

Testing Techniques 2015 – 2016

Assignment 2

1 Manual Testing

Manually developing and executing black-box functionality test cases for your SUT:

1. Describe and explain how black-box functionality test cases for your SUT look like: the structure of tests, the points of control and observation, i.e., the interfaces at which you test, and the domains of possible inputs and outputs.
2. Develop (at least) 10 black-box functionality test cases to test your SUT manually. Justify the choice of these test cases with classical, black-box testing techniques.
3. Test your SUT manually with the developed test cases, and analyse the results.
(It may be that some interfaces of your SUT cannot be accessed with manual execution, in which case you will have to develop some way to access the interfaces).
4. Discuss the quality, completeness, and coverage of your manual test suite, and, if possible, use some measure to assess the completeness.

2 Automated Testing

Automating the manually developed test cases:

1. Describe, design, and develop an automated test execution environment for your SUT. Use any additional tools that you think are useful, e.g., search the Web for test execution tools, such as SELENIUM, JUBULA, scripting languages, a protocol sniffer, . . .
2. Implement the test cases that you developed for manual testing, as scripts or as programs, so that they can be executed with your test execution environment.
3. Test your SUT with the automated test scripts and analyse the results.
4. Evaluate your automated test execution environment.
5. Give the code, in such a way that we can run it; provide a 'README'. Be prepared to give a demo.