**Test Plan:**

Date: 25-SEP-2021

Requirement: API automation using calculator functionality

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**Introduction:**

  The test plan is that test focus and project scope are defined. It deals with test coverage, scheduling, features to be tested, features not to be tested, estimation and resource management.

Scope:

**In Scope:**

Scope defines the features, functional or non-functional requirements of the software that will be tested

**Out of Scope:**

Out of scope defines the features, functional or non-functional requirements of the software that will NOT be tested

**Quality Objective:**

Here makes a mention of the overall objective that you plan to achieve with automation testing. Some objectives of your testing project could be

* Ensure the Application Under Test conforms to functional and non-functional requirements
* Ensure the AUT meets the quality specifications defined by the client
* Bugs/issues are identified and fixed before going live.

**Terms and Acronyms:**

Make a mention of any terms or acronyms used in the project

Terms and Acronyms Definition

API Application Program Interface

AUT Application under Test

**In Scope:**

The Test Plan is designed to prescribe the scope, approach, resources, and schedule of all testing activities of the project Calculator function using API Automation. The plan identifies the items to be tested, the features to be tested, the types of testing to be performed, the personnel responsible for testing, and the risks associated with the plan.

**Out of Scope:**

This feature is not tested because they are not included in the software requirement specs

* Database logical
* API Security and Performance
* Load testing

**Quality Objective**

The test objectives are to verify the Functionality of API project should focus on testing the arithmetic operations such as Additional, Subtraction, Multiplication, Division, Square, Modules and Power…etc. to guarantee all these operations can work normally in environment and found bugs which has been generated in jest HTML report.

**Bug Triage**

**Suspension Criteria and Resumption Requirements**

In the test report, there are 58% of test cases failed, due the some of the arithmetic operations are not working as expected for example subtraction operation getting an error with 500 status code and noticed some defects in other operations too which caused the failed of test cases

**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. And in this requirement observed few observations which are explaining the below state
* Pass rate is 53%, achieving the pass rate is mandatory

**Test Deliverables:** Test deliverables are provided as below

### Before testing phase

### Test plans document.

### Test Requirement review

### Test cases documents

### Test Design specifications review.

### Test Data (Request payload) and validation of HTTP request and response should be ready to deliver to the next phase (testing)

### Environment set-up in respective QA lower-level environment

### During the testing

### Test Data (Request payload) and validation of HTTP request and response

### Test Execution

### Bug Triage and Tracker meeting if risk is occurred and severity of defect

### Test Trace-ability Matrix – Error logs and execution logs.

### Co-ordinate with Frontend team to discuss the test coverage to understand the End- user perspective

### After the testing cycles is over

### Test Results/reports

### Defect Report

### Installation/ Test procedures guidelines

### Release notes

### Test Closure report to the stakeholders