Google Homepage Test Plan

1. INTRODUCTION

1.1 Purpose

This Test Plan will ensure the Google homepage functionalities meet all the requirements by assessing if the user's need and intent is met.

It will occur earlier in the Planning phase of the Software Development Lifecycle

- **Test Strategy** adherence to compliance as per the business policies, legal stipulations, & technical requirements of a company, defining the scope, test environment, creating test cases, criteria, test steps to perform, test scheduling
- **Execution Strategy** defect identification, defect reporting, fixing defects, retesting bugs
- **Test Management** Logistics (communication, risk mitigation if needed)

1.2 Project Overview

- **Who will use the website?** End users worldwide
- **What is it used for?** To provide recommended sites, images, videos, according to the user's intended search request as well as access to other Google products (Gmail)
- **What software/ hardware the product uses?** Hardware: Windows 8+, Mac, PC, Mobile devices, Tablets, Google products

1.3 Audience

- Testers and other team members will perform the test steps and provide their feedback based on the expected results
- Stakeholders involved (clients, users)
- Project Managers approve the plan and track progress
- Developers will ensure technical specifications are met (inline with the design document, coding errors, fixes defects according to requirements)
- Business Analyst approves test cases

2. TEST STRATEGY

2.1 Purpose

Testing will ensure the Google homepage functionalities meet all the requirements by assessing if the user's need and intent is met.

2.2 Test Objectives

Test Cases will verify the functionality of the Google homepage to have a high quality software

2.3 Test Assumptions

- Testers will have access to the Test Environment
- Functional Testing will use pre written search queries and require reviewing design documents and creating test cases
- Performance Testing will check the speed and loading time (Jmeter), scalability to reduce overspending on hardware, and stability in case of system crashes
- Security Testing checks for a secure access to the network
- User Acceptance Testing (UAT) will be tested by the end users after Functional Testing
- Defects will be tracked through Excel
- Business Analyst will review test cases
- Communication will perform under Agile Methodology between Developers, Testers, and Project Managers
- Testing will be able to be changed as needed

2.4 Data

- Prewritten search queries for testing user search requests

2.5 Scope: Methods of Testing

EXPLORATORY TESTING
PURPOSE: Testing done by tester to identify any defects out of the scope aside from test cases created
SCOPE: first level navigation
TESTERS: Testing Team
METHOD: No need for any test scripts or documentation to conduct
TIMING: Beginning of each test cycle

FUNCTIONAL TESTING
PURPOSE: Testers will use pre written queries to test functionality of the homepage and provide feedback
SCOPE: Excel Sheet provided has details.
TESTERS: Testing Team
METHOD: According to Test scripts
TIMING: After exploratory test is conducted

A. **DELIVERABLE** Functional Test Cases

AUTHOR Test team
REVIEWER Business Analyst

B. **DELIVERABLE:** Test Plan
AUTHOR Test Lead
REVIEWER Project Manager/Business Analyst

C. **DELIVERABLE:** Defect Log
AUTHOR Test team
REVIEWER Programmers

D. **DELIVERABLE:** Status Report
AUTHOR Test team/Lead
REVIEWER Test Lead/Project Manager

E. **DELIVERABLE:** Test Report
AUTHOR Test Lead
REVIEWER Project Manager

PERFORMANCE TESTING

PURPOSE: Testers will use pre written queries to test functionality of the homepage and provide feedback
SCOPE: Jmeter and details in Excel Sheet provided.
TESTERS: Testing Team
METHOD: Use performance measurement tool
TIMING: After exploratory test and functional test is conducted

SECURITY TESTING

PURPOSE: Testers will use pre written queries to test functionality of the homepage and provide feedback
SCOPE: Excel Sheet provided has details.
TESTERS: Testing Team
METHOD: According to Test scripts
TIMING: After exploratory test, functional test, and performance test is conducted

TEST ACCEPTANCE CRITERIA

Test cases need to be approved before test execution
Test environment is installed
Defects are fixed
Development unit tested
Results shared with team
Approved specifications document, test cases, and use cases must be available before Design phase

USER ACCEPTANCE TESTING (UAT)

PURPOSE: End users will test the test cases according to script and provide feedback
TESTERS: End users
METHOD: Use of user test scripts provided in the excel sheet.
TIMING: After exploratory and functional testing
DELIVERABLE: UAT Test Cases
AUTHOR: Test team
REVIEWER: Business Analyst

MILESTONES:

- Additional scope
- Dependencies that affect the timeline

3. EXECUTION STRATEGY

3.1 Entry and Exit Criteria: Flexible benchmarks for progress

ENTRY CRITERIA: Test planning activities are 100% completed to start the test execution phase

EXIT CRITERIA:

- 100% Test scripts executed
- Pass rate is above 90%
- No critical defects
- Expected and Actual Results are documented
- Test Metrics are collected
- All defects are logged in Excel Sheet
- Sign/Off and Approval of Test

3.2 Test Cycles

- 2 cycles for Functional Test: First is the critical defects testing, second test is for other remaining priorities
- 2 cycles for Performance Test
- 1 cycle for Security Test
- 1 cycle for UAT

3.3 Test Metrics

They measure level of success

- Status of Test Cases: Pass/Fail
- Status Reports

3.4 Defect Tracking

- Tester reports defects
- Test Lead validates defects
- Development Lead assigns defects, if approved, close the defect
- Developers fix defects
- Tester retests the page

4. TEST MANAGEMENT

4.1 Test Environment

- Testing will take place in Test Environment and updated results as well
- Test cases will be written in the environment during the Design phase
- Testers will have access to the environment
- Testers will update their status
- Status reports can be generated for defects, test cases, statuses

4.2 Test Design

- Testers will understand the requirements
- Test cases will be reviewed by Business Analysts
- Tester will use specifications and use case to create test steps
- Testers will create a sheet to track progress
- Updated test cases have to be changed in Test Environment

4.3 Test Execution

1. Once test cases are approved, testers will use the test environment to test the page
2. Raise any issue with Test Lead or Project Manager
3. Tester is assigned a test and has access to the test environment
4. Testers follow the test steps and update status (Pass/Fail)
5. If errors are present, tester will raise a defect with screenshots
6. Communication through meetings to ensure efficiency
7. All defects need to be in test environment
8. Steps are repeated until all test cases pass or fail
9. Defects that are fixed needs to be retested and updated in test environment

4.4 Test Risks

RESOURCES: Vacations might delay time
DEFECTS: If defects are found in a later stage, defect management plan will

ensure efficiency
SCOPE: Additional scope and frequent updating
SCHEDULE: Early preparation can solve this issue

5. ROLES EXPECTATIONS

- **Project Manager:** Reviews Test Plan and Test Strategy
- **Test Lead:** Gives go on when to start test cycle and facilitate communication
- **Business Analyst:** Reviews test cases
- **Development Lead:** Leads development team
- **Testing Team: Develop** test conditions, test cases, expected results, perform validation and execution of tests, update status as well as identify and document defects
- **Development Team:** Reviews deliverables/gives feedback, inform of any software issues, assist testers, and fixes defects
- **Users:** End Users who use Google Homepage

6. TEST ENVIRONMENT

- Google Homepage site
- Windows Internet Explorer 8+ with Google Chrome & Firefox
- MacOS
- Linux

7. APPROVALS

Name:
Role:
Signature: _____
Date: