
Software Quality Assurance: SOFT3302

Tutorial – Week 9

Objectives

This tutorial deals with writing test procedure specifications. By the end of this tutorial you will have experience in writing a test procedure and performing a written test procedure.

Prework

Continue your efforts on Assignment 2.

Labwork

Refer to the outline for a sample test procedure given below. You will be working in pairs.

1. Find a website that one member of each pair is familiar with but not the other (each pair will need to find two such sites, one for each member). Describe the basic functionality of the site to the other member. Let the person who is not familiar with the site nominate a use-case scenario.
2. Define a test procedure for the nominated use-case scenario.
3. Swap test procedure specifications and attempt to execute the test procedure. Tick each step on completion.
 - a. If you cannot complete a step and so cannot proceed any further with the test procedure, *return the test procedure to the author without explaining to them why you could not proceed*. The author should attempt to work out why the procedure is not sensible at that point, modify the procedure and return the procedure for continued testing *without any further advice or explanation*.
 - b. Repeat these steps until the test procedure can be executed to completion.

There is no one ‘right answer’ but there are many wrong answers! The procedures need to be detailed enough that the tester can complete the task without having to supply missing steps and/or information.

Stress the comments at the end of each series of questions regarding detail and detecting missing information.

It’s tempting to skip detail in steps when authoring the procedure because the procedures can seem mindlessly detailed but that’s actually the point! Procedures need to be as mindless as possible because they must not require discretion on the part of the tester, only execution. Obviously tests can usually assume and rely on some level of literacy and skill on the part of the tester and need not descend into banal descriptions such as ‘Press “t” then “e” then “s” then “t” then “Enter” (which is located on the right-hand side of the keyboard).’ The danger lies in leaving so much information out that the procedures become ambiguous or unspecified.

4. Repeat the same steps for another use case. This time deliberately introduce an error into your test procedure.
5. Swap procedures again and execute the new procedures.

6. Discuss the execution of the new procedures with the author. Was the deliberate error the only error detected? Was it in fact detected?

Realising one is supplying missing steps and/or information is a skill in itself and needs to be developed. Many individuals are not necessarily aware of when they are filling in gaps in an incomplete procedure/specification and so are oblivious to the fact that the procedure/specification is, in fact, ambiguous/incomplete. Developing this skill is a very necessary of being able to elicit procedures and review requirements and specifications.

Sample Procedure

The following procedure might be given to describe a user acceptance test case for a piece of software.

Identifier: AccountingApp-UAT-P009

Purpose: Verify that money can be transferred into a new account

Preconditions: Application is installed; application is running; application is in 'open transaction' dialog.

Procedure steps:

1. Select 'File'
2. Select 'New'
3. Select 'Account'
4. Enter account name 'test'
5. Enter balance '\$1000'
6. Select 'Type'
7. Select 'Cheque' account type
8. Select 'Confirm'
9. Select 'Confirm' again to create new account
10. Select account 'test' from top left menu
11. Verify single transaction in transaction listing panel in upper section of main panel from account with balance of \$1000.
12. Select 'Pay to'
13. Select account 'test'
14. Select 'Confirm'
15. Select source account (book icon on bottom left of panel)
16. Select 'Adjustment' account
17. Select 'Confirm'
18. Select transaction type ('?' selector on bottom of panel)
19. Select 'Computer'
20. Select 'Confirm'
21. Select 'Save' to record transaction
22. Verify second transaction record in transaction listing in upper section of panel.