Pearson
Higher Nationals in
Computing

Unit 10: Website Design & Development

Assignment Brief Number: 1

Higher National Certificate/Diploma in Computing

Assignment Brief

Student Name/ID Number	
Unit Number and Title	10: Website Design & Development
Academic Year	2021
Unit Tutor	Mr. A.R. Mohamed Nizzad
Assignment Title	Results Management System
Issue Date	16.02.2021
Submission Date	25.03.2021
IV Name & Date	Mr. K.M. Ishraque

Submission Format

Submission Format
The submission is in the form of two documents: Part 1: IEEE Software Requirement Specification must be prepared and completed; template should be collected from Assessor (Send an email to nizzad@bcas.lk requesting the SRS) Part 2: Report 2000 to 3000 words, Analysis document on the development methodologies, development tools and techniques Part 3: System Presentation (Microsoft PowerPoint) report on functional business application, filled peer evaluation sheet Part 4: Code with comments, code snippets Part 5: Submit your developed application with the relevant supporting documentation (user manuals etc.). *As confirmation of self-development source code and project files should be zipped and provided as softcopy on CD.* This requires you prepare a 20 minutes video presentation and upload it to youtube. Then, provide the reference in your report. Part 6: Critical Software Quality Assurance Report 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
LO3:- Utilise website technologies, tools and techniques with good design principles to create a multipage Website
LO4:- Create and use a Test Plan to review the performance and design of a multipage website

Assignment Brief and Guidance

Scenario

The department of computing at BCAS Kalmunai Campus has decided to design and develop a web application for the benefit of students in order to make their academic progress accessible via a web application.

Following are the essential features

- Only authorized people will have access to the system (Login Functionality)
- Admin should be able to perform the following
    - To CRUD (Create, Read, Update, Delete) the students
    - To CRUD the batch details
    - TO CRUD the subject details
    - To CRUD result details
- Student should be able to perform the following
    - Can access their batch detail
    - Can access their results

Any additional features that you may think appropriate. You are allowed to make any valid assumptions and reasonable limitations as well.

Assignment Brief and Guidance

Based on the Scenario,

Part 1

Identify the purpose and types of DNS, including explanations on how domain names are organized and managed. - Report

Part 2

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. - Report

Part 3

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

Part 4

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). - Report

Part 5

Create a design document for a branded, multipage website supported with medium fidelity wireframes and a full set of client and user requirements. - Report

Part 6

Use your design document with appropriate principles, standards and guidelines to produce a branded, multipage website supported with realistic content. – Deployable Code

Part 7

Create a suitable Test Plan identifying key performance areas and use it to review the functionality and performance of your website. – Test Report

Learning Outcomes and Assessment Criteria		
Pass	**Merit**	**Distinction**
LO1 Explain server technologies and management services associated with hosting and managing websites		
P1 Identify the purpose and types of DNS, including explanations on how domain names are organised and managed. P2 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.	M1 Evaluate the impact of common web development technologies and frameworks with regards to website design, functionality and management. M2 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.	LO1 & 02 D1 Justify the tools and techniques chosen to realise a custom built website.
LO2 Categorise website technologies, tools and software used to develop websites		
P3 Discuss the capabilities and relationships between front-end and back-end website technologies and explain how these relate to presentation and application layers. P4 Discuss the differences between online website creation tools and custom built sites with regards to design flexibility, performance, functionality, User Experience (UX)	M3 Evaluate a range of tools and techniques available to design and develop a custom built website.	
LO3 Utilise website technologies, tools and techniques with good design principles to create a multipage website		
P5 Create a design document for a branded, multipage website supported with medium fidelity wireframes and a full set of client and user requirements. P6 Use your design document with appropriate principles, standards and guidelines to produce a branded, multipage website supported with realistic content.	M4 Compare and contrast the multipage website created to the design document.	D2 Critically evaluate the design and development process against your design document and analyse any technical challenges.
LO4 Create and use a Test Plan to review the performance and design of a multipage website		

P7 Create a suitable Test Plan identifying key performance areas and use it to review the functionality and performance of your website.	M5 Evaluate the Quality Assurance (QA) process and review how it was implemented during your design and development stages.	D3 Critically evaluate the results of your Test Plan and include a review of the overall success of your multipage website; use this evaluation to explain any areas of success and provide justified recommendations for areas that require improvement.