## Software Tester Template 5 – Declaration and Evidence Checklists for the Completion of the Summative Portfolio

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These templates are provided to support the training provider in working with the apprentice and employer to ensure the successful completion of the summative portfolio.

The checklists can be used by training providers to help them manage the process through to completion, although training providers may also substitute their own processes and documentation as they see fit.

The key responsibilities of the apprentice in producing their summative portfolio can be found in the General Guidance for Apprentices, Employers and Training Providers, as can generic guidance on how to select evidence to compile the summative portfolio.

The apprentice should gather artefacts and record information that can evidence their activities undertaken in the workplace. The portfolio of evidence should demonstrate the full range of competencies, as shown in this template, which are required by the standard to show that the apprentice can fulfil the role of a Software Tester.

**Summative Portfolio Declaration**

**Apprentice declaration**

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| Name |  |
| ULN |  |
| Declaration | I confirm that all the evidence submitted is my own work and it has been completed as specified. |
| Signature |  |
| Date |  |

**Line manager declaration (employer)**

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| Name |  |
| Company |  |
| Declaration | I confirm that the work contained within this portfolio has, to the best of my knowledge, been completed solely by \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Signature |  |
| Date |  |

**Training provider declaration (training provider)**

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| Name |  |
| Company |  |
| Declaration | I confirm that the work contained within this portfolio has, to the best of my knowledge, been completed solely by \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Signature |  |
| Date |  |

**Software Tester competencies evidence checklist**

The defined competence areas and associated typical evidence are listed in this table. Not all employer businesses are identical so there will always be variation in the types of activity that will be carried out in the course of each apprentice’s daily work; however, each Software Tester apprentice must be able to demonstrate evidence of every competence.

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| **Acceptable evidence format** |
| The intention is to allow flexibility in the format that evidence can take in order to reflect the type of records that an apprentice could realistically be expected to have access to. This includes, but is not limited to:   * photographic or video evidence of activity; * witness statement; * observation reports; * annotated screenshots; * signed-off work records; * printed outputs of pre- and post-configuration settings; * peer reviews. |

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| Competence | | |
| Implements software testing procedures on software applications (including desktop, web, mobile, embedded, mainframe) to ensure agreed errors and security issues are identified, recorded, prioritised and corrected before release. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Implementing a wide range of software testing procedures for their employer context to achieve the desired test outcomes (desktop, web, mobile apps, games, business solutions etc) to identify, prioritise and correct software defects before release. |  |  |
| Familiar with the range of industry standard software test management and automation tools that are available and in particular those for their employer context. |  |  |
| a. causes of defects  b. role of software testing  c. software testing processes, procedures, tools and techniques  d. the collation and documentation of information relating to software testing activities  e. the range of software testing activities commonly implemented  f. test levels:  • component testing  • integration testing  • system testing  g. acceptance testing |  |  |

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| Competence | | |
| Reviews software requirements and specifications for software functionality and security, and defines comprehensive tests and conditions. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Analyse software requirements so that they understand the intended purpose of software being developed. |  |  |
| Review and validate that each requirement can be tested for so that they can define tests and test conditions, identifying any requirement ambiguities ensuring that they are fixed early in the development life cycle. a. test analysis and design  b. reviewing functional software requirement specification (SRS) documents c. requirements testing  d. software tests, test conditions and exit criteria for each requirement  e. testing for security |  |  |

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| Competence | | |
| Designs simple test strategies for non- complex projects. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Design simple test strategies.  The components of the test strategy, typically including:  • testing scope  • the testing process and the level of testing  • test type and the testing approach  • test environment setup  • test data requirements  • test management and automation tools  • risk identification and analysis  • release control |  |  |

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| Competence | | |
| Analyses test requirements and designs and prepares a test plan. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Interpret and understand test plans and be able to create a test plan from scratch.  a. requirements analysis  b. test planning process  c. creating a test plan d. the components of a test plan:  • test scenarios/test objectives that will be validated.  • test schedules  • roles and responsibilities  • deliverables  • test environments  • tools  • defect management  • risks and risk management  • completion and exit criteria |  |  |

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| Competence | | |
| Designs and builds test cases, test scripts, and test procedures, with expected results. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Show evidence of test cases are documented:  a. functional and non-functional testing  b. creating detailed test cases and test scripts  c. test conditions for test cases  d. the expected results for each test case |  |  |

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| Competence | | |
| Develops and collects representative and realistic test data. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Prepare realistic test data. Testers should check and update the test data before execution of any test case:  a. test data types  b. test data preparation  c. the testers responsibility in creating their own test data according to testing needs  d. the role of common test data  e. cost, quality and time constraint for preparing test data and running tests. |  |  |

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| Competence | | |
| Conducts a range of different software testing types (including Unit Testing, Integration Testing, Functional and Non- Functional Testing, System Testing, Stress Testing, Performance Testing, Usability Testing, Acceptance Testing, Regression Testing and Exploratory Testing); interpreting and executing sets of moderately complex test scripts using agreed methods and standards. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Evidence of test execution which includes the execution of test cases or test scripts, manually or in an automated way, the logging of test results, comparison of the expected and actual results, reporting the incidents and retesting the fixed bugs.  a. software testing techniques  b. executing different types of test as defined in the testing plan  c. assigning the test cases in each test suite to testers for execution  d. defect and bug reporting  e. reporting status, and dynamic planning and prioritisation  f. report testing test cycle findings and status |  |  |

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| Competence | | |
| Accurately records the outcome of test activities and maintains accurate test records and reports. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Evidence of recording test activities:  a. documenting testing activities and test outcomes  b. recording test executions, test passes and test failures  c. logging new defects into the defect tracking system  d. user acceptance testing results should be recorded including the user interaction leading up to a test failure |  |  |

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| Competence | | |
| Assesses test results against expected results and acceptance criteria and through traceability to requirements. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Evidence of assessing test results:  a. determining and reporting root causes for test failures  b. compares actual results with expected results  c. report discrepancies as incidents |  |  |

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| Competence | | |
| Presents and communicates results effectively using appropriate communication styles and media. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Evidence of present results:  a. monitoring test results and test progression  b. present software test results  c. communicates software test results to different stakeholders |  |  |

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| Competence | | |
| Operates the organisation's software testing tools effectively and follows procedures and techniques correctly. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Evidence of using software testing tools. The tools are divided into different categories as follows:  • Test management tools  • Functional testing tools  • Load testing tools  • Bug tracking tools There are also a range of Automation Testing Tools    a. the classification of the major types of software test tools  b. an overview of the major functional testing tools and their application  c. overview of test management and bug tracking tools  d. how to perform automated testing  e. benefits and risks of automated testing  f. factors for choosing a particular tool |  |  |

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| Competence | | |
| Complies with relevant legislation and internal/external standards related to software testing and software security. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Aware of the standards and procedures to follow during software testing, as well as sector specific legislation and standards. |  |  |
| Aware of code of ethics for accessing private and sensitive data.  a. organisational standards for software testing  b. sectoral standards and legislation (e.g. insurance, food, health, automotive etc)  c. National and international standards for software testing:  • the International Software Testing Standard - ISO/IEC/IEEE29119SoftwareTesting  • IEEE 829-2008, also known as the 829 Standard for Software and System Test Documentation  • BS 7925-1  d. code of ethics for accessing private data |  |  |

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| Competence | | |
| Advises and supports others on testing processes and procedures. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Inform and advise a wide range of stakeholders on software testing processes, procedures and outcomes    a. Inform, advise and guide others on all aspects of software testing activities, including best practice |  |  |

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| Competence | | |
| Completes allocated tasks in accordance with the organisation’s reporting and quality systems. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Complete tasks within the organisations reporting and quality systems. |  |  |

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| Competence | | |
| Operates within service level agreements. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Work within their organisations service level agreements (SLAs). |  |  |

**Generic levels of responsibility evidence checklist**

Areas of responsibility and associated typical evidence are shown below.

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| Proficiency | | |
| Business skills  Demonstrates an analytical and systematic approach to issue resolution. Takes the initiative in identifying and negotiating appropriate personal development opportunities. Demonstrates effective communication skills. Contributes fully to the work of teams. Plans, schedules and monitors own work (and that of others where applicable) competently within limited deadlines and according to relevant legislation, standards and procedures. Appreciates the wider business context, and how their role relates to other roles and to the business of the employer or client. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Evidence that you can demonstrate an analytical and systematic approach to issue resolution. |  |  |
| Evidence that you can take the initiative in identifying and negotiating appropriate personal development opportunities. |  |  |
| Evidence that you can demonstrate effective communication skills. |  |  |
| Evidence that you can contribute fully to the work of teams. |  |  |
| Evidence that you can plan, schedule and monitor own work (and that of others where applicable) competently within limited deadlines and according to relevant legislation, standards and procedures. |  |  |
| Evidence that you can appreciate the wider business context, and how your role relates to other roles and to the business of the employer or client. |  |  |

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| Proficiency | | |
| Complexity  Performs a range of work, sometimes complex and non-routine, in a variety of environments. Applies a methodical approach to issue definition and resolution. Undertakes all work in accordance with agreed safety, technical and quality standards, using appropriate methods and tools. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Evidence that you can perform a range of work, sometimes complex and non-routine, in a variety of environments. |  |  |
| Evidence that you can apply a methodical approach to issue definition and resolution. |  |  |
| Evidence that you undertake all work in accordance with agreed safety, technical and quality standards, using appropriate methods and tools. |  |  |

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| Proficiency | | |
| Autonomy  Works under general direction. Uses discretion in identifying and responding to complex issues and assignments. Usually receives specific instructions and has work reviewed at frequent milestones. Determines when issues should be escalated to a higher level. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Evidence that you can work under general direction. |  |  |
| Evidence that you can use discretion in identifying and responding to complex issues and assignments. |  |  |
| Evidence that you can usually receive specific instructions and have work reviewed at frequent milestones. |  |  |
| Evidence that you can determine when issues should be escalated to a higher level. |  |  |

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| Proficiency | | |
| Influence  Interacts with and influences colleagues. Has working level contact with customers, suppliers and partners. May supervise others or make decisions which impact the work assigned to individuals or phases of projects. Makes decisions which influence the success of projects and team objectives. | | |
| Minimum expected requirement | **List the evidence in the portfolio that fulfils this requirement** | **Reflections on applying knowledge learnt** |
| Evidence that you can interact with and influence colleagues. |  |  |
| Evidence that you have working level contact with customers, suppliers and partners. |  |  |
| Evidence that you may supervise others or make decisions which impact the work assigned to individuals or phases of projects. |  |  |
| Evidence that you can make decisions which influence the success of projects and team objectives. |  |  |