Assignment front sheet

Qualification		Unit number and title	
Pearson BTEC Higher Nationals in Computing and Systems Development		Unit 42: Programming in .NET	

Student name		Assessor name	
		Dr Derek Peacock	

Date issued		Completion date		Submitted on
11th May 2017		9th June 2017		

Assignment title	Assignment 2: ASP.NET Programming

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
U42 LO 3	Be able to implement .NET solutions	3.1	implement a .NET programming solution based on a prepared design	1	Web Pages
		3.2	implement event handling using control structures to meet the design algorithms	1	C# or JavaScript code
		3.3	identify and implement opportunities for error handling and reporting	1	Client side and server side validation
		3.4	make effective use of an Integrated Development Environment (IDE) including code and screen templates	1	MVC Scafolding or Data Controls

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	*Web pages and code pages produced on schedule that provide an easy to use interface, and that perform client side data validation well*
M2 Select/design and apply appropriate methods/techniques	a range of methods and techniques have been applied	*Web pages and code pages that embody the specified principles of good coding practice.*
M3 Present and communicate appropriate findings	the appropriate structure and approach has been used	*Web pages and code pages that are well commented, structured and formatted so that they match the agreed house style*
D1 Use critical reflection to evaluate own work and justify valid conclusions	Self-criticism of approach has taken place	*An evaluation of the design and its implementation with suggestions for improvement*
D2 Take responsibility for managing and organising activities	Activities have been managed	*A project plan with all the activities scheduled, updated and the deliverables completed by the agreed deadline.*
D3 Demonstrate convergent/lateral/ creative thinking	innovation and creative thought have been applied	*The web page produced that contains ideas of features or improvements that clearly show innovation or creativity*

Assignment brief

Unit number and title	Unit 42: Programming in .NET
Qualification	Pearson BTEC Higher Nationals in Computing and Systems Development
Start date	
Deadline/hand-in	
Assessor	Dr Derek Peacock

Assignment title	Assignment 2: ASP.NET Programming

Purpose of this assignment

To provide learners with an understanding of the principles of programming using a .NET Framework as an underpinning technological concept in the fields of programming and systems development. This assignment will provide an opportunity to create an application using the latest version Visual Studio and C#.NET

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.

Your team has been given the job of implementing part of the approved design for an e-commerce application using ASP.NET

Task 1

AC 3.1: Each member of the team should create back-end web pages that add, edit, delete view and list one or two entities in the application, and at least 8 attributes. The implementations should be based on an approved E-R design that is in third normal form or better.

AC 3.2: Add queries and code to extract the data required from the database and check data validation.

AC3.3: These pages should have code added that implements event handling, error handling and reporting.

AC3.4: Each team member should also create at least one public dynamic front end page for the application that uses data from the database.

Evidence checklist	Summary of evidence required by student	Evidence presented
Task 1	Web pages that allow authorised staff to add, edit, remove, display and list an entity with at least 8 attributes containing at least four different data types Please include:- • Explanation of MVC Scaffolding and Routing • Screen shots of 5 web CRUD and Index pages • Commented C# Code for Model and Controller • CSHTML Code for 5 Views • Database Migrations Code • Database Seed Code • jQuery Validate Code (sample) with explanation of how this code is applied through bootstrap	
	For Merit **M1:** Good data validation, and suggested improvements where the data validation can be improved **M2:** Separation of concerns, no unnecessary duplication, good use of HTML5 and Boostrap css and JavaScript **M3:** C# and HTML code that is formatted to an acceptable standard with appropriate use of names and C# code suitably commented	
	For Distinction **D1:** A critical evaluation of MVC code first migrations and scaffolding **D2:** A team project plan with all the tasks identified, allocated to individual team members, with suitable dependencies and updated at appropriate times **D3:** The standard scaffolding code has been modified in a way that shows innovative improvements in the way the CRUD pages work. Alternatively, modifications to any of the e-commerce web pages that shows creative and innovative though has been applied.	

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)
U42-3.1	implement a .NET programming solution based on a prepared design	
U42-3.2	implement event handling using control structures to meet the design algorithms	
U42-3.3	implement event handling using control structures to meet the design algorithms	
U42-3.4	make effective use of an Integrated Development Environment (IDE) including	

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	