Software Testing Self Assessment

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1. Analyse requirements to determine appropriate testing strategies. **Mark: 4**
    (a) Range of requirements, functional requirements, measurable quality attributes, qualitative requirements. **Mark: 4**
    (b) Level of requirements, system, integration, unit. **Mark: 4**
    (c) Identifying test approach for chosn attributes. **Mark: 3**
    (d) Assess the appropriateness of your chose testing approach. **Mark: 3**
2. Design and implement comprehensive test plans with instrumented code. **Mark: 4**
    (a) Construction of test plan. **Mark: 4**
    (b) Evaluation of the quality of the test plan. **Mark: 2**
    (c) Instrumentation of the code. **Mark: 5**
    (d) Evaluation of the instrumentation. **Mark: 2**
3. Apply a wide variety of testing techniques and compute test coverage and yield according to a variety of criteria. **Mark: 5**
    (a) Range of techniques. **Mark: 3**
    (b) Evaluation criteria for the adequacy of the testing. **Mark: 4**
    (c) Results of testing. **Mark: 5**
    (d) Evaluation of the results. **Mark: 3**
4. Evaluate the limitations of a given testing process, using statistical methods where appropriate and summarise outcomes. **Mark: 3**
    (a) Identifying gaps and omission in the testing process. **Mark: 4**
    (b) Identifying target coverage/performance levels for the different testing procedures. **Mark: 3**
    (c) Discussing how the testing carried out compares with the target levels. **Mark: 4**

(d) Discussion of what would be necessary to achieve the target levels. **Mark: 3**

5. Conduct reviews and inspection and design and implement automated testing processes. **Mark: 4**

   (a) Identify and apply review criteria to selected parts of the code and identify issues in the code. **Mark: 3**

   (b) Construct an appropriate CI pipeline for the software. **Mark: 5**

   (c) Automate some aspects of the testing. **Mark: 4**

   (d) Demonstrate the CI pipeline functions as expected. **Mark: 4**