**Test Plan for Google Search Engine**

**Test Plan Id**- T001

**1. Introduction:**

The purpose of this test plan is to outline the testing approach and strategy for evaluating the functionality and performance of the Google Search Engine. This plan will ensure that the search engine meets quality standards and user expectations.

**1.1 Description:**

The Google Search Engine is a widely used web search platform, and this test plan aims to assess its various components, including search functionality, user interface, and performance under various conditions.

**1.2 In Scope:**

The following areas are within the scope of this testing effort:

* **Search Functionality**: Test the accuracy and relevance of search results. User can search by typing text or URL, search by voice and search by image.
* **User Interface**: Evaluate the usability and responsiveness of the search interface.
* **Compatibility**: Ensure compatibility with popular web browsers and devices.
* **Performance**: Test the search engine's response times under varying loads.
* **Security**: Verify the security measures in place to protect user data.
* **Localization**: Test the search engine's support for multiple languages.

**1.3 Out of Scope:**

The following areas are not within the scope of this testing effort:

* Testing of external websites or content: This includes websites linked from search results.
* Integration testing with third-party applications: Such as Google Maps or Google Drive.
* Load testing on external websites: We will not test the performance of websites linked in search results.
  1. **Review & Approval Required**

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| --- | --- | --- |
| Alex | QA Lead | Review |
| Sam | Test manager | Approval |
| Wang | Development Manager | Approval |
| Samy | Product Manager | Approval |

**2. Roles and Responsibilities:**

2.1 **Test Manager : Ankit Sharma**

- Define the test strategy and objectives.

- Create and manage the test plan.

- Oversee the testing process.

- Review and approve test cases and test scripts.

- Report and escalate issues to stakeholders.

2.2 **Testers: QA Team**

- Execute test cases based on the test plan.

- Report defects and issues with detailed information.

- Test Data Creation .

- Verify fixed defects and regression test as necessary.

- Collaborate with other team members to ensure comprehensive testing.

2.3 **Developers:**

- Provide necessary support in setting up test environments.

- Address and fix defects reported by the testing team promptly.

- Ensure that changes and updates are properly documented.

**2.4 Stakeholders:**

- Provide feedback on test cases, plans, and results.

- Approve the final test plan and sign off on test completion.

**3. Test Schedule:**

Test Preparation: [Start Date] - [End Date]

Test Execution: [Start Date] - [End Date]

Defect Reporting and Fixing: Ongoing

Test Closure: [End Date]

4. **Resource & Environment Needs**

**4.1 Testing Tools**

**No. Resources Descriptions**

1. Server Need a Database server which install MySQL server

Web server which install Apache Server

2. Test tool Develop a Test tool which can auto generate the test result to the

predefined form and automated test execution

3. Network Setup a LAN Gigabit and 1 internet line with the speed at least 5 Mb/s

4. Computer At least 4 computer run Windows 7, Ram 2GB, CPU 3.4GHZ

**4.2 Test Environment**

It mentions the minimum hardware and software requirements that will be used to test the Application.

Following software’s are required in addition to client-specific software.

Different Cross browser testing.

Testing on different devices. Like Mobile , Tabs and Laptop.

**5 Test Methodology**

5.1 Overview

Agile software development methodlogy is used as part of this project.

5.2 Test Levels

In the project Google search Engine, there’re 3 types of testing should be conducted.

**Integration Testing** (Individual software modules are combined and tested as a group)

**System Testing**: Conducted on a complete, integrated system to evaluate the system’s compliance with its specified requirements

/**api-testing**.html: Test all the APIs create for the software under tested

**UAT Support**:

**5.3 Bug Triage**

The goal of the triage is to

* To define the type of resolution for each bug
* To prioritize bugs and determine a schedule for all “To Be Fixed Bugs’.

**5.4** **Defect Workflow**

The following is a fairly common workflow that moves bugs onwards towards resolution:

* Open
* In Progress
* Fixed
* Under Review (by QA)
* Approved
* Deployed
* Closed

**5.5 Suspension Criteria and Resumption Requirements**

If the team members report that there are 40% of test cases failed, suspend testing until the development team fixes all the failed cases.

**5.6 Test Completeness**

Specifies the criteria that denote a successful completion of a test phase

Run rate is mandatory to be 100% unless a clear reason is given.

Pass rate is 80%, achieving the pass rate is mandatory

**5.7 Project task and estimation and schedule**

Task Members Estimate effort

Create the test specification Test Designer 170 man-hour

Perform Test Execution Tester, Test Admin 80 man-hour

Test Report Tester 10 man-hour

Test Delivery 20 man-hour

Total 280 man-hour

6**. Test Deliverables:**

- Test Plan

- Test Cases

- Test Scripts

- Test Execution Reports

- Defect Reports

- Test Summary Report

**7. Risks and Assumptions:**

7.1 **Assumption**:

* Test environments will be available and stable.
* Before starting any testing level like UAT-1 or UAT-2 . All the defects are 100% closed in SIT phase.

7.2 **Risk**: Changes to the Google Search Engine during testing may impact the test schedule.

Proper Resources planning and backup is could be a risk.

Special Skilled and Trained staff is required and could be a risk.

**8. Version & Controls**

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| --- | --- | --- | --- |
| **0.1** | **Initial version** |  |  |
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