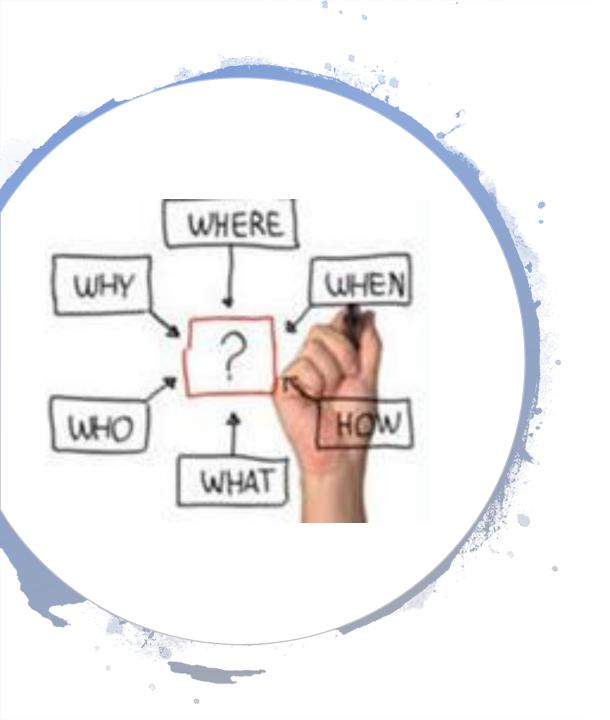# Manual Testing DAY 2

Testing Documentation

Test Plan

- A test plan in Software Testing industry is the document that outlines the what, when, how, who, and more of a testing project. In general, it includes the objective and scope of the tests to be run. A test plan does not include the tests themselves – those are called test cases

- It outlines the strategy that will be used to test an application.

- The resources that will be used.

- The test environment in which testing will be performed, the limitations of the testing and the schedule of testing activities.

- Mostly Quality Assurance Team Lead or QA Manager will be responsible for writing a Test Plan.

- **Answers to following questions:**
- What to test?
- How to test?
- Why to test?
- Who will perform the testing?
- Where testing will be performed?
- When testing will take place?

Test Plan Content

- Introduction to the Test Plan document.

- Assumptions while testing the application.

- List of test cases included in testing the application.

- List of features to be tested.

- Environmental Needs

- What sort of approach to use while testing the software.

- The resources allocated for testing the application

- Any risks involved during the testing process

- Staffing And Training Needs

- schedule.

- The testing tools will be used.

Test Cases

- Test Case is a set of conditions or variables under which a tester determines whether the software satisfies requirements and functions properly.

- Test Case is a single executable test which a tester carries out. It guides them through the steps of the test. You can think of a test case as a set of step-by-step instructions to verify something behaves as it is required to behave.

- Test case validates one or more system requirements and generates a pass or fail
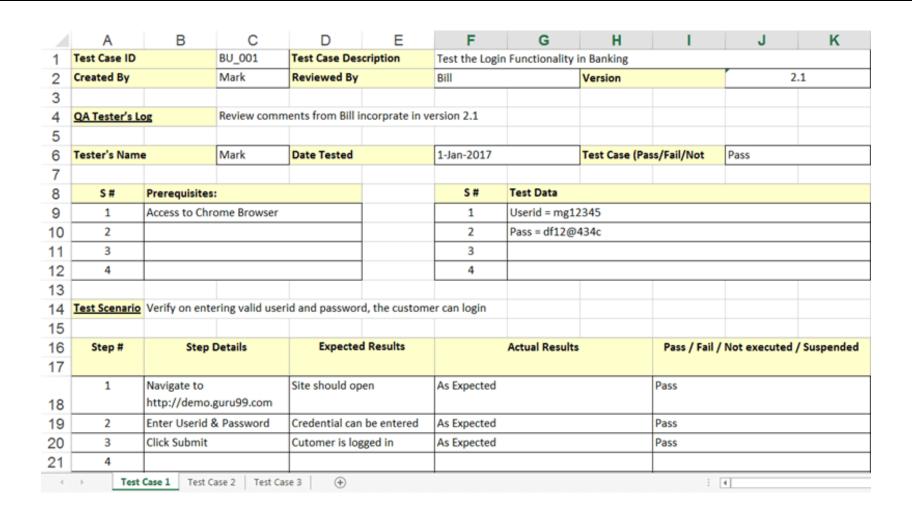
Test Cases

A test case often contains:

- Test Case ID
- Test Case Name
- Pre-condition
- Steps Number
- Steps Detail / Description
- Expected Result
- Actual Result

Sample Test Case

	A	B	C	D	E	F	G	H	I	J	K
1	Test Case ID		BU_001	Test Case Description		Test the Login Functionality in Banking					
2	Created By		Mark	Reviewed By		Bill		Version		2.1	
3											
4	QA Tester's Log		Review comments from Bill incorprate in version 2.1								
5											
6	Tester's Name		Mark	Date Tested		1-Jan-2017		Test Case (Pass/Fail/Not	Pass		
7											
8	S #	Prerequisites:				S #	Test Data				
9	1	Access to Chrome Browser				1	Userid = mg12345				
10	2					2	Pass = df12@434c				
11	3					3					
12	4					4					
13											
14	Test Scenario	Verify on entering valid userid and password, the customer can login									
15											
16	Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended		
17											
18	1	Navigate to http://demo.guru99.com		Site should open		As Expected			Pass		
19	2	Enter Userid & Password		Credential can be entered		As Expected			Pass		
20	3	Click Submit		Cutomer is logged in		As Expected			Pass		
21	4										

Test Case 1 | Test Case 2 | Test Case 3

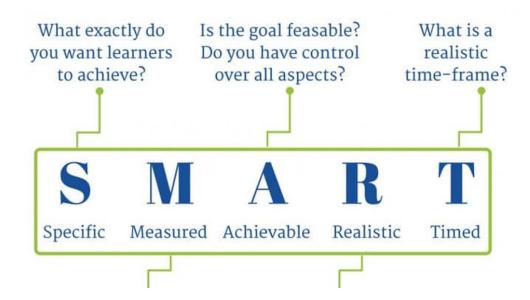| Scenario ID	Test case ID	Test case	Test case Description	Test Step	Test step Description	Expected Result	Actual Result	Status	Comment
TS001	TC001	Validate Login Credentials	Test the login functionality of the e-commerce site to make sure that registered user is allowed to login into site using valid credentials.	Pre-Condition	1) Make sure that site under test is available and testable. 2) Make sure that required data for login is available.				
				Step 1	Launch the ecommerce application with the givn URL: <Test Site URL>	The e-commerce site launched properly.	Site launched successfully.	Pass	
				Step 2	Navigate to Login page	Login page is displayed to user with Username and Password fields are displayed on the page.	Login page loaded successfully.	Pass	
				Step 3	Enter valid Username in username field.	Username field should be editable and accept the username.	Usrename input accepted	Pass	
				Step 4	Enter valid Password in Password field.	Password field should be editable and accept the password and display as star or dot.	Password input displayed in dot and accepted	Pass	
				Step 5	Click on login button.	User should login into site and navigated to Home page.	User navigated Checkout page.	Fail	

Analyze the User story/Requirement

- As a Tester you should first read and understand what the requirement is asking.

Ask these questions to yourself:

- Specific
- Measurable
- Achievable
- Realistic
- Time

Write out Test Cases

- Write out test cases based off the user story and implement the different forms of testing.

- Create Manual Test case with Positive and Negative steps.

- After Manual Test Case is created Automation Tester will convert those manual steps to Code. Automating the Manual Test case
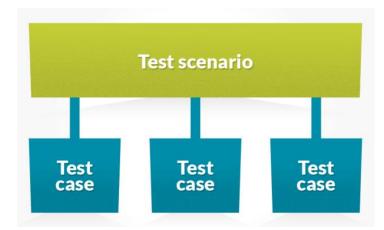
Test Scenario

- A new product is under development, we as a testing team are given design docs to write test cases for each feature.
- Before writing any test case, one should concentrate on various scenarios which the product will face when it will be at customers site.By doing this you are sure that very obvious things are not missed.
- Scenario writing should be given time, thorough review process should be followed. Because this would be forming the base for future test cases and testing.
- Scenario should be one liner and less descriptive. The intention here is not to provide details, but the specific idea of testing a particular case.

Test scenarios are the high level classification of test requirement grouped depending on the functionality of a module

Example:

- Scenario 1: Check login functionality
- Scenario 2: Check payment
- functionality

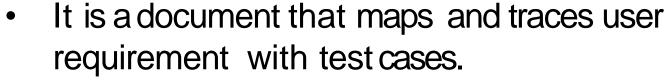# One Test Scenario can cover multiple test cases

- Example: Scenario to check payment functionality:

- User is able to make a payment with valid credit card

- User is not able to make a payment with invalid credit card

- User is able to make a payment with new bank account

- User is able to make a payment with stored bank account

Test scenario ID	Test Objective/Test scenarios
TS_Loan_001	Validate the "Apply Loan" feature as a new user
TS_Loan_002	validate the "Apply Loan" feature as a already existing user
TS_Loan_003	For a new user in the "Apply loan", check the guest customer option and apply loan
TS_Loan_004	For a new user in the "Apply loan", check the Register option and apply loan
TS_Loan_005	Login to the loan portal as an already a customer with a loan and check the information displayed
TS_Loan_006	Check the Loan whose status is "Sent for review"
TS_Loan_007	Check the Loan whose status is "Reviewed and approved"
TS_Loan_008	Check the Loan whose status is "Reviewed and deleted"
TS_Loan_009	Check for a visitor if the information on the site is accessible in less than 3 clicks or not
TS_Loan_010	Check for a reigstered user if the information on the site is accessible in less than 3 clicks or not
TS_Loan_011	Check for a banker if the information on the site is accessible in less than 3 clicks or not

What is RTM?

- It is a document that maps and traces user requirement with test cases.

- The main purpose of RTM is to see that all test cases are covered so that no functionality should miss while testing. RTM is the mapping between requirement to test cases and test cases to the defect. If there is defect found we can trace back to tell which specific requirement failed.

- It is also called requirement coverage, one on one mapping.

Requirement Traceability Matrix

Requirement	Status	Linked Tests	Linked Tests Defects
CALC-671 - Req v4	v3.0 - NOTRUN	CALC-672 - T v4	
CALC-670 - As a user, I can calculate the sum of 2 numbers	v3.0 - UNCOVERED		
CALC-653 - As a user, I can calculate the sum of 2 numbers	v3.0 - OK	CALC-658 - test addition in shell script CALC-657 - Calculate the sum of two numbers CALC-654 - user sums two integer numbers	CALC-667 - problem with 1 button CALC-660 - the calculator crashed
CALC-650 - As a user, I can calculate Requirement Coverage charts based on a given Test Plan	v3.0 - NOTRUN	CALC-652 - T2 CALC-651 - T1	
CALC-640 - As a user, I can calculate the sum of 2 numbers	v3.0 - NOK	CALC-645 - teste soma em shell script CALC-644 - teste automatizado para soma 2 numeros CALC-641 - usuario soma dois numeros	CALC-647 - calculadora crashou ao fazer igual apos soma
CALC-629 - As a user, I can calculate the sum of 2 numbers	v3.0 - NOK	CALC-634 - generic automated test CALC-633 - automatic cucumber addition CALC-630 - calculate the sum of two numbers CALC-324 - Calculate the sum of 2 numbers	CALC-636 - the calculator crashed
CALC-619 - As a user, I can calculate the sum of 2 numbers	v3.0 - OK	CALC-620 - Calculate the sum of 2 numbers	CALC-626 - Def2 CALC-625 - Def1
CALC-614 - As a user, I can calculate the sum of 2 numbers	v3.0 - NOTRUN	CALC-618 - automatic test for the addition CALC-615 - Calculate the sum of 2 numbers	

Legend: Approved, Pending, Completed, Verified, Deployed, Submitted

86 — Total Requirements

1403 — Total Linked Test Cases

201 — Found Defects

Not Run — 4
Passed — 18
Failed — 9
Blocked — 12
Descoped — 4

REQ ID / Test Case ID

Test Case ID	0001	0002	0003	0004	0005	0006	0007	0008	0009	0010	0011	0012	0013	0014	0015	0016	0017	0018	0019	0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	0030	0031	0032	0033	0034	0035	0036
TC-000001																																				
TC-000002									2																											
TC-000003									1													1	5													
TC-000004																																				
TC-000005											1																									
TC-000006						12			2																											
TC-000007								1																												
TC-000008									1																		1									
TC-000009																																				
TC-000010																																				
TC-000011								12																	3		8	7	4	7						
TC-000012									1																											
TC-000013													1															3								
TC-000014																																				
TC-000015																																				