

Software Testing 2022/3 Portfolio

You

January 19, 2025

1 Outline of the Software Being Tested

In this section provide a brief paragraph describing the software

2 Learning Outcomes

This is the main part of the portfolio where you describe how you have gone about meeting each of the subcriteria.

1. **Analyze requirements to determine appropriate testing strategies** [default 20%]
 - (a) **Range of requirements, functional requirements, measurable quality attributes, qualitative requirements**
 - (b) **Level of requirements, system, integration, unit**
 - (c) **Identifying test approach for chosen attributes**
 - (d) **Assess the appropriateness of your chosen testing approach**
2. **Design and implement comprehensive test plans with instrumented code** [default 20%]
 - (a) **Construction of the test plan**
 - (b) **Evaluation of the quality of the test plan**
 - (c) **Instrumentation of the code**
 - (d) **Evaluation of the instrumentation**
3. **Apply a wide variety of testing techniques and compute test coverage and yield according to a variety of criteria** [default 20%]
 - (a) **Range of techniques**
 - (b) **Evaluation criteria for the adequacy of the testing**
 - (c) **Results of testing**
 - (d) **Evaluation of the results**
4. **Evaluate the limitations of a given testing process, using statistical methods where appropriate, and summarise outcomes** [default 20%]
 - (a) **Identifying gaps and omissions in the testing process**
 - (b) **Identifying target coverage/performance levels for the different testing procedures**
 - (c) **Discussing how the testing carried out compares with the target levels**
 - (d) **Discussion of what would be necessary to achieve the target level**
5. **Conduct reviews, inspections, and design and implement automated testing processes** [default 20%]

- (a) **Identify and apply review criteria to selected parts of the code and identify issues in the code**
- (b) **Construct an appropriate CI pipeline for the software**
- (c) **Automate some aspects of the testing**
- (d) **Demonstrate the CI pipeline functions as expected**