

Digital Technologies

Learner Name	
Course	Pearson BTEC Higher National Certificate in Computing
Awarding Body	BTEC (Pearson)
Module Name(s)	Unit 2 – Networking (2019 rev)
Assignment Title & Number	Assignment 2 of 2
Assessor's Name	John Terry
Hand out Date	2 nd April 2020
Hand in Date	21 st May 2020
Feedback Date	+3 weeks

Assessment Brief IQA by: (Name & Signature)		Assessment Brief sample by Lead IQA: (Name & Signature)	
Date:	??/??/2020	Date	
Specific outcomes and criteria being assessed			
Module	Grading Criteria	Description	
2	P5 (LO3)	Design a networked system to meet a given specification.	
2	P6 (LO3)	Test and evaluate the design to meet the requirements and analyse user feedback.	
2	M3 (LO3)	Install and configure network services and applications on your choice.	
2	D2 (LO3)	Design a maintenance schedule to support the networked system.	
2	P7 (LO4)	Implement a networked system based on a prepared design.	
2	P8 (LO4)	Document and analyse test results against expected results.	
2	M4 (LO4)	Recommend potential enhancements for the networked systems.	
2	D3 (LO4)	Use critical reflection to evaluate own work and justify valid conclusions.	

English, maths and other Skills for Success covered in this assignment	English Written reports and presentations.	Maths -	Skills for Success Describing and explaining concepts
Learner submission sampled by IQA: (Name and signature)		Learner submission sampled by Lead IQA: (Name and signature)	
Date		Date	

COPYING DISCLAIMER

I confirm that all the work contained in this assignment, being presented for assessment, is my own work.

I also confirm that I have not copied this work from other people's papers, electronically from their disk, from textbooks, CD ROM or from the Internet.

I also understand that if I hand in an assignment that has work in it that has been copied, this will be subject to disciplinary action and may cause me to lose my place on the course.

Student Signature:		Date:	
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Assessor declaration	I certify that the evidence submitted for this assignment is the learner's own. The learner has clearly referenced any sources used in the work. I understand that false declaration is a form of malpractice.		
Assessor signature	John Terry	Date	
Date of feedback to learner			
Resubmission authorisation by Lead Internal Quality Assurer*		Date	
<p>* All resubmissions must be authorised by the Lead Internal Verifier. Only one resubmission is possible per assignment, providing:</p> <ul style="list-style-type: none">• The learner has met initial deadlines set in the assignment, or has met an agreed deadline extension.• The tutor considers that the learner will be able to provide improved evidence without further guidance.• Evidence submitted for assessment has been authenticated and accompanied by a signed and dated declaration of authenticity by the learner. <p>** Any resubmission evidence must be submitted within 10 working days of receipt of results of assessment.</p>			

Vocational Scenario

You are managing the network setup and configuration for a small chain of estate agents in the Milton Keynes area called MK Agents. They have one main branch and currently have 3 smaller branches, one near the edge of Milton Keynes and two in surrounding villages.

Task 1	Grading Criteria Covered: Unit 2: P5 (LO3) Design a networked system to meet a given specification.
Evidence Required	A 1.5-2 page report submitted as a Word or PDF document.
<p>MK Agents currently use a client-server approach within their offices, however they do have cloud services from Microsoft (Office 365) in order to create documents and collaborate within the organisation. They have a main domain controller and web server which have been virtualised in the head office to run from one machine.</p> <p>Show your design for the network that includes the main branch and the three smaller branches along with the equipment held at each site and your IP addressing plan for the sites. Include servers, desktop machines, laptops, switches, routers, Wireless APs, connections and any other hardware required along with configurations required for each item of hardware. You can use Packet Tracer to complete your design and present the result in a Word/PDF document.</p>	

Task 2	Grading Criteria Covered: Unit 2: P6 (LO3) Test and evaluate the design to meet the requirements and analyse user feedback.
Evidence Required	Illustrated Report
<p>Create a test plan in order to test your design above.</p> <p>Use the simulation mode in Packet Tracer to show that the different devices are contactable from different sites and that any services can be used from all locations.</p> <p>Create a report that includes screen shots showing successful connections / service use.</p> <p>Finally, include feedback on your design from one of your peers who will role-play as a user.</p>	

Task 3	Grading Criteria Covered: Unit 2: P7 (LO4) Implement a networked system based on a prepared design. Unit 2: M3 (LO3) Install and configure network services and applications on your choice.
Evidence Required	2-3 page report showing photos of setup and configuration along with details of the hardware and software used plus any configuration carried out.
<p>You have designed a network for MK Agents. You have been asked, along with a colleague, to demonstrate part of that network.</p> <p>With your choice of hardware and software, implement (install and configure) a networked system and services/applications that include:</p> <ul style="list-style-type: none"> • At least two machines – one client and one server. • Use of two routers and switches to simulate two different sites with associated cables. • Your choice of operating system and web server, set up and configured. 	

Task 4	Grading Criteria Covered: Unit 2: P8 (LO4) Document and analyse test results against expected results.
Evidence Required	1.5-2 page test plan and report with additional illustrations showing results.
<p>You have been asked to individually test the network to give the broadest range of tests possible.</p> <p>Create a test plan with at least 15 different tests and document and analyse the results of your network testing against the results you expected.</p>	

Task 5	Grading Criteria Covered: Unit 2: D2 (LO3) Design a maintenance schedule to support the networked system.
Evidence Required	1-2 page maintenance schedule document (Word/PDF)
<p>You should now create a maintenance schedule to support the system that you originally designed (i.e. NOT the small test network that you implemented for task 3 – although this could form part of the overall design).</p>	

Task 6	Grading Criteria Covered: Unit 2: M4 (LO4) Recommend potential enhancements for the networked systems. Unit 2: D3 (LO4) Use critical reflection to evaluate own work and justify valid conclusions.
Evidence Required	3-4 page document (Word/PDF)
<p>Finally, you have been asked to reflect on your design. Is there anything you would do to improve the network?</p> <p>Also, you should use critical reflection to evaluate your own work, both the design and practical work, and justify any conclusions you come to about what you have produced and the way you went about it.</p>	

Feedback

Module Number	Criteria included in this assessment		Met or Not Met	Comments
Task 1				
2	P5 (LO3)	Design a networked system to meet a given specification.		
Task 2				
2	P6 (LO3)	Test and evaluate the design to meet the requirements and analyse user feedback.		
Task 3				
2	P7 (LO4)	Implement a networked system based on a prepared design.		
2	M3 (LO3)	Install and configure network services and applications on your choice.		
Task 4				
2	P8 (LO4)	Document and analyse test results against expected results.		
Task 5				
2	D2 (LO3)	Design a maintenance schedule to support the networked system.		
Task 6				
2	M4 (LO4)	Recommend potential enhancements for the networked systems.		
2	D3 (LO4)	Use critical reflection to evaluate own work and justify valid conclusions.		
Assessor's Feedback				
<p>What Went Well?</p> <p>Even Better If...</p> <p>SPaG & Maths Feedback</p>				
Assessor Signature:			Date:	
Student Signature:			Date:	

Student's Target (Student to complete from feedback)	
<p><i>Using the feedback provided, consider how you will improve the quality of your assessed work and identify targets to achieve this.</i></p>	
Signature:	Date: