**BCS Digital Industries Apprenticeship**

**Template 4 – Employer Reference**

**Level 4 Software Tester Apprenticeship**

**Version 6.0**

**August 2020**

**Change History**

Any changes made to the project shall be clearly documented with a change history log. This shall include the latest version number, date of the amendment and changes made. The purpose is to identify quickly what changes have been made.

|  |  |
| --- | --- |
| Version Number and Date | Changes Made |
| V5.0May 2019 | Change History table added to document. Major changes to document throughout. Standard specific competencies and proficiencies unchanged. |
| V6.0August 2020 | Technical competencies paragraph updated |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Software Tester Template 4 – Employer Reference

**Apprentice Details**

|  |  |
| --- | --- |
| Name |  |
| ULN number |  |

**Training Provider Details**

|  |  |
| --- | --- |
| Contact name |  |
| Company name |  |
| Company address |  |

**Employer Details**

|  |  |
| --- | --- |
| Name |  |
| Company address |  |
| Signed by:Print name:Job title:Date:  |

**Section 1**

**Starting the Apprenticeship**

The apprentice may have just joined your organisation but could also be an existing employee who has joined the apprenticeship programme.

The intent of the employer reference is for you to support your apprentice by validating the evidence that they have submitted for end point assessment (EPA).

**You should complete this initial section when the apprenticeship starts.**

## Software Tester Standard Number ST0129

The knowledge, skills and behaviours that must be demonstrated by the end of this apprenticeship are defined by the Standard:

<https://www.instituteforapprenticeships.org/apprenticeship-standards/software-tester/>

**Role Profile**

The primary role of a Software Tester is to ensure that software operates as intended. Testers typically design and prepare test plans and conduct software testing as appropriate to ensure that software is fit for purpose. They document and report the results of testing activities. They have a good understanding of the software lifecycle and software development practices.

**Typical Job Roles**

Software Tester, Software Test Analyst.

**Please complete the following fields:**

|  |  |  |
| --- | --- | --- |
| **Job Title of Apprentice** | **Brief Summary of the Common Duties that the Apprentice Will be Doing for your Organisation** | **Date Started** |
|  |  |  |

The standard defines the technical knowledge and understanding that will be required by the apprentice, these will generally be delivered by the training provider that you have chosen to work with. This knowledge and understanding will be confirmed by two knowledge modules, in addition, one approved vendor certification must be taken. Please note that currently one of the approved vendor certifications (ISTQB Certified Tester Foundation Level) acts as a proxy for both KM1 and KM2. If this vendor certification is taken it provides confirmation of knowledge and understanding for the totality of the standard and no other certification or examinations are required.

Over their time on the apprenticeship, your apprentice will apply the underpinning knowledge gained through the training to actual work-related activities required by the role that you have employed them to fulfil. The apprentice should work with one or more mentors within your organisation who will provide advice, guidance and training on how the knowledge gained by the apprentice is applied in actual working situations.

The standard also defines a number of technical competences, your apprentice must demonstrate competence in all of them to achieve the standard. The following must bedemonstrated by the apprentice in their Summative Portfolio, which provides evidence against the totality of the standard, based on the application of knowledge, competence and behaviours to real work projects in the work environment.

## Technical Competencies

* **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.
* **Reviews software requirements** and specifications for software functionality and security and defines comprehensive tests and conditions.
* **Designs simple test** strategies for non-complex projects.
* **Analyses test requirements** and designs and prepares a test plan.
* **Designs and builds** test cases, test scripts, and test procedures, with expected results.
* **Develops and collects** representative and realistic test data.
* **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.
* **Accurately records** the outcomes of test activities and maintains accurate test records and reports.
* **Assesses test results** against expected results and acceptance criteria and through traceability to requirements.
* **Presents and communicates** results effectively using appropriate communication styles and media.
* **Operates** the organisation's software testing tools effectively and follows procedures and techniques correctly.
* **Complies** with relevant legislation and internal/external standards related to software testing and software security.
* **Advises and supports** others on testing processes and procedures.
* **Completes allocated tasks** in accordance with the organisation’s reporting and quality systems.
* **Operates** within **service level agreements.**

BCS have created a Standard Specific Guide for this standard and also provides Template 5 – Summative Portfolio Checklistwhich gives advice and guidance on what types of evidence are suitable for each of the above criteria, it also includes specific details of the minimum evidence requirements.

Please note, the apprenticeship standards are designed to cover a wide range of different job roles so there may be a small number of areas within these mandatory requirements that are not naturally occurring within the day-to-day duties of your apprentice. If the evidence in the portfolio is weak due to limited exposure within the day to day activities of the workplace, it is perfectly acceptable for you to second your apprentice to a different department for a period (at least a week) to allow them exposure to some activities that they may not come into contact with and to develop their competence in this area. If this is not possible or in addition, the project should be considered and selected to allow the apprentice to demonstrate that they are competent in those criteria and to provide the breadth and depth to meet the specified minimum requirements of the Occupational Brief. Please also note, the project is the only area within the submitted portfolio of evidence that does not draw from the real work environment.

**Section 2**

**Technical Competence Evaluation**

Please provide your evaluation of the technical competence of the apprentice using the tables below. Under each heading are details of the activities that a competent apprentice should be able to demonstrate by the time that they are judged ready, by you, your chosen training provider and the apprentice themselves, to apply for the EPA.

We strongly recommend that you continually review your apprentice against these competences throughout the duration of the apprenticeship and periodically update this document. A suitable time to add comments and evidence could be during your performance reviews (or similar) with your apprentice.

**Competence – Implements Software Testing**

**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.**

|  |
| --- |
| **How has your apprentice demonstrated competence in this area? (please give examples)**NOTE: this box will expand as required |

**Competence – Reviews Software Requirements**

**Reviews software requirements and specifications for software functionality and security and defines comprehensive tests and conditions.**

|  |
| --- |
| **How has your apprentice demonstrated competence in this area? (please give examples)**NOTE: this box will expand as required |

**Competence – Designs Simple Test**

**Designs simple test strategies for non-complex projects.**

|  |
| --- |
| **How has your apprentice demonstrated competence in this area? (please give examples)**NOTE: this box will expand as required |

**Competence – Analyses Test Requirements**

**Analyses test requirements and designs and prepares a test plan.**

|  |
| --- |
| **How has your apprentice demonstrated competence in this area? (please give examples)**NOTE: this box will expand as required |

**Competence – Designs and Builds**

**Designs and builds test cases, test scripts, and test procedures, with expected results.**

|  |
| --- |
| **How has your apprentice demonstrated competence in this area? (please give examples)**NOTE: this box will expand as required  |

**Competence – Develops and Collects**

**Develops and collects representative and realistic test data.**

|  |
| --- |
| **How has your apprentice demonstrated competence in this area? (please give examples)**NOTE: this box will expand as required |

**Competence – Conducts a Range of Different Software Testing Types**

**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.**

|  |
| --- |
| **How has your apprentice demonstrated competence in this area? (please give examples)**NOTE: this box will expand as required |

**Competence – Accurately Records**

**Accurately records the outcomes of test activities and maintains accurate test records and reports.**

|  |
| --- |
| **How has your apprentice demonstrated competence in this area? (please give examples)**NOTE: this box will expand as required |

**Competence – Assesses Test Results**

**Assesses test results against expected results and acceptance criteria and through traceability to requirements.**

|  |
| --- |
| **How has your apprentice demonstrated competence in this area? (please give examples)**NOTE: this box will expand as required |

**Competence – Presents and Communicates**

**Presents and communicates results effectively using appropriate communication styles and media.**

|  |
| --- |
| **How has your apprentice demonstrated competence in this area? (please give examples)**NOTE: this box will expand as required |

**Competence – Operates**

**Operates the organisation's software testing tools effectively and follows procedures and techniques correctly.**

|  |
| --- |
| **How has your apprentice demonstrated competence in this area? (please give examples)**NOTE: this box will expand as required |

**Competence – Complies**

**Complies with relevant legislation and internal/external standards related to software testing and software security.**

|  |
| --- |
| **How has your apprentice demonstrated competence in this area? (please give examples)**NOTE: this box will expand as required |

**Competence – Advises and Supports**

**Advises and supports others on testing processes and procedures.**

|  |
| --- |
| **How has your apprentice demonstrated competence in this area? (please give examples)**NOTE: this box will expand as required |

**Competence – Completes Allocated Tasks**

**Completes allocated tasks in accordance with the organisation’s reporting and quality systems.**

|  |
| --- |
| **How has your apprentice demonstrated competence in this area? (please give examples)**NOTE: this box will expand as required |

**Competence – Operates to SLA**

**Operates within service level agreements.**

|  |
| --- |
| **How has your apprentice demonstrated competence in this area? (please give examples)**NOTE: this box will expand as required |

**Section 3**

**Behaviours, Business Skills and Level of Responsibility Evaluation**

Please provide an evaluation as to the level of responsibility of the apprentice you are providing a reference for using the tables below. Under each heading is a list of proficiencies that a competent apprentice should display.

**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 of client.**

|  |
| --- |
| **How has your apprentice demonstrated competence in these areas? (please give examples)****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 of client:**NOTE: this box will expand as required |

**Proficiency – Complexity**

* **Performs a range of work, sometimes complex and non-routine, in a variety of environments.**
* **Applies methodical approaches to issue definition and resolution.**
* **Undertakes all work in accordance with agreed safety, technical and quality standards, using appropriate methods and tools.**

|  |
| --- |
| **How has your apprentice demonstrated competence in this area? (please give examples)****Performs a range of work, sometimes complex and non-routine, in a variety of environments:****Applies methodical approaches to issue definition and resolution:****Undertakes all work in accordance with agreed safety, technical and quality standards, using appropriate methods and tools:**NOTE: this box will expand as required  |

**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.**

|  |
| --- |
| **How has your apprentice demonstrated competence in this area? (please give examples)****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:**NOTE: this box will expand as required  |

**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.**

|  |
| --- |
| **How has your apprentice demonstrated competence in this area? (please give examples)****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:**NOTE: this box will expand as required |

**Overall Impressions and Constructive Feedback**

This section is an opportunity for you to provide written feedback outside the rigid competency structure.

It is a free text field to allow you to share general thoughts on the apprentice’s performance in case you were unable to say everything you wanted to say using the structured template.

For example, you may want to highlight some of the areas where you have not been able to give the apprentice the exposure they would have liked.

We would welcome any general constructive development advice you may wish to give.

|  |
| --- |
| NOTE: this box will expand as required |

## Please accept our sincere thanks for the support that you have provided to your apprentice.