level is assigned to each bug.

The QA Lead, Development Lead and Project Manager will participate in bug review meetings to assign the priority of all currently active bugs. This meeting will be known as “Bug Triage Meetings”. The QA Lead is responsible for setting up these meetings on a routine basis to address the current set of new and existing but unresolved bugs.

**Severity List**

|  |  |  |
| --- | --- | --- |
| Severity ID | Severity | Severity Description |
| **1** | Highest | The module/product crashes or the bug causes nonrecoverable conditions. System crashes, GP Faults, or database or file corruption, or potential data loss, program hangs requiring reboot are all examples of a Severity 1 bug. |
| **2** | High | Major system component unusable due to failure or incorrect functionality. Severity 2 bugs cause serious problems such as a lack of functionality, or insufficient or unclear error messages that can have a major impact to the user, prevents other areas of the app from being tested, etc. Severity 2 bugs can have a work around, but the work around is inconvenient or difficult. |
| **3** | Medium | Incorrect functionality of component or process. There is a simple work around for the bug if it is Severity 3. |
| **4** | Low | Documentation errors or signed off Severity 3 bugs. |

**Priority List**

|  |  |  |
| --- | --- | --- |
| Priority | Priority Level | Priority Description |
| **1** | Highest | This bug must be fixed immediately; the product cannot ship with this bug. |
| **2** | High | These are important problems that should be fixed as soon as possible. It would be an embarrassment to the company if this bug shipped. |
| **3** | Medium | The problem should be fixed within the time available. If the bug does not delay the shipping date, then fix it. |
| **4** | Low | It is not important (at this time) that these bugs be addressed. Fix these bugs after all other bugs have been fixed. Enhancements/ Good to have features incorporated just are out of the current scope. |
| **5** | Lowest | Documentation errors or signed off Low 4 bugs. |

**6. TEST ENVIRONMENT**

Environment x Support level 1 (browsers):

* Laptop
* OS: Windows 11, Mac OS:
* Browsers (latest versions): Edge, Chrome, Firefox, Safari.

**7. APPROVALS:**

|  |  |  |
| --- | --- | --- |
|  | Project Manager | QA Lead |
| NAME | \*\*\* | \*\*\* |
| SIGNATURE |  |  |