

Test Plan for an Online Calculator

Prepared By: Stephen Kimondiu Mutinda

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1.0 Introduction

1.1 Background

This is an online calculator which entails the basic mathematical operation of a basic calculator. It comprises of the basic operators which are addition, subtraction, multiplication and division. Other functions include Memory storage functions and clear button.

2.0 Objectives and Tasks

2.1 Objectives

- The objective of this test plan is to be able make sure that the application is working as expected with all functionalities working as required

2.1 Tasks

- Testers will come up with Test Cases to be able to adequately write their test scripts to cover all areas of testing
- Issue tracking and reporting will have to covered adequately.
- Automation test scripts will be written according to the test cases to be able to test the application more efficiently before rolling out to market.

3. Scope

3.1 General

- All functionalities of the calculator will be tested which include;
 - Addition functionalities
 - Subtraction Functionalities
 - Division Functionalities
 - Multiplication Functionalities
 - Mathematical Operation edge cases

3.2 Tactics

- Each functionality above will be assigned to a team in which their tasks will be logged on an issue tracker platform with their allotted time to complete their specific tasks.
- The issue tracker platform will help the team to manage their timelines well and also log issues during their testing for easier tracking.
- A sprint will be created with the individual teams and tasks assigned for efficiency and tracking
- Test cases have to be developed by the testers to be able to cover every test scenario

4. Testing Strategy

- A methodological approach will be used to test the functionalities in which each team will use the same automation framework for easier use and troubleshooting.
- Each team will produce their testing reports which comprises of tests which have passed or failed
- Screen shots have to be produced for reproducing purposes.

4.1 Unit Testing

- Since each team have been allocated their different functionalities to test a Unit Testing approach will be used.
- Each team will test their own functionalities with adequate test cases to ensure they have thoroughly covered their tests

5. Control Procedures

5.1 Problem Reporting

- An issue tracker platform will be used to log all the issue/defects found by the teams. The tool we will use to achieve this will be You track.
- All issues will be logged and an assignee will be attached for them to look into the issue. The tester will make sure to attach adequate information about the issue with supporting documents for easier validation.
- Upon fixing the assignee will mark the issue as fixed and an email will be sent to the tester for them to do run their tests again to ensure the issue has been fixed and no other feature has been broken. (Regression testing)

5.2 Change Requests

- A document will be circulated around to be able to track the change requests which include the type of change to be done if need arises.

6. Features to be Tested

6.1 Features to be tested

- The features below should be tested adequately;
 - Addition functionalities
 - Subtraction Functionalities
 - Division Functionalities
 - Multiplication Functionalities
 - Mathematical Operation edge cases

7. Features not to be Tested

7.1 Features not to be tested

- The features below should not be tested;
 - Memory storing Functionality

8. Tools

8.1 Automation Testing tools.

- Automation testing approach will be used to test this application. Testers should write their test scripts according to the test cases developed.
- Below are the tools/technologies which will be used to achieve the above;
 - Selenium using Java
 - You track by Jet brains for issue tracking
 - Testing Framework - TestNG using Java
 - TestNG for reporting
 - Maven – Any dependencies will be installed using Maven e.g., Selenium, TestNG, Web driver manager
 - TestNG XML file – This is used to arrange the test case executions

9. Approvals

9.1 Approvals

- This plan will be approved by the people below;

Tester Name	Designation	Signature	Date Approved
Stephen Mutinda	Quality Assurance Tester	S.K.M	15 th October 2022