

Assignment front sheet

Qualification		Unit number and title			
Pearson BTEC Higher Nationals in Computing and Systems Development		Unit 21 Software Applications Testing			
Student name		Assessor name			
		Dr Derek Peacock			
Date issued	Completion date	Submitted on			
18th April 2017	Fri 28 th May 2017				
Assignment title		Assignment 1: Application Testing			
O	Learning outcome (LO)	AC	In this assessment you will have the opportunity to present evidence that shows you are able to:	Task no	Evidence
U21 LO 1	Understand the principles of software application testing	1.1	evaluate testing techniques applicable to the testing opportunity	1	Report
		1.2	compare the relative benefits of different testing methodologies	1	Report
		1.3	justify a proposed testing methodology	1	Report
U21 LO 2	Be able to design test strategies	2.1	design a test strategy for a given testing opportunity	2	Report
		2.2	design a test plan for a given testing opportunity	3	Web page
		2.3	justify the test plan proposition and testing strategy	3	Report

Learner declaration

I certify that the work submitted for this assignment is my own and research sources are fully acknowledged.

Student signature:

Date:

In addition to the above PASS criteria, this assignment gives you the opportunity to submit evidence in order to achieve the following MERIT and DISTINCTION grades

Grade Descriptor	Indicative characteristic/s	Contextualisation
M1 Identify and apply strategies to find appropriate solutions	effective judgements have been made	<i>The detailed test plan produced on schedule that contains suitable tests for all the features of the web pages to be tested.</i>
M2 Select/design and apply appropriate methods/techniques	a range of sources of information has been used	<i>A thorough evaluation of testing methods with a comprehensive comparison of methods.</i>
M3 Present and communicate appropriate findings	a range of methods of presentation have been used and technical language has been accurately used	<i>The evaluation and comparison of methods uses technical language well, and clearly identifies the strengths and weaknesses of each method</i>
D1 Use critical reflection to evaluate own work and justify valid conclusions	conclusions have been arrived at through synthesis of ideas and have been justified	<i>The testing strategy and the test plan have been clearly justified.</i>
D2 Take responsibility for managing and organising activities	Effective planning, organising and managing of individual tasks	<i>A detailed project plan has been created showing the proposed sequence of implementation and testing with target dates and tasks assigned to appropriate people.</i>
D3 Demonstrate convergent/lateral/creative thinking	ideas have been generated and decisions taken	<i>The testing strategy, the test plan and the project plan are all consistent and justified</i>

Assignment brief

Unit number and title	Unit 21 Software Applications Testing
Qualification	Pearson BTEC Higher Nationals in Computing and Systems Development
Start date	
Deadline/hand-in	
Assessor	Dr Derek Peacock

Assignment title	Assignment 1: Application Testing
Purpose of this assignment To provide learners with an understanding of the principles of software applications testing as an essential element in the development of commercial applications for delivery to customers.	
Scenario Valerian Software is a small software development firm newly established that is looking to develop novel dynamic interactive websites that make use of modern web development best practices. You have been recently appointed as a trainee web developer and you are required as part of your job to complete an on-going CPD program which will last two years. You have been asked to survey available testing methods and select the best methods for testing your ASP.NET Web Forms or MVC website.	
Task 1 (AC 1.1, 1.2 and 1.3) Evaluate the following testing techniques suitable for testing your teams ASP.NET e-commerce website implementation. <ul style="list-style-type: none">• Black box testing• White box testing• Test Driven Development• Performance Testing• Security Testing• Design/Code Reviews• Usability/acceptance testing• System Testing• Integration Testing• Unit Testing Compare the relative benefits of different testing methodologies, and select the methods that you will use to test your team's e-commerce website. Justify your choice of testing methods.	
Task 2 (AC 2.1) Document a proposed testing strategy, who will do which testing method, when the testing will be done, how issues will be documented and updated and re-tested.	

Task 3 (LO2.2, LO2.3)

Design a detailed test plan as web pages in your ASP.NET e-commerce website. Justify the proposed test strategy and test plan

Evidence checklist	Summary of evidence required by student	Evidence presented
Task 1	An evaluation of the 10 test methods, a comparison of those methods and a justification for the methods selected (select at least 4). The report should be between 1,000 and 2,000 words	
Task 2	A documented testing strategy including which method will be used, when it will be used, who will use it and how issues will be recorded	
Task 3	Detailed test plans with suitable well defined tests and a justification for the test plan and the test strategy. The justification should be at least 500 words.	

Achievement Summary

Qualification	Pearson BTEC Higher Nationals in Computing and Systems Development	Assessor name	Dr Derek Peacock
Unit Number and title	Unit 42: Programming in .NET Unit	Student name	
Criteria Reference	To achieve the criteria the evidence must show that the student is able to:	Achieved ? (tick)	
U21-1.1	evaluate testing techniques applicable to the testing opportunity		
U21-1.2	compare the relative benefits of different testing methodologies		
U21-1.3	justify a proposed testing methodology		
U21-2.1	design a test strategy for a given testing opportunity		
U21-2.2	design a test plan for a given testing opportunity		
U21-2.3	justify the test plan proposition and testing strategy		
Higher Grade achievements (where applicable)			
Grade descriptor	Achieved? (tick)	Grade descriptor	Achieved? (tick)
M1: Identify and apply strategies to find appropriate solutions		D1: Use critical reflection to evaluate own work and justify valid conclusions	
M2: Select / design and apply appropriate methods / techniques		D2: Take responsibility for managing and organising activities	
M3: Present and communicate appropriate findings		D3: Demonstrate convergent /lateral / creative thinking	

Assignment Feedback

Formative Feedback: Assessor to Student

Action Plan

Summative feedback

Feedback: Student to Assessor

Assessor Signature

Date

Student Signature

Date