
Software Quality Assurance: SOFT3602

Assignment 3 – Due 5 p.m. 24 October 2007

Note that this assignment is different to the SOFT3302 version.

Introduction

This is a group assignment with the objective of designing a test strategy for a web-based interface. Groups should consist of not more than two SOFT3602 students. Individuals may attempt this assignment but the same standard of work will be expected regardless of the number of team members. The same mark will be awarded to all team members. Each team should submit a single written report in addition to other required materials.

Task

1. You will be designing a test strategy for the web site www.auspcmarket.com.au. The web site is designed for general user access. Review the site to ensure you understand its functionality. It is an e-commerce site dealing in computer equipment.

AusPCMarket is a 'live' commercial site that has kindly agreed to cooperate with us on this assignment. A login 'student@usyd.edu.au' with the password 'student' has been created for our use. YOU ARE TO USE THIS LOGIN FOR THIS ASSIGNMENT and no other. YOU ARE NOT TO RUN ANY AUTOMATED SCRIPTS OR SPIDERS OVER THE SITE.

Remember thoughtless activity may be taken as a denial-of-service attack on the site. Please use the above login and act courteously and appropriately.

2. Create a test strategy for the SUT.
 - a. Use the template *Test Strategy* document below.
 - b. Complete the test strategy by filling in each section of the document in order.
 - c. The risk register is the most critical part of this document. It is strongly recommended that teams conduct formal risk analysis sessions, *i.e.* think about this seriously and don't just jot down the first things that come into your head!
 - d. The risk register should use the ISO 9126 Quality Criteria.
 - e. Risk severity should be rated using the 8-value scale introduced in lectures (use 1 for low severity and 8 for high severity); risk likelihood should be rated using a 4-value (Very High: 4, High: 3, Low: 2, Very Low: 1) scale. Compare your risks using the various combination formulae from lectures to see if your risks rank sensibly and include this ranking information in your register.
 - f. Carefully choose test activities and cross-reference them to risks mitigated.
 - g. Briefly describe each test activity.

Marking

The assignment is worth 15 marks and 10% of your overall course mark. Marks will be awarded according to the following marking scheme.

- **[6 marks]** Risk register
 - a) The risk register should follow the format in the lecture notes
 - b) The ISO 9126 quality must be followed and correctly interpreted
 - c) The risk register should contain at least 50 entries
 - d) Risks should be valid risks
 - e) Risks should be consistently rated
 - f) Risks should give good coverage of site

- **[4 marks]** Activities
 - a) Between 5 and 15 activities should be defined and described
 - b) Activities should be appropriate
 - c) Mitigated risks should be listed for each activity
 - d) Risk mitigations must be appropriate

- **[5 marks]** General
 - a) Introduction
 - b) Risks not covered
 - c) Environment
 - d) Effort
 - e) Overall

Submission

You will need to submit your written assignment **with a signed *group assignment cover sheet*** in the appropriately marked assignment box in the School of IT building by the due date and time. No extensions will be granted. Late work will not be accepted for credit. One minute late is still late so don't leave things to the last minute. (Be aware that system time may differ from machine to machine and may be different to wall-clock time. Please read the section dealing with assessment on the course page.)

Test Strategy Document Template

Introduction

Describe the company and the web site. List the significant features and components. Outline the testing task.

Risk Register

Using the ISO 9126 Quality Criteria (see lecture notes) develop a risk register for the web site.

Activities

Describe each test activity you propose to mitigate risks in the risk register. For each activity list the risks that are mitigated.

Risks Not Covered

Describe risks that are not covered by the defined testing activities and explain why they aren't/can't be covered, e.g. too expensive.

Environment

Describe the hardware and software required to complete testing, e.g. any special tools or data.

Effort

Give an estimate of how long each activity should take and how many people will be required. Include set-up and specialise training.

Appendices

Attach any additional information relevant to the test task, e.g. standards documents, system specifications, &c.