Assignment front sheet

Qualification		Unit number and title	
Pearson BTEC Higher Nationals in Computing and Systems Development		Unit 10 HCI Unit 14: Web Site Design	
Student name		**Assessor name**	
		Dr Derek Peacock	
Date issued	**Completion date**	**Submitted on**	
6th October 2016	15th December 2016		

Assignment title		A14.1: Web Site Design			
Unit & LO	**Learning outcome (LO)**	**AC**	**In this assessment you will have the opportunity to present evidence that shows you are able to:**	**Task no.**	**Evidence (Page No)**
U10 LO 3	Be able to develop a human computer interface	3.1	design and create a human computer interface for a specified application	2	
		3.2	explain the principles that have been applied to the design	1	
U14 LO 1	Be able to design interactive websites	1.1	discuss the design concepts that have to be considered when designing a website	1	
U14 LO 2	Be able to design interactive websites	2.1	design an interactive website to meet given requirements	2	
		2.2	Evaluate website design with other users.	3	

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	Effective judgements have been made	*The design needs to be in line with currently recognised good practice for website usability, accessibility and overall layout, structure and appearance and produced on schedule.*
M2 Select/design and apply appropriate methods/techniques	Relevant theories and techniques have been applied	*A design that shows a good application of HCI design principles and modern responsive web design*
M3 Present and communicate appropriate findings	Coherent, logical development of principles/concepts for the intended audience	*The design review of the website clearly shows that people find the site attractive and easy to understand as judged by a survey.*
D1 Use critical reflection to evaluate own work and justify valid conclusions	Self-criticism of approach has taken place	*Individual or team blog posts showing critical evaluation of planning, organisation, tools used, techniques followed and the products produced*
D2 Take responsibility for managing and organising activities	Effective planning, organising and managing of individual tasks	*A detailed plan has been produced and continuously updated showing individual task allocation and completion on schedule*
D3 Demonstrate convergent/lateral/ creative thinking	Innovation and creative thought has been applied	*Web pages have been produced that show creative thought or new ideas*

Assignment brief

Unit number and title	Unit 1 Business Skills for e-Commerce Unit 10 HCI, Unit 14: Website Design
Qualification	Pearson BTEC Higher Nationals in Computing and Systems Development
Start date	
Deadline/hand-in	
Assessor	Dr Derek Peacock

Assignment title	A14.1: Designing and Developing a Web Site

Purpose of this assignment

The purpose of this assignment is to provide students with the opportunities to design a real modern e-commerce application and in the process use a professional Business Analysis and Design tool Visual Paradigm (http://www.visual-paradigm.com/). This tool is used by NASA, Adobe, Apple and Intel.

This assignment also provides opportunities to design a full human computer interface which embodies best principles and practice with an online tool (https://moqups.com/) which is used by BBC, Microsoft and Amazon.

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.

Valerian Software (http://valeriansoftware.com/) designed and developed an online project management system which it released onto the market in 2010. You are asked to join a small team that will design a new version which can compete against the market leaders that include Basecamp (https://basecamp.com/). Customers of Basecamp include Adidas, twitter, Nike, National Geographic and DHL.

There however many other potential e-commerce applications, and your team can propose an alternative web based e-commerce application. It will however have to be viable in the timescale, and utilise a similar skill set as the proposed application. You will need your manager's approval for any alternative application.

Task 1: (U14 AC 1.1, U10 AC 3.2)

Your manager would like you to document the design concepts that you will consider in designing web pages. These should include considering different users, analysis of the purpose of the site, accessibility, functionality navigation and the ASP.NET environment.

You have also been asked to explain the HCI principles that you have applied to the design of your web pages. This should include task analysis, user needs, performance, online help, consistency, simplicity, tolerance, user feedback, and ergonomics.

Please illustrate your approach with selected examples.

Task 2: (U14 AC 2.1, U10 AC 3.1)

As a team create a shared project plan and select and summarise the features and functionality of the website by creating a shared Use Case Diagram. Document each use case with a specification. Each member of the team must complete at least three Use Case Specification

Plan and design a suitable web based interface for an e-commerce application that includes the following features

- Standard menu system with a Contact Us, About Us and Help pages

- At least nine features (Use Cases) in total where each member of the team designs the HCI for three features.

- Pages should include images, headings, well formatted text, multiple columns, lists, buttons and hyperlinks.

- Each page design should have versions of the page for using on a mobile phone and a tablet.

Each member of the team should include in the design feature that use JavaScript to enhance usability. The interface should be designed using mock-ups, story boards, mood boards or wire frames. There should be a suggested colour scheme, and a selection of fonts.

Task 3 (U14 AC 2.2)

As a team design an online survey on your completed design. The questions should assess accessibility, navigation, website identity and content. The survey should be completed by at least ten people who are not part of your team.

Hold a design review meeting in which all the development team are present, together with at least three people outside the team. Evaluate the website design using the results of the survey

Make a note of all feedback in two lists. Features of the design that are liked by users and features of the design that could be improved together with suggested improvements.

Evidence checklist	Summary of evidence required by student	Evidence presented
Task 1	An individual web page in your e-portfolio discussing HCI principles and .design concepts.	
Task 2	A UML analysis or requirements in Visual Paradigm with a Use Case Diagram and use case specifications for each main use case.	
Task 2	Sketches, Wireframes, story boards or mock-ups of the user interface for the proposed web pages that match the use case specifications.	
Task 3	A completed online survey on the proposed design and a team evaluation of the proposed design which lists all the good features and all the suggested improvements	

Achievement Summary

Qualification	Pearson BTEC Higher Nationals in Computing and Systems Development	Assessor name	Dr Derek Peacock
Unit Number and title	Unit 10 HCI Unit 14: Website Design	**Student name**	

Criteria Reference	To achieve the criteria the evidence must show that the student is able to:	Achieved? (tick)
U14 AC 2.1	Design an interactive website to meet the given requirement	
U14 AC 2.2	evaluate website design with other users	
U14 AC 1.1	discuss the design concepts that have to be considered when designing a website	
U10 AC 3.1	design and create a human computer interface for a specified application	
U10 AC 3.2	explain the principles that have been applied to the design	

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	