# Testing Policy Document

## COS 301: REDIRECTION

### 2018

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# 1   Introduction

We have decided to implement Karma (https://karma-runner.github.io/2.0/index.html) as our front-end test environment to test the angular side of development. We have decided to use Jasmine https://jasmine.github.io/2.0/introduction.html as our test environment for the express back-end API server.

# 2   Purpose for testing

Testing is implemented to ensure that all elements of the software work as expected such that the elements fulfil all the requirements as set out by the Software Requirements Specifications. Testing is also employed so that any flaws within the system can be found and identified immediately.

# 3   Description of the test process

We have decided to use Automated Testing implemented by Travis (https://travis-ci.org/) integrated with GitHub such that when a push is made to any branch, all the previous tests are run. The dev branch cannot be accessed directly by merge or push requests, this has been done in order to prevent any team member from changing the branch and potentially messing with the system as a whole. When a new feature needs to be added, an issue is created on GitHub and a corresponding branch will be created with the following structure <branch_name>-<issue_number> and all scripts are added and changed within the branch to in order to solve the problem or issue at hand. The dev branch can only be changed upon a merge request thus once a branch has been finalized, a merge request is made to the dev branch. Consequently the branch has to be checked and verified by our team leader (Jeffrey Russell) who will finalize the merge, if any changes result in failed tests or if the scripts violate any of the coding standards, our team leader will not authorize the merge and contact the person assigned to the issue and explain why the merge was rejected.

# 4   Test Evaluation

The new tests incorporated with the merge request for the given feature or issue will be also be evaluated when the merge request is made. If these tests are not sufficiently thorough, then our team leader will refuse the merge request and send relevant feedback to the team member assigned to the issue such that the tests can be improved.

# 5   Quality Level to be achieved

The tests are implemented so that our coding standards can be enforced and that we detect any unexpected faults with the system before the product is released.