Testing Policy Document

Optimize Prime

Definition of Testing:

Testing is done to effectively and efficiently provide timely, accurate, and useful information of the current state of the application. This is to ensure the software fulfills all its requirements while remaining in a healthy condition (bug free, etc).

Description of the test process:

Unit tests:

Goals:

- Detect defective code in units
- Reduce risk of unit failure in Production

Unit tests must comply with all coding standards.

Integration:

Goals:

- Detect defects in unit interfaces
- Reduce risk of dataflow and workflow failures in Production

After every major feature commit a test should be written to validate that the feature is working and giving the expected result. Theses tests must be added to automatically run on our continuous integration service (Travis CI).

Quality Level to be achieved:

Tests should result in no outstanding high severity faults prior to version releases. All server side tests must succeed for server commits to be deemed ready for merging into develop. Current running instances of the development server can only be updated if all unit tests pass.

Approach to Test Process Improvement

Tests should be reviewed alongside code reviews after a sprint. Tests should be on the same quality standard as the production code released to end-users.

Current continuous integration results:

Current tests are executed on Travis CI:
Backend: https://travis-ci.org/COS301-OptimizePrime/COS301_DND_Backend

A badge is added to the repository to show the current result status: