
FUNCTIONAL SOFTWARE TEST PLAN

for

Encost Smart Graph Project

Version 1.0

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Revision History

Name	Date	Reason for Changes	Version

1 Introduction/Purpose

1.1 Purpose

What is the purpose of this document? Take a look at the SRS & SDS document as a guideline.

1.2 Document Conventions

Are any conventions, acronyms, specialised terms, etc. used in this document? If so, list them here, along with their meaning. Take a look at the SRS document as a guideline.

1.3 Intended Audience and Reading Suggestions

Who is the intended audience for this document? Take a look at the SRS & SDS document as a guideline.

1.4 Project Scope

What is the scope of the project? Take a look at the SRS & SDS document as a guideline.

2 Specialized Requirements Specification

Have you found any ambiguities, missing detail, missing features, etc. in the SDS document? Have you discussed them with your client (your lecturers) and received confirmation/clarification? If so, this information should go here.

3 Black-box Testing

Write tests to cover all *High Priority* functional requirements in the SRS, based on the design laid out in the SDS. **Please note, the SRS has been updated to reflect a change in some priorities. Please ensure that you use the most up-to-date version of the SRS (Version 1.1)**

3.1 Requirement #1

Rename the section header to relate to the requirement you are writing a test for

3.2 Requirement #2

Rename the section header to relate to the requirement you are writing a test for

3.3 Requirement #3

Rename the section header to relate to the requirement you are writing a test for

3.4 Requirement #n

Rename the section header to relate to the requirement you are writing a test for

4 White-box testing

4.1 <Requirement/Feature Name> Pseudocode

Provide pseudocode for one of the Summary Statistic requirements. E.g. *The system should use the information stored in the graph data structure to calculate the number of devices that exist in each device category.*

4.2 Branch Coverage Testing

Branch coverage testing: Develop tests that achieve 100% branch coverage for this pseudocode

5 Mutation Testing

Generate four mutants based on your whitebox testing pseudocode

5.1 Mutant #1

Generate a mutant based on your whitebox testing pseudocode

5.2 Mutant #2

Generate a mutant based on your whitebox testing pseudocode

5.3 Mutant #3

Generate a mutant based on your whitebox testing pseudocode

5.4 Mutant #4

Generate a mutant based on your whitebox testing pseudocode

5.5 Mutation Score

Select two test sets (i.e., two sets of input-output pairs) and calculate the mutation score