

**LEARNER INFORMATION**

School	School of IT		
Learner Name			
Learner ID No.		Edexcel Reg. No.	
Unit No & Title	RQF 10, Website Design and Development		
Assessor's Name	Muntasir Wahid	Semester	Summer Semester (2021-2)

Unit Details:

Wireless, public hotspots, mobile broadband and unlimited network connections means that accessing and using the internet to request, use and post information has never been so easy, or so important. As public, organisational and business demand increases, so does user expectation. Designers need to successfully use technology to deliver a high quality and consistent User Experiences (UX) through friendly and functional User Interfaces (UI). However, as the software and hardware evolves, so does the challenge of design.

This unit introduces students to the underpinning services required to host, manage and access a secure website before introducing and exploring the methods used by designers and developers to blend back-end technologies (server-side) with front-end technologies (client-side). To help ensure new designers are able to design and deliver a site that offers an outstanding User Experience (UX) supported by an innovative User Interface (UI) this unit also discusses the reasons, requirements, relationships, capabilities and features of the systems they will be using and gives them an opportunity to explore various tools, techniques and technologies with 'good design' principles to plan, design and review a multipage website.

Among the topics included in this unit are: domain structure, domain name systems, web protocols, database servers, development frameworks, website publishing, content management, search engine optimisation, web browsers, HTML standards, CSS and CSS pre-processing (LESS, SASS), presentation models, responsive design, integrated development environments, user requirements, interface design, user experience, branding, navigation, optimisation and validation.

On successful completion of this unit students will be able to explain server technologies and management services associated with the hosting and management of secure websites, categorise website technologies, tools and software used to develop websites, utilise website technologies, tools and techniques with good design principles to create a multipage website and create and use a Test Plan to review the performance and design of a multipage website.

As a result they will develop skills such as communication literacy, critical thinking, analysis, reasoning and interpretation, which are crucial for gaining employment and developing academic competence.

Unit Level: 10**Learning Outcomes and Assessment Criteria:**

Learning Outcomes	Assessment Criteria
LO1	P1, P2,M1,M2,D1
LO2	P3,P4,M3,D1

Handout date: 06.04.21**Submission date:** 05.05.21



Necessary Guidance

- Use 12 point Times New Roman
- Use a bibliography
- Use 1.5 spacing
- Complete the title page and sign the statement of authenticity
- Submit the assignments as per the following deadlines
- Submission date of the assignment is final and no other extra day will be offered in any circumstances
- Use appropriate referencing in your assignments.

Center & Assessor Information

Center Name	BAC International		
Center Code	93195		
Assessor(s)	Muntasir Wahid		

Assignment Evidence

Evidence Authenticity Declaration

I affirm that the attached work is entirely my own except where the words of ideas of other writers are specifically acknowledged through the use of inverted commas and in-text references.

This assignment has not been submitted for any other subject at 93195 centre (or other institution). I have revised, edited and proofread this paper before submission.

I further confirm that I have read and understood BAC's rules and regulation relating to plagiarism and agree to be bound by them.

Learner Name			
Signature		Date	

Web hosting and web technologies

Aim: Explaining server technologies and management services associated with hosting and managing websites and also categorising website technologies, tools and software used to develop websites

Scenario:

Suppose, you work as a full-stack web team leader for a leading creative web solutions and marketing company. Your team is about to have a big contract to develop an online shopping mall. One of the preparation tasks is to choose appropriate tools and techniques to realise a custom built website.

As part of your role, you have been asked to create an engaging presentation to help train junior staff members on basic web technologies including hosting and website management as well as server technologies. Your presentation should not only explain basic knowledge in the domain but also points out the impact of these technologies to website design, functionality, management or performance.

You also need to present more technical presentation to senior staff members to discuss about frontend, back-end technologies as well as other tools, techniques and softwares used to develop website from simple (online website creation tools) to complicated (custom built). Your presentation will be used as guidance of choosing suitable tools and techniques for the next project.

Based on the scenario, you have to do the following tasks.

a) Identify the purpose and types of DNS, including explanations on how domain names are organised and managed.

Hint.

- Must include, how does dns works with example.

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.

c) Discuss the capabilities and relationships between front-end and back-end website technologies and explain how these relate to presentation and application layers.

d) 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).

e) Evaluate the impact of common web development technologies and frameworks with regards to website design, functionality and management.

f) 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.

g) Evaluate a range of tools and techniques available to design and develop a custom built website.

h) Justify the tools and techniques chosen to realise a custom built website.

Special Instruction:

- Check for Plagiarism of your written document, your document should not have more than 25% Plagiarism. Attach the Plagiarism report with the submitted document.
- The suggested software for checking the plagiarism is “**Turnitin**”.
- Proper referencing (Harvard Style) is expected in the assignment.
- Document should have Table of Contents, Header, Footer, Page No., page border etc.
- Please upload your assignment in **VLE(Virtual Learning Environment)**.
- Soft copy emailed to muntasir@bacbd.org with **RQFUNIT10** as subject line and your name/id in the body of the email. (File format must be *.pdf* and file name should be *student_id_WebsiteDesignAndDevelopment.pdf*. For example:
2020426005_WebsiteDesignAndDevelopment.pdf)
- Copied documents are strictly prohibited. If you are planning to do so, please no need to submit. There is no chance for re-submission. So, think twice before you submit your assignment.

Submission Date: 5th May, 2021