

EXPERIMENT – 07

Aim: Design of test cases based on requirements and design

Objective: Developing testcases for Attendance management system

Theory:

In Software Development, we need to check each functionality or events in the developing product to make sure it fulfils the actual requirements.

Test Cases are the set of conditions or variables for checking this. For each scenario there will be test cases, and these set of conditions are planned by the tester.

7.1 VARIOUS FIELDS IN A TEST CASE

TEST CASE FIELD	DESCRIPTION
Test case ID:	<ul style="list-style-type: none">Each test case should be represented by a unique ID. To indicate test types follow some convention like "TC_UI_1" indicating "User Interface Test Case#1."
Test Priority:	It is useful while executing the test. <ul style="list-style-type: none">LowMediumHigh
Name of the Module:	Determine the name of the main module or sub-module being tested
Test Designed by:	Tester's Name
Date of test designed:	Date when test was designed
Test Executed by:	Who executed the test- tester
Date of the Test Execution:	Date when test needs to be executed
Name or Test Title:	Title of the test case

Description/Summary of Test:	Determine the summary or test purpose in brief
Pre-condition:	Any requirement that needs to be done before execution of this test case. To execute this test case list all pre-conditions
Dependencies:	Determine any dependencies on test requirements or other test cases
Test Steps:	Mention all the test steps in detail and write in the order in which it requires to be executed. While writing test steps ensure that you provide as much detail as you can
Test Data:	Use of test data as an input for the test case. Deliver different data sets with precise values to be used as an input
Expected Results:	Mention the expected result including error or message that should appear on screen
Post-Condition:	What would be the state of the system after running the test case?
Actual Result:	After test execution, actual test result should be filled
Status (Fail/Pass):	Mark this field as failed, if actual result is not as per the estimated result
Notes:	If there are some special condition which is left in above field

OPTIONAL FIELDS BASED ON THE PROJECT REQUIREMENTS

- **Link / Defect ID:** Include the link for defect or determine the defect number if test status is fail
- **Keywords / Test Type:** To determine tests based on test types this field can be used. Eg: Usability, functional, business rules, etc.
- **Requirements:** Requirements for which this test case is being written
- **References / Attachments:** It is useful for complicated test scenarios, give the actual path of the document or diagram
- **Automation (Yes/No):** To track automation status when test cases are automated
- **Custom Fields:** Fields particular your project being tested due to client/project requirements.

TEST CASE TEMPLATES

Req ID	Risks	Requirement Type	Requirement Description	Trace from User Requirement/ Trace to System Requirement	Trace to Design Specification	UT	IT	ST	UAT	Trace to Test Script

	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 incorporate 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	1	Navigate to http://demo.guru99.com		Site should open		As Expected		Pass			
18	2	Enter Userid & Password		Credential can be entered		As Expected		Pass			
19	3	Click Submit		Cutmener is logged in		As Expected		Pass			
20	4										
21											

Test Case 1

Test Case 2

Test Case 3

Project Name:						
Test Case Template						
Test Case ID: <u>Fun_10</u>				Test Designed by: <u><Name></u>		
Test Priority (Low/Medium/High): <u>Med</u>				Test Designed date: <u><Date></u>		
Module Name: <u>Google login screen</u>				Test Executed by: <u><Name></u>		
Test Title: <u>Verify login with valid username and password</u>				Test Execution date: <u><Date></u>		
Description: <u>Test the Google login page</u>						
Pre-conditions: <u>User has valid username and password</u>						
Dependencies: <u></u>						
Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Navigate to login page	User= <u>sample@gmail.com</u>	User should be able to login	User is navigated to	Pass	
2	Provide valid username	Password: <u>1234</u>		dashboard with successful		
3	Provide valid password			login		
4	Click on Login button					
Post-conditions: <u>User is validated with database and successfully login to account. The account session details are logged in database.</u>						

Example: Test-Case for Attendance Management System
based on Requirements and Design. Req-Requirement (say)

Req id	Risks	Req Type	Req Description	Trace from User Req/ Trace to system req	Trace to Design specifications	U T	I T	S T	UAT	Trace to test script
3.2	Technical Aspect	Functional	Should perform	No	yes	Y	Y	Y	N	Y
4.1	GUI	Interface	Easy use	Yes	yes	Y	Y	N	N	Y
5.1	users login	Performance	So many users are not supported	No	No	N	N	N	N	Y
6	Design	Design	Overall design	Yes	Yes	Y	Y	Y	Y	Y
7.4	Updating Attendance	Maintainability	Add or Delete	No	yes	N	N	N	N	Y