

Part 1: Test Plan and estimate

a) Test Plan

Introduction: Need to verify the Triangle determination application

Objective: The main objective of testing is to ensure that the triangle determination application is working as expected and meets the acceptance criteria. Once all testing been completed and all the issues are resolved or accepted with workarounds, the Test phase will be signed off and the project team will move to the Production phase.

Test Activities:

- Test Strategy
- Test cases
- Test result
- Test Summary report

Entry Criteria:

- Test environments are set up correctly.
- Testing resources have appropriate Test Data, Test URLs and other tools

Exit Criteria:

- All functionality/requirements have been in tested
- No outstanding high-level defects
- Medium and low-level defect have been mitigated/workaround.

Testing Records and Results:

All test results will be captured in Quality Centre.

Test Reporting:

- Test Results
- Daily test status report
- Email Escalation for any critical Issue.
- Test Summary reports

b) Estimate: The effort for this user story to verify the triangle determination app can be categorized as Medium and no of points can be around 3 story points (which can be understood as 2 man days)

Part 2: Test Scenarios

TC1. Verify if the application validates a valid scalene triangle. (Here we will input values 3,4,5 and click on compute)

TC2. Verify if the application validates a valid Equilateral triangle. (Here we will input values 3,3,3 and click on compute)

TC3. Verify if the application validates a valid Isosceles triangle. (Here we will input values 3,3,4 and click on compute)

TC4. Verify if the application validates depending on the input provided that the shape is not a triangle (4,1,2)

TC5. Verify if the application does not accept negative values and it should display an error message "Value must be greater than 0"

TC6. Verify the application should not accept 0 as a value and should display an error message "Value must be greater than 0"

TC7. Verify the preview of the triangle is displayed correctly for a valid scalene triangle.

TC8. Verify the preview of the triangle is displayed correctly for a valid equilateral triangle.

TC9. Verify the preview of the triangle is displayed correctly for a valid isosceles triangle.

TC10. Verify if a separate dialog box is displayed to confirm the triangle type.

The test data will be entered and validated as below

Test case	Side 1	Side 2	Side 3	Expected result
TC1	3	4	5	Scalene
TC2	3	3	3	Equilateral
TC3	3	3	4	Isosceles
TC4	4	1	2	Not a triangle
TC5	-1	4	5	Side 1 Value must be greater than 0
TC5	3	-3	3	Side 2 Value must be greater than 0
TC5	3	3	-4	Side 3 Value must be greater than 0
TC6	0	0	0	Side 1, Side2,Side 3 ,Value must be greater than 0

Part 3.

Answer is B : Stop testing, report the bug and then continue the scripts.

This is because there can be issues in other test scripts and meanwhile the bug which was spotted earlier has been reported so the developer can start working on it.

In case, we find more issues in other scripts, we can report them too.