

CS4157 Project 2 (60%)

You will research and submit a report titled "*The Role & Importance of Testing in Facilitating the Development of Quality Software* "

Your report should include:

- Research and discuss the role and importance of dynamic analysis in the verification and validation of software and the essential part it plays in facilitating quality.
- Clearly outline and define what Functional and Non-Functional Software Requirements are and in your discussion compare and contrast the differences between them.
- Outline and discuss the key stages in the software testing process
- Research and define the principles of an effective test strategy.
- Research and discuss how Functional Software Requirements and Non-Functional requirements can be successfully tested and define the differences in approach required by each.
- Define and discuss the importance of utilizing both white box and black box testing.
- Consider and discuss the role and importance of having documented test procedures in place to facilitate effective testing.
- Research and outline the purpose, importance and content of a test plan
- Consider each of the following and outline and describe their role and purpose in the testing process:
 - Unit Testing
 - Integration Testing
 - Regression Testing
 - System Testing
 - Acceptance Testing

The report will be as follows:

- It should be 2,500 words in length or more.
- It should have a minimum of 6 references.
- References can be numbered or the Harvard Referencing method may be used.
- A softcopy of your report will be submitted on Moodle.

The Submission Deadline for this project is 23.55 Irish Standard Time (GMT +1) on Sunday 26th of April 2020.