Assignment front sheet

Qualification		Unit number and title	
Pearson BTEC Higher Nationals in Computing and Systems Development		Unit 33: Data Analysis and Design	
Student name		**Assessor name**	
		Dr Derek Peacock	
Date issued	**Completion date**	**Submitted on**	

Assignment title	Assignment 1: .Database Queries

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 3	Be able to use manipulation and querying tools	3.1	explain the benefits of using manipulation and query tools in a relational database system	1	
		3.3	critically evaluate how meaningful data has been extracted through the use of query tools	1	
LO4	Be able to test and document relational database systems	4.5	explain how control mechanisms have been used	2	

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	complex problems with more than one variable have been explored	
M2 Select/design and apply appropriate methods/techniques	a range of methods and techniques have been applied	
M3 Present and communicate appropriate findings	the appropriate structure and approach has been used	
D1 Use critical reflection to evaluate own work and justify valid conclusions	Self-criticism of approach has taken place	
D2 Take responsibility for managing and organising activities	autonomy/independence has been demonstrated	
D3 Demonstrate convergent/lateral/ creative thinking	innovation and creative thought have been applied	

Assignment brief

Unit number and title	Unit 33: Data Analysis and Design
Qualification	Pearson BTEC Higher Nationals in Computing and Systems Development
Start date	
Deadline/hand-in	
Assessor	Dr Derek Peacock

Assignment title	Assignment 1: .Database Queries

Purpose of this assignment

This assignment will show the importance of structured query languages, in terms of how they can be used to manipulate data and how they are used for a variety of tasks including querying and report writing

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 investigate alternative ways of creating database queries that can be used as a basis for producing various kinds of reports. You have also been asked to explain the use of control mechanisms

Task 1 (LO3.1, LO3.3)

You have been asked to create an example of creating database queries using SQL stored procedures, SQL Queries in C# code, the query builder in Web Forms, and the LINQ language in MVC or Web Forms

Critically evaluate these tools and explain their advantages and disadvantages

Task 2 (LO4.5)

Explain TQM (Total Quality Management) and how it has been used in the current projects. Discuss how it could be used more fully, in particular in sign off procedures.

Evidence checklist	Summary of evidence required by student	Evidence presented
Task 1	Web Pages containing the advantages and disadvantages of four query tools.	
Task 2	Web Pages containing a discussion of TQM.	

Achievement Summary

Qualification	Pearson BTEC Higher Nationals in Computing and Systems Development	Assessor name	Dr Derek Peacock
Unit Number and title	Unit 33: Data Analysis and Design	**Student name**	

Criteria Reference	To achieve the criteria the evidence must show that the student is able to:	Achieved? (tick)
LO3.1	explain the benefits of using manipulation and query tools in a relational database system	
LO3.3	critically evaluate how meaningful data has been extracted through the use of query tools	
LO4.5	explain how control mechanisms have been used	

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	