Digital Technologies

Learner Name	
Course	Pearson BTEC Higher National Certificate in Computing
Awarding Body	BTEC (Pearson)
Module Name(s)	Unit 9 – Software Development Lifecycles (2019 rev)
Assignment Title & Number	Assignment 1 of 2
Assessor's Name	John Terry
Hand out Date	W/C 23rd September 2019
Hand in Date	15th November 2019
Feedback Date	+3 weeks

Assessment Brief IQA by: *(Name & Signature)*	Dan Purdy 	**Assessment Brief sample by Lead IQA: *(Name & Signature)***	
Date:	16/09/2019	**Date**	

Specific outcomes and criteria being assessed

Module	Grading Criteria	Description
9	P1 (LO1)	Describe two iterative and two sequential software lifecycle models.
9	P2 (LO1)	Explain how risk is managed in these models.
9	M1 (LO1)	Discuss, with an example, why a particular lifecycle model is selected for a development environment.
9	D1 (LO1)	Assess the merits of applying the Waterfall lifecycle model to a large software development project.
9	P3 (LO2)	Explain the purpose of a feasibility report.
9	P4 (LO2)	Describe how technical solutions can be compared.
9	M2 (LO2)	Discuss the components of a feasibility report.
9	D2 (LO2)	Assess the impact of different feasibility criteria on a software investigation.

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**	

Transforming Lives Through Learning

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:**	

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**	

* All resubmissions must be authorised by the Lead Internal Verifier. Only one resubmission is possible per assignment, providing:

- 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.

**Any resubmission evidence must be submitted within 10 working days of receipt of results of assessment.

Vocational Scenario

You have recently started working for MKCoding Solutions Ltd – a small software development firm based in Milton Keynes. MKCoding provide bespoke solutions to local business and even nationally if required.

Task 1	**Grading Criteria Covered:** Unit 9: P1 (L01) Describe two iterative and two sequential software lifecycle models.
Evidence Required	Report

As part of your induction activities, MKCoding have asked you to work on a 2 page descriptive piece that details two iterative and two sequential software lifecycle models.

You should create a report that gives the following:

- The name of each model
- A description of each model
- An illustration that helps to explain how the model works

For this report, please reference any illustration you have used with Harvard referencing.

Task 2	**Grading Criteria Covered:** Unit 9: P2 (L01) Explain how risk is managed in these models. Unit 9: M1 (L01) Discuss, with an example, why a particular lifecycle model is selected for a development environment.
Evidence Required	Report Document

MKCoding have been asked to pitch for the contract to create a new system for a national chain of Estate Agents to help manage all of their business activities. Visual Studio (ASP.net and C#.net) is being considered as the development environment to create an intranet-based solution. It has been suggested that the Spiral model may be an approach to consider.

Before the final decision is made regarding which lifecycle model will be used, management have asked you to put together a paper that gives the following details:

- An explanation about how risk is managed within the models you described in Task 1.
- A description about why the Spiral Model would be an appropriate selection to use in managing this project, which will involve a mixture of intranet applications and desktop applications to be created in Visual Studio and linking to a SQL database back-end.

Task 3	**Grading Criteria Covered:** Unit 9: D1 (LO1) Assess the merits of applying the Waterfall lifecycle model to a large software development project.
Evidence Required	Assessment Report

With reference to case studies you have been provided with or found online, assess the merits of applying the Waterfall lifecycle model to a large software development project.

Ensure that you reference sources fully using Harvard Referencing.

Task 4	**Grading Criteria Covered:** Unit 9: P3 (LO2) Explain the purpose of a feasibility report. Unit 9: M2 (LO2) Discuss the components of a feasibility report.
Evidence Required	Presentation with Speaker's Notes

You have been asked to create a presentation with speaker's notes in order to explain to your customers what the feasibility report stage of your project lifecycle is all about.

Explain the purpose of a feasibility report across a number of slides. Use illustrations where appropriate.

Include details on the slides about the components of a feasibility report. Give your detail in the speaker's notes. Give any references on a final slide.

Task 5	**Grading Criteria Covered:** Unit 9: D2 (LO2) Assess the impact of different feasibility criteria on a software investigation.
Evidence Required	Assessment Report

A feasibility report will cover a range of different criteria such as legal issues, social, technical, timescales etc. Give your assessment of how each of these feasibility criteria can impact a software investigation.

Task 6	**Grading Criteria Covered:** Unit 9: P4 (LO2) Describe how technical solutions can be compared.
Evidence Required	Assessment Report

Provide a document that can be added to your company documentation library that describes how the technical solutions researched as part of a feasibility study can be compared.

Feedback

Module Number	Criteria included in this assessment		Met or Not Met	Comments
Task 1				
1	P1 (L01)	Describe two iterative and two sequential software lifecycle models.		
Task 2				
1	P2 (LO1)	Explain how risk is managed in these models.		
	M1 (LO1)	Discuss, with an example, why a particular lifecycle model is selected for a development environment.		
Task 3				
1	D1 (LO1)	Assess the merits of applying the Waterfall lifecycle model to a large software development project.		
Task 4				
1	P3 (LO2)	Explain the purpose of a feasibility report.		
	M2 (LO2)	Discuss the components of a feasibility report.		
Task 5				
1	D2 (LO2)	Assess the impact of different feasibility criteria on a software investigation.		
Task 6				
1	P4 (LO2)	Describe how technical solutions can be compared.		

Assessor's Feedback	
What Went Well? **Even Better If…** **SPaG & Maths Feedback**	
Assessor Signature:	**Date:**
Student Signature:	**Date:**

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