

# CITS5501 Software Testing and Quality Assurance

## Semester 1, 2018

### Workshop 8 – Quality assurance strategies

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This workshop is worth 5% of your final grade. It is due on **Friday 11 May, 5pm**, and should be submitted via [cssubmit](#). All work is to be done individually.

You are expected to have read and understood the University’s [guidelines on academic conduct](#). In accordance with this policy, you may discuss with other students the general principles required to understand this project, but the work you submit must be the result of your own effort.

You must submit your project before the submission deadline above. The penalties for late submission are described in the University’s [guidelines on assessment](#): For late submissions a penalty of 10% of the total mark allocated to the assessment item must be deducted per day for the first 7 days (including weekends and public holidays). After 7 days the assigned work will not be accepted and will receive a mark of zero (unless an application for mitigation is approved).

## Overview

Stercom Technologies, Inc, are a Silicon Valley–based company who apply “smart” technologies to the problem of collection, treatment and disposal of waste and sewage. They plan to apply blockchain technologies to the problem of letting their clients securely order their services. You have been put in charge of quality assurance for this project.

You will need to devise a *quality assurance strategy* to help ensure an end product which meets the high standards of quality that Stercom’s clients have come to expect. The product will need to meet all functional requirements, allow transactions to be made securely, and should have minimal downtime (as Stercom operate in a global, 24/7 market, and clients could make orders at any time of day or night).

## Task

Describe your quality assurance strategy. (A *strategy* is at a higher level than a *plan*, which is usually concrete and very detailed. A sports team's *plan* for winning a game might involve particular players being deployed at particular points in time, in particular places to carry out particular actions; their *strategy* might be to put their energies into offense, rather than defense, and aim to tire their opponents through a strong attack early in the game. A *strategy* involves looking at the "big picture" of the problem to be solved and what needs to be done; a *plan* involves "zooming in" and focusing on specific steps you'll need to take.)

Your strategy should have at least three different elements or aspects, but no more than ten. (Fewer than three looks unimpressive to management; more than ten makes it difficult to fit them all onto a PowerPoint slide in presentations.)

For each element or aspect:

- explain what it involves, and how it will contribute to product quality;
- give a concrete example of how it might be used or applied, in a more fully-fleshed-out plan; and
- describe whether any parts of the element could be automated (as opposed to having to be carried out manually).

You should submit your strategy in the form of a short (1 page) report in PDF format.

## Submission

Submit a single PDF file via [cssubmit](#).

## Assessment

The submission will be assessed out of 10, as follows:

- 3 marks: explanation and appropriate justification of the elements of the strategy
- 3 marks: appropriate use of examples
- 4 marks: clarity and logical structure of the report