

# Pearson Higher Nationals in Computing

## ASSIGNMENT 1

### Unit 10: Website Design & Development

#### Assignment Brief

Student Name/ID Number	
<b>Unit Number and Title</b>	<b>10: Website Design &amp; Development</b>
Academic Year	<b>2017/2018</b>
Unit Tutor	<b>Scott Morgan</b>
<b>Assignment Title</b>	<b>Web Services Presentation and Guidebook</b>
<b>Issue Date</b>	<b>13th October 2017</b>
Submission Date	<b>1st December 2017</b> (Presentations will also take place on this date)
IV Name & Date	

## Submission Format

The submission is in the form of two documents/files:

1. A ten-minute slides presentation to be presented to your colleagues. The presentation can include links to performance data with additional speaker notes and a bibliography using the Harvard referencing system. The presentation slides for the findings should be submitted with speaker notes as one copy.
2. An extended guidebook **or** detailed report that provides more thorough, evaluated or critically reviewed technical information on all of the topics covered in the presentation.

You are required to make use of headings, paragraphs, subsections and illustrations as appropriate, and all work must be supported with research and referenced using the Harvard referencing system.

## Unit Learning Outcomes

LO1 Explain server technologies and management services associated with hosting and managing websites.

LO2 Categorise website technologies, tools and software used to develop websites.

## Assignment Brief and Guidance

You work as a full-stack web developer for a leading creative web solutions and marketing company. As part of your role, you have been asked to create an engaging presentation to help train junior staff members on the tools and techniques associated with front- and back-end development together with the technologies and services required to set up, host and manage a typical commercial website.

In addition to your presentation you should also provide an extended guidebook containing further information for junior staff members **or** a detailed report containing a technical review of the topics covered in the presentation.

### **Your presentation should include:**

1. Server technologies and the management services associated with hosting and managing websites (including search engine optimisation).
2. A review of different website technologies supported with the tools and software used to develop websites (including the differences between online website creation tools and custom built sites).

Your extended guidebook **or** detailed report should include a summary of your presentation as well as additional, evaluated or critically reviewed technical notes on all of the expected topics.

*Please review the subsequent grading criteria for more details on the expected elements and topics that need to be included.*

## Learning Outcomes and Assessment Criteria

Pass	Merit	Distinction
<p><b>LO1</b> Explain server technologies and management services associated with hosting and managing websites</p>		<p><b>LO1 &amp; 2</b> <b>D1</b> Justify the tools and techniques chosen to realise a custom built website.</p>
<p><b>P1</b> Identify the purpose and types of DNS, including explanations on how domain names are organised and managed.</p> <p><b>P2</b> Explain the purpose and relationships between communication protocols, server hardware, operating systems and web server software with regards to designing, publishing and accessing a website.</p>	<p><b>M1</b> Evaluate the impact of common web development technologies and frameworks with regards to website design, functionality and management.</p> <p><b>M2</b> Review the influence of search engines on website performance and provide evidence-based support for improving a site's index value and rank through search engine optimisation.</p>	
<p><b>LO2</b> Categorise website technologies, tools and software used to develop websites</p>		
<p><b>P3</b> Discuss the capabilities and relationships between front-end and back-end website technologies and explain how these relate to presentation and application layers.</p> <p><b>P4</b> Discuss the differences between online website creation tools and custom built sites with regards to design flexibility, performance, functionality, User Experience (UX) and User Interface (UI).</p>	<p><b>M3</b> Evaluate a range of tools and techniques available to design and develop a custom built website.</p>	