

SENG3011 Testing Documentation

Teams must produce a testing document describing the testing processes used in the development their API and attach their testing data.

The testing documentation should contain:

1. Describe your testing environment: e.g. environment and/or tools used, limitations (e.g. things that are not tested). Describe your testing process i.e. how your team conducts testing using the test data (e.g. in which order). How do you make sure you do not break old features when introducing new features ?
2. Overview of test cases, testing data and testing your API results (excluding performance testing)
3. The results of applying your testing process to another team's API (excluding performance). Discuss how their module compares to yours (be objective, this will not affect the other team in anyway)
4. Include a separate section on performance testing: how it was conducted, which test cases you used, the results obtained and compare your performance results with that of another team. You are encouraged to use third party software for more comprehensive results. Vtune from intel is a good start and has a free version for students <https://software.intel.com/en-us/qualify-for-free-software/student> . You may research other tools for automatically testing APIs.
5. [Optional] If relevant, discuss what you have done in your API design to cater for speed (e.g. Hash maps everywhere) ? And what feature(s) you may have added to give you extra performance edge (e.g. Result cache) ?

Sections 4 and 5 related to performance design and testing alongside the attachments provided will be used to determine the **shortlist for the IMC prize**. Preference will be given to teams that use some kind of tool for performance measurement and understand its pros and cons. The shortlisted teams will be invited to IMC's office to do a 5-10 minutes presentation on section 4 & 5 with the aim of determining 1st, 2nd and 3rd place prizes.

The testing document does not have to be long, 6-9 pages is a good average. As much as possible, it should refer to rather than duplicate information in the attached files.

The attached files should consist of:

1. Test input files
2. Test configuration files (if any)
3. Result files (if any)
4. Software or scripts used during testing (if any)
5. Documentation file (e.g. README)

The testing documentation will apply to the latest release of your software on your Web site. For the other team's module, indicate which version you have used and when it was downloaded.

The section on performance testing alongside the attachments provided will be used to determine the shortlist for the IMC prize.

Email the report and attachments (in a zipped folder) to the LIC (f.rabhi@unsw.edu.au) when completed. Any large files can be provided via URLs.