

Assignment front sheet

Qualification		Unit number and title	
Pearson BTEC Higher Nationals in Computing and Systems Development		Unit 3: Employability and Professional Development	
Student name		Assessor name	
		Dr Laura Marulanda-Carter	
Date issued	Completion date	Submitted on	
9 th May 2017	13 th June 2017		

Assignment title	03-3: Problem Solving
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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
LO 4	Be able to develop strategies for problem solving	4.1	Review tools and methods for developing solutions to problems	1	
		4.2	Develop an appropriate strategy for resolving a particular problem	1	
		4.3	Evaluate the potential impact on the business of implementing the strategy	1	

Learner declaration	
<p>I certify that the work submitted for this assignment is my own and research sources are fully acknowledged.</p> <p>Student signature: _____ Date: _____</p>	

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

Grade Descriptor	Indicative characteristic/s	Contextualisation
M1 Identify and apply strategies to find appropriate solutions	Not in this assessment	
M2 Select/design and apply appropriate methods/techniques	Not in this assessment	
M3 Present and communicate appropriate findings	Not in this assessment	
D1 Use critical reflection to evaluate own work and justify valid conclusions	Not in this assessment	
D2 Take responsibility for managing and organising activities	Not in this assessment	
D3 Demonstrate convergent/lateral/creative thinking	Not in this assessment	

Assignment brief

Unit number and title	Unit 3: Employability and Professional Development
Qualification	Pearson BTEC Higher Nationals in Computing and Systems Development
Start date	09/05/17
Deadline/hand-in	13/06/17
Assessor	Dr Laura Marulanda-Carter

Assignment title	A03-3: Problem Solving
Purpose of this assignment To provide learners with the opportunity to acquire employability skills required for effective employment and to manage their own personal and professional development. The objective of this work is to understand the development strategies for problem solving that shape business activities.	
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. There are six members of the team who are all adept at dealing with the many and varied problems associated with conducting surveys, such as designing the necessary computer software, briefing interviewers, etc. The company hires interviewers for its surveys and the six permanent staff never carry out interviews themselves. Recently, the company was asked to conduct a market research survey for an online project management system update, which they had first released onto the market in 2010. The details of the activities which the survey will involve are given below. Activity A: Design a survey (6 weeks – 5 staff per week) Activity B: Proof read & print questionnaire (2 weeks – 1 staff per week). Starts after A. Activity C: Engage interviewers (2 weeks – 3 staff per week). Starts after A Activity D: Prepare interviewer sheets (1 week – 1 staff per week). Starts after A. Activity E: Set up computer software (2 weeks – 2 staff per week). Starts after A. Activity F: Brief interviewers (1 week – 2 staff per week). Starts after C and D. Activity G: Test computer software (1 week – 2 staff per week). Starts after E. Activity H: Supervise field work (5 weeks – 4 staff per week). Starts after B and F. Activity I: Analyse results (3 weeks – 5 staff per week). Starts after G and H. Activity J: Prepare report (2 weeks – 5 staff per week). Starts after I.	

Task 1 – Review strategies for problem solving (AC 4.1)

Review tools and methods such as timescale, stages, resources and critical path analysis for developing solutions to the problem, i.e. completing the IT survey for all levels of end users within the time set at Valerian Software.

Task 2 – Develop strategies for problem solving (AC 4.2)

Develop an appropriate strategy (using appropriate tools) for resolving the problem, as stated below, and explained in the case study. You have been appointed as the IT Project Manager for this project and, despite that fact that the survey is dependent on staff availability, you are required to:

1. Determine the maximum number of weeks this project will take to complete.
2. Determine the number of staff floats for each week.
3. Calculate the number of permanent staff (i.e. excluding interviewers) who will be required for each week of the project, assuming that each activity starts as early as possible.
4. Given the number of staff required, can the project be completed in the time calculated above?
5. If one member of staff is ill from weeks 7 to 14, would the completion of the survey be delayed?

Task 3 – Reflection of solution (AC 4.3)

Finally, you should evaluate whether the problem was solved or not; measure the solution against the specification and desired outcomes, i.e. completing the IT survey for all levels of end users within the time set at Valerian Software.

Evidence checklist	Summary of evidence required by student	Evidence presented
Task 1	A report that summarises your review of tools and methods considered to develop solution (max. word count 1500).	
Task 2	A project plan that identifies a solution to the problem, including responses for each enquiry (max. word count 1000).	
Task 3	A reflective account that summarises how your problem was solved/not solved (max. word count 1000).	

Achievement Summary

Qualification	Pearson BTEC Higher Nationals in Computing and Systems Development	Assessor name	Dr Laura Marulanda-Carter
Unit Number and title	Unit 3: Employability and Professional Development	Student name	
Criteria Reference	To achieve the criteria the evidence must show that the student is able to:	Achieved ? (tick)	
4.1	Review tools and methods for developing solutions to problems		
4.2	Develop an appropriate strategy for resolving a particular problem		
4.3	Evaluate the potential impact on the business of implementing the strategy		
Higher Grade achievements (where applicable)			
Grade descriptor	Achieved? (tick)	Grade descriptor	Achieved ? (tick)
M1: Identify and apply strategies to find appropriate solutions	Not Available	D1: Use critical reflection to evaluate own work and justify valid conclusions	Not Available
M2: Select/design and apply appropriate methods/techniques	Not Available	D2: Take responsibility for managing and organising activities	Not Available
M3: Present and communicate appropriate findings	Not Available	D3: Demonstrate convergent/lateral/ creative thinking	Not Available

Assignment Feedback

Formative Feedback: Assessor to Student

Action Plan

Summative feedback

Feedback: Student to Assessor

**Assessor
Signature**

Date

**Student
Signature**

Date