Test Case Concepts & Template

University of Information Technology

Lecture: MSc. Nguyen Thi Thanh Truc

Email: trucntt@uit.edu.vn

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Agenda

➢ **Duration:** *2 Hours*

➢ **Audience:** *Testers*

➢ **Content:**

1. Test case concepts
2. Test case guideline
3. Test case review checklist
4. Test case management

After the course, student will:

• Understanding what is Test Case

• Aware about Test case template

• Able to understand how to read & create test case

• Using checklist to review Test Case

What is Test Case?

- A set of pre-requisites/pre-conditions, input value, execution steps, expected results
- Developed for a particular objective or test condition

For example:

Exercise a particular program path or to verify compliance with a specific requirement

Microsoft Office
Excel Template

Inputs for creating Test case

- Test plan
- Test design
- Requirement (User requirement, SRS - Software Requirement Specification, User stories,…)
- GUI design
- Database design
- Prototype
- User manual, technical manual
- Domain knowledge, business experience
- …

- Unique number to identify test case. It should be ID to:
  - Easy to say it belong to which module
  - Easy to add new one into a module and don't change ID of other
  - Should not replaced by deleted one

For example:
  - USER_MGT_Create_01
  - USER_MGT_Create_02
  - ...
  - USER_MGT_Delete_01
  - USER_MGT_Delete_02
  - USER_MGT_Delete_03
  - ...
  - USER_MGT_Login_01

Test case description

- The description of objective or condition
  - Should be clear, brief
  - Describe generally about test case as same as a title of test case

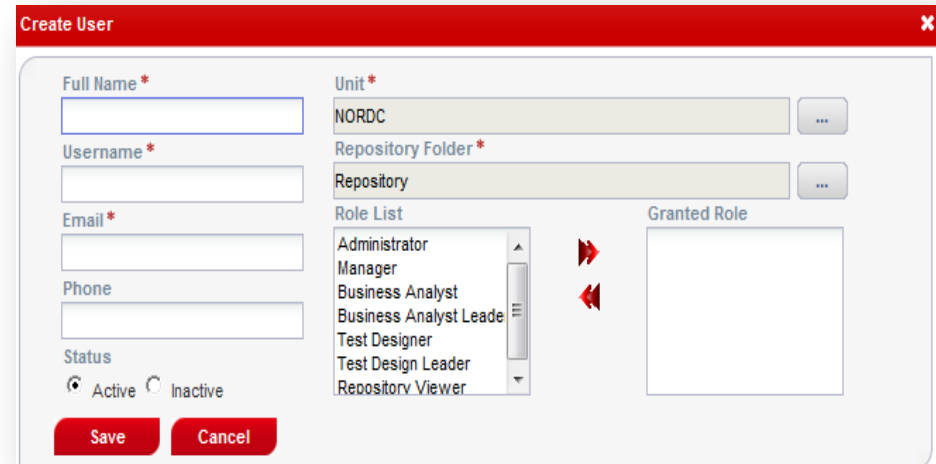**For example:**

Add user successfully

Or

Can not add user with special characters

Or

Can not add duplicated user name

Or

Can not add user without email

Test Pre-Condition

- A set of actions need to be done before run a case.

- It maybe set for one or a set of test cases

For example:

1. Open IE
2. Access to http://10.16.51.8/Test
3. Login with Admin role (admin/admin)
4. Select Admin menu and then User menu item
5. Search to ensure that user test not existed (E.g. "test")

- A set of steps/actions need to be run to complete a particular objective or condition
  - Must be detailed, specific
  - Should be shortly, single step
  - Should be ordered by number for more clear

For example:

1. On User list screen, click on [+] button
2. Input username that not existed (E.g. "test")
3. Input Full name, email (E.g. "test", test@abc.com.vn)
4. Use other values by default and click on [Save] button

- A set of output/result after run test case procedure

For example:

1. Create User screen is displayed

4. "test" is displayed in User list with order of username, number of list increase one

More few common Elements

- Test Data
- Test Result (Pass / Fail)
- Test Date
- Executer
- Priority of Test case
- Traceability
- Author
- Remark / Note
- Inter-test case Dependence

Example - Test case which have Test data

- Test data is the data that is used in tests of a software system. Test data can be:
  - In excel sheet which can be entered manually
  - Or read automatically from files (XML, Flat Files, Database,…) by automation tools.
- Test data may be prepared during or after creating Test case, but make sure that it's prepared before executing Test case.

Example - Test case which have Test data

- Test case sheet

Test Case Description	Test Case Procedure	Expected Output	Test data	Result
Query VIP customer list from database (table 1)	1. Login the system with Manager role. 2. Click [Search] button in the left side of home screen. 3. On [Query] dialog, select [VIP] in [Customer Type] combobox 4. Click [Search] button	4. List with 10 VIP customers is displayed on [Query] dialog	TestData01	
Query Member customer list from database (table 2)	1. Login the system with Manager role. 2. Click [Search] button in the left side of home screen. 3. On [Query] dialog, select [Member] in [Customer Type] combobox 4. Click [Search] button	4. List with 50 Members customer is displayed on [Query] dialog	TestData02	

- Test data sheet

Test data	Description
TestData01	In database, table 1 [CustomerVIP] have more than 10 records
TestData02	In database, table 2 [CustomerMember] have more than 50 records

Some information about Test case need to be managed:

- Result after executing Test case
- Number of Test case for a component or system
- Status of Test case (how many Test case is passed, how many Test case is fail,…)

….

∗ Test case can be managed manually (example use an excel file) or a tool to support management (example TestLink tool).

Tips for good Test case

- Structure of TC is clear and reasonable.
- Follow requirement closely.
- Cover all of cases that can occur.
- Title easy to understand and cover requirement (as user, I can do or can't do…)
- Test step and expected result is a step by step

* 4 C principal
- **Correctness**: A good test case should be correct
- **Clear**: The test cases should be simple and easy to understand
- **Completeness**: 100% coverage of the requirements
- **Consistency**: consistency in writing the test cases

Test Case Review Checklist

- **TC checklist?** Common questions to ensure that TC created enough and right format
- **Who do?** Reviewer (Test leader, PM, Developers, QA, customer)

Microsoft Office
:el 97-2003 Worksh

QUIZ