NATIONAL SKILLS QUALIFICATION

LEVEL 2

TITLE:

(WEB DEVELOPMENT)

YEAR: 2024

NATIONAL SKILLS QUALIFICATION

NSQ LEVEL 2- *(Web Development)*

GENERAL INFORMATION

QUALIFICATION PURPOSE

This Qualification is designed to equip learner with knowledge and skills of web programming, database integration and content management

QUALIFICATION OBJECTIVES

The learner should be able to: -

i. Understand Information Technology Ethics
ii. Know Computer Graphic Editing and Database Concepts
iii. Understand IT Networking
iv. Understand UI/UX Design
v. Understand Web Programming
vi. Know Content Management System

Mandatory Units

Unit No	Reference Number	NOS Title	Credit Value	Guided Learning Hours	Remark
01	ICT/WEB/001/L2	Occupational Health and Safety	2	20	
02	ICT/WEB/002/L2	Communication and Interpersonal Skills	2	20	
03	ICT/WEB/003/L2	Team Work	2	20	
04	ICT/WEB/004/L2	Information Technology and Ethics	1	10	
05	ICT/WEB/005/L2	Computer Graphics Editing and Database Concept	4	40	
06	ICT/WEB/006/L2	IT Networking	3	30	
07	ICT/WEB/007/L2	Introduction to (UI/U/X) Design	3	30	
08	ICT/WEB/008/L2	Web Programming (Python)	4	40	
09	ICT/WEB/009/L2	Web Programming (HTML, CSS)	4	40	
10	ICT/WEB/010/L2	Web Programming (JavaScript)	4	40	
11	ICT/WEB/011/L2	Content Management System	3	30	

NATIONAL SKILLS QUALIFICATION

LEVEL 2: *(WEB DEVELOPMENT)*

Unit 01: OCCUPATIONAL HEALTH AND SAFETY

Unit Reference Number: ICT/WEB/001/L2

NSQ Level: 2

Credit Value: 2

Guided Learning Hours: 20

Unit Purpose: *This unit specifies the competencies required to demonstrate understanding of safe work practices, it involves learning about workplace safety correct use of signs and symbols, Identifying and reducing risks of hazards in the work environment*

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

1. Direct Observation/oral questions (DO)
2. Question and Answer (QA)
3. Professional Discussion (PD)
4. Reflect Journal (RJ

UNIT 01: OCCUPATIONAL HEALTH AND SAFETY

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evid nce Type					Evidence Ref. Page No.				
LO 1: Demonstrate Safe working Practices and Instructions	1.1	Explain safe work practice and instructions in an ICT environment										
	1.2	Carry out safe work practices and instructions in an ICT environment										
	1.3	Work in accordance with health and safety best practices in an ICT environment										
	1.4	Follow all necessary instructions related to safety in the work place										
LO 2: Demonstrate Understanding of Safety Hazards and risks	2.1	Identify work environment hazards in an ICT environment										
	2.2	State various methods to reduce the risk of identified hazards in an ICT environment										
	2.3	Demonstrate use of safety equipment applicable to ICT environment.										
LO 3: Possess the ability to take appropriate actions during accident/injury	3.1	State how to maintain hygienic, safe and secure workplace.										
	3.2	Demonstrate the uses of safety equipment in an ICT environment as required.										
	3.3	Identify basic first aid equipment										
	3.4	Illustrate basic first aid treatments										
LO 4: Demonstrate safe work habit and clean work environment	4.1	Use safe access and exit routes in the work environment										
	4.2	Dispose all wastes appropriately to designated waste facilities										

Unit 02: COMMUNICATION AND INTERPERSONAL SKILLS

Unit Reference Number: ICT/WEB/002/L2

NSQ Level: 2

Credit Value: 2

Guided Learning Hours: 20

Unit Purpose: *This unit aims to equip leaners with skills and knowledge required to demonstrate good communication and interpersonal skills.*

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

1. Direct Observation/oral questions (DO)
2. Question and Answer (QA)
3. Professional Discussion (PD)
4. Reflect Journal (RJ)

UNIT 02: COMMUNICATION AND INTERPERSONAL SKILL

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO 1: Know of the importance of good communication	1.1	State reasons why good communication is important									
	1.2	List ways to communicate effectively									
	1.3	Exhibit patience and a mild demeanor while communicating with colleagues, managers and clients									
	1.4	Demonstrate how to speak in a respectful manner									
	1.5	Use respectful body language even when in a bad mood or while under pressure									
LO 2: Demonstrate ability to follow documented instructions	2.1	Read and accurately follow steps in a web framework/plugins installation manual									
	2.2	Find specific Class definitions and Method descriptions in the programming language reference document.									
	2.3	Find feature descriptions in the plugin framework documentation, while using a plugins/framework,									

UNIT 03: TEAMWORK

Unit Reference Number: ICT/WEB/003 /L2
QCF Level: 3
Credit Value: 2
Guided Learning Hours: 20

Unit Purpose:

The purpose for this unit is to impact into the learner the necessary skills, knowledge and understanding required to develop team spirit and positive working relationship with colleagues.

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

1. Direct Observation/oral questions (DO)
2. Question and Answer (QA)
3. Professional Discussion (PD)
4. Reflect Journal (RJ)

Unit 03: Teamwork

LO (Learning outcome)		Criteria:-	Evidence Type					Evidence Ref Page number			
LO 1 Positive working relationship with colleagues	1.1	Identify the need for developing positive working relationship with colleagues									
	1.2	Recognize the importance of relating with other people in a way that makes them feel valued and respected									
	1.3	Assist team members when required.									
	1.4	Report to the appropriate personnel when request for assistance fall outside area of responsibility.									
	1.5	Communicate information to colleagues about individual work that may affect team work.									
LO 2 Take responsibility within the team	2.1	Recognize own role and responsibilities within a team									
	2.2	Perform individual tasks in line with the team's rules and regulations.									
	2.3	Participate effectively in teamwork.									
LO.3 Compliance with policy of organization	3.1	Explain organizational code of conduct									
	3.2	Work in line with organizational standard									
	3.3	Use organizational code of practice									
	3.4	Adhere strictly to instructions given by the Management									

Unit 04: INTRODUCTION TO INFORMATION TECHNOLOGY ETHICS

Unit Reference Number: ICT/WEB/004/L3

NSQ Level: 2

Credit Value: 1

Guided Learning Hours: 10

Unit Purpose: *This unit aims to equip learners with skills and knowledge of Information Technology Ethics.*

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

1. Direct Observation/oral questions (DO)
2. Question and Answer (QA)
3. Professional Discussion (PD)
4. Assignment (ASS)

UNIT 04: INTRODUCTION TO INFORMATION TECHNOLOGY ETHICS

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.				
LO 1: Understand Secure Software Design	1.1	Explain Secure Software Design										
	1.2	Identify the principles of secure software design										
	1.3	Explain three modelling secure software design										
	1.4	Develop software architecture										
LO2: Know Secure coding	2.1	Explain Secure Coding Practices										
	2.2	Explain common security vulnerabilities										
	2.3	Demonstrate common coding vulnerabilities										
	2.4	Demonstrate coding practices										
	2.5	Adhere to best practices in secure coding										
LO3: Understand Authentication and Authorization	3.1	Describe the process of Authentication										
	3.2	Describe the process of Authorization										
	3.3	Differentiate between Authentication and Authorization										
	3.4	Describe different methods of Authentication and Authorization										
LO4: Know Encryption and Data Protection	4.1	Explain Encryption techniques and applications										
	4.2	Explain Data Protection techniques										
	4.3	Demonstrate encryption techniques and applications										
	4.4	Demonstrate methods for securing and handling sensitive data										
	4.5	Apply decryption in real world applications										

Unit 05: COMPUTER GRAPHICS EDITING AND DATABASE CONCEPT

Unit Reference Number: ICT/WEB/005/L3

NSQ Level: 2

Credit Value: 4

Guided Learning Hours: 40

Unit Purpose: *This unit provide learners with knowledge and skills of Computer Graphic Editing and Database Concepts in Web Development.*

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

1. Direct Observation/oral questions (DO)
2. Question and Answer (QA)
3. Professional Discussion (PD)
4. Assignment (ASS)

UNIT 05: COMPUTER GRAPHICS EDITING AND DATABASE CONCEPT

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.				
LO 1: Understand Computer Graphic Editing in Web Development	1.1	Explain Computer Graphic Editing										
	1.2	Describe Image Optimization										
	1.3	Create Image Optimization										
	1.4	Construct responsive Images										
LO2: Understand Scalable Vector Graphics (SVG)	2.1	Explain Scalable Vector Graphic										
	2.2	Use SVG to edit										
	2.3	Apply Styles to Images and other visual element using CSS										
	2.4	Use modern WebP Format instead of JPEG										
LO3: Understand Graphic Editor (Adobe Photoshop)	3.1	Explain Layer Masking										
	3.2	Apply Adjustment, blending modes, effect etc										
	3.3	Select, mask workspace for precision selections										
	3.4	Use advance color grading techniques to create mood and enhance visual story telling of image										
	3.5	Create 3D effect including extrusions, bevels and shading										
	3.6	Create and use symbols in libraries										
LO4: Understand Image Editing in code	4.1	Explain Image Editing										
	4.2	Use Libraries and Framework in image editing										
	4.3	Use JavaScript (Node.js) to process Image										
	4.4	Use Pyton to open, manipulate and save different images										
LO5: Understand Data base Concept in Web Development	5.1	Explain Relational Database										
	5.2	Describe NoSQL Databases										
	5.3	Create Object, tables using CRUD Operation										
	5.4	Construct table using Schema										
	6.1	Explain Object Relational Mapper										

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO6: Know Object Relational Mapper	6.2	Describe the process of Mapping Tables to Object									
	6.3	Use Pyton to Map tables to object									
	6.4	Describe the process of using Django ORM for Mapping									
	6.5	Use Django ORM to Map tables to object									

Unit 06: INFORMATION TECHNOLOGY NETWORK

Unit Reference Number: ICT/WEB/006/L2

NSQ Level: 2

Credit Value: 3

Guided Learning Hours: 30

Unit Purpose: *This unit provide learners with knowledge and skills of information technology networking in web development.*

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

1. Direct Observation/oral questions (DO)
2. Question and Answer (QA)
3. Professional Discussion (PD)
4. Assignment (ASS)

UNIT 06: INFORMATION TECHNOLOGY NETWORK

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO 1: Understand Basic Network Concept	1.1	Explain information technology network									
	1.2	Identify network devices									
	1.3	Construct types of network topologies using the simulator									
	1.4	Use a 128-bit address format to handle a larger number of devices									
	1.5	Translate domain names (www.exampl.com) into IP address									
	1.6	Describe the difference between HTTP and HTTPS									
	1.7	Explain the difference between Client and Server with examples									
	1.8	Explain Firewalls technique									
LO2: Understand Client-Server Architecture	2.1	Explain Client-Server Architecture									
	2.2	Use an interface (HTML or CSS) to define the look and functionality of the web application									
	2.3	Use Protocol (HTTP, FTP or SMTP) to request packets									
	2.4	Use header and status code to send response									
	2.4										
LO3: Know Web Protocols	3.1	Explain Web Protocols									
	3.2	Demonstrate the use of HTTPS Protocol through encryption									
	3.3	Use SMTP Protocol to send email									
	3.4	Use SSH File Transfer Protocol grant file access									
	3.5	Use SFTP Protocol to transfer file									
	3.6	Use POP3 to retrieve emails									
	3.7	Explain Dynamic Host Configuration Protocol (DHCP)									

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO4: Understand Data Transmission	4.1	Explain Data Transmission									
	4.2	Identify Nodes and Network									
	4.3	Describe Data Transfer Methods									
	4.4	Explain OSI Model and Protocols									
	4.5	Demonstrate Data encapsulation and de-encapsulation									
	4.6	Demonstrate data compression									
	4.7	Demonstrate Catching									
LO5: Understand Network Security	5.1	Identify basic security measures necessary for network devices.									
	5.2	Explain network devices with device hardening features to mitigate security threat									
	5.3	Configure secure passwords and SSH on network devices									
	5.4	List general security mitigation techniques									
	5.5	Demonstrate the use of firewall to prevent traffic									
	5.6	Demonstrate Authentication using Password									
	5.7	Demonstrate Authentication using Intrusion Detection System									
LO6: Understand API Communication	6.1	Explain Types of API Communication									
	6.2	Demonstrate Peer-to-Peer Models (File sharing network)									
	6.3	Demonstrate wireless communication									
	6.4	Explain Synchronous Remote Procedure Call									
	6.5	Differentiate Cellular from Satellite Communication									
LO7: Understand Network Performance Optimization	7.1	Explain Network Performance Optimization									
	7.2	Describe Bandwidth Management									
	7.3	Use shortest path algorithms to Optimized Routing									
	7.4	Use Edge Caching procedure to reduce latency									

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
	7.5	Use Subnetting method to minimize broadcast traffic									

Unit 07: INTRODUCTION TO UI/UX DESIGN

Unit Reference Number: ICT/WEB/007/L2

NSQ Level: 2

Credit Value: 3

Guided Learning Hours: 30

Unit Purpose: *This unit introduce learners with knowledge and skills of UI/UX Design.*

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

1. Direct Observation/oral questions (DO)
2. Question and Answer (QA)
3. Professional Discussion (PD)
4. Assignment (ASS)

UNIT 07: INTRODUCTION TO UI/UX DESIGN

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO 1: Understand Concept of User Interface (UI) Design	1.1	Explain User Interface (UI) Design									
	1.2	Describe the components of User Interface (UI)									
	1.3	Explain best practices for User Interface (UI) Design									
LO2: Understand the concept of User Experience (UX) design	2.1	Explain User Experience (UX) Design									
	2.2	Explain the components of User Experience (UX) Design									
	2.3	Explain best practices for User Experience (UX) Design									
	2.4	Describe the relationship between UI and UX									
LO3: Understand User Interface in Web Development	3.1	Describe Layout and Structure of UI									
	3.2	Use percentage base width for flexible layout									
	3.3	Use CSS layout system to create complex flexible grid layouts									
	3.4	Use Figma or Adobe to create wireframes									
	3.5	Create Input form fields with labels, placeholders and validation messages									
	3.6	Use modals for tasks like confirmations additional information or forms									
	3.7	Use font size, weight and color to establish a clear visual									
	3.8	Explain User Research in UI									
LO4: Understand User Experience UX Research	4.1	Explain Information Architecture in UX									
	4.2	Create sitemap outlining the main pages and their relationship to									
	4.3	Use heading and subheading to show a clear information architecture									
	4.4	Develop a robust search feature with filters and auto-suggestion									
LO5: Understand	4.5	Create low fidelity wireframes to outline the layout and structure of pages									

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
User Experience UX in web development	4.6	Develop interactive prototypes to simulate user interactive development									
	4.7	Apply micro interactions e.g button hovers, form validation messages, loading indicator etc									
	4.8	Conduct text real users to observe their interactions									
	4.9	Get user behavior and feedback									

Unit 08: WEB PROGRAMMING (PYTHON)

Unit Reference Number: ICT/WEB/008/L2

NSQ Level: 2

Credit Value: 4

Guided Learning Hours: 40

Unit Purpose: *This unit provide learners with knowledge and skills of Web Programming in Python.*

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

1. Direct Observation/oral questions (DO)
2. Question and Answer (QA)
3. Professional Discussion (PD)
4. Assignment (ASS)

UNIT 08: WEB PROGRAMMING (PYTHON)

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO 1: Understand Web programming concepts and techniques	1.1	Explain concept of web programming									
	1.2	Describe what python is									
	1.3	Install and configure Python Interpreter, IDE / Code editor									
	1.4	Distinguish Python from other Web programming Language									
LO2: Know Data types, variables, input-output operations, and basic operators	2.1	Explain Data types, variables, operators etc									
	2.2	Construct simple Python codes using data types, variables, operators									
	2.3	Describe basic Python input and output operations									
	2.4	Develop programs to perform basic Python input and output operations									
LO3: Know Boolean values, conditional execution, loops, lists and list processing, logical and bitwise operations	3.1	Explain the Boolean data type									
	3.2	Describe relational operators									
	3.3	Explain conditional statements and/or executions									
	3.4	Develop Python codes to demonstrate Boolean operations, Relational operators									
	3.5	Develop Python codes to demonstrate conditional statements using if, if-else, if-else statements									
	3.6	Construct Python codes to perform logic and bitwise operations									
	3.7	Construct Python codes to repeat code execution using while and for loops statements									
	3.8	Construct Python code to control the loops using *break* and *continue*									

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
		instructions									
LO4: Understand python functions, tuples, dictionaries, and data processing	4.1	Explain code structuring and the concept of function									
	4.2	Explain exceptions – the *try* statement the *except* clause, built-in exceptions,									
	4.3	Describe code testing, debugging									
	4.4	Construct functions to solve simple problems and invoke them to return results									
	4.5	Design programs that use *try* statement and *except* clause to test Python built-in exceptions									
LO5: Understand python modules, libraries, packages, and PIP	5.1	Describe some of the most useful Python standard library modules									
	5.2	Explain PIP (Python Installation Package)									
	5.3	Design codes to import Python standard library modules using different import techniques									
	5.4	Use entities inside the codes									
	5.5	Use PIP to install and uninstall packages									
LO6: Understand strings, string and list methods, and exceptions	6.1	Explain characters, strings and coding standards									
	6.2	Handling runtime errors in python									
	6.3	Control the flow of errors using *try* and *except*									
	6.4	Construct programs that use list and string methods									
	6.5	Construct program that manipulates list elements and strings									
	6.6	Construct Python codes that control the flow of errors by using *try* and *except*									

Unit 09: WEB PROGRAMMING (HTML, CSS)

Unit Reference Number: ICT/WEB/009/L2

NSQ Level: 2

Credit Value: 4

Guided Learning Hours: 40

Unit Purpose: *This unit provide learners with knowledge and skills of Web Programming in HTML and CSS.*

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

1. Direct Observation/oral questions (DO)
2. Question and Answer (QA)
3. Professional Discussion (PD)
4. Assignment (ASS)

UNIT 09: WEB PROGRAMMING (HTML, CSS)

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO 1: Understand HTML	1.1	Explain concept of HTML									
	1.2	Describe HTML syntax									
	1.3	Use HTML concepts such as: Elements, HTML Editors, Attributes, Headings, Paragraphs, Formatting,									
	1.4	Use HTML concepts such as: Head, Images, Tables, Lists, Block, Layout, Forms, I Frames, Colors,									
	1.5	Use HTML concepts such as: Entities, URL Encode, Form, Media, Object, Audio, Video									
	1.6	Create a basic web page using HTML basic concept									
LO2: Understand CSS	2.1	Explain the importance of Cascading Style Sheets (CSS) in website design									
	2.2	Describe the CSS syntax such as; Id & Class, Styling of Backgrounds, Text, Fonts, Links and Tables, CSS Border, Outline, Margin, Padding, Dimension, Positioning, Floating, Align, Colors, Color HEX									
	2.3	Create CSS files in a suitable Text Editor or IDE.									
	2.4	Use the Cascading Style Sheets (CSS) to style HTML elements									
LO3: Know HTML, CSS Code	3.1	Create HTML file with a few elements									
	3.2	Apply basic style like color, font size and background color									
	3.3	Create an HTML file with elements styled using margin, border, padding and width									
	3.4	Create a responsive layout using Flexbox									
	3.5	Create a layout using CSS Grid									
	3.6	Link CSS files to HTML pages									
	3.7	Create code in HTML and CSS to link pages									

Unit 10: WEB PROGRAMMING (JAVASCRIPT)

Unit Reference Number: ICT/WEB/010/L2

NSQ Level: 2

Credit Value: 4

Guided Learning Hours: 40

Unit Purpose: *The purpose of the unit is to equip learners with skills and knowledge on how to create dynamic and interactive web applications using JavaScript.*

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

1. Direct Observation/oral questions (DO)
2. Question and Answer (QA)
3. Professional Discussion (PD)
4. Assignment (ASS)

UNIT 10: WEB PROGRAMMING (JAVASCRIPT)

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO 1: Understand JavaScript fundamentals (Data Types, Data Structure)	1.1	Explain JavaScript fundamentals									
	1.2	Explain JavaScript code and syntax (data types, data structures)									
	1.3	Create code on Identify Data Type that takes an argument and returns its data type as a string									
	1.4	Create code on function Convert to Types that convert a given value to different data types: String, Number, and Boolean									
	1.5	Create code on function Array Operations that takes array and perform Add, Remove, Finds and Returns									
	1.6	Create code on function Object Manipulation that Add, Update, Delete and Returns the update object									
LO2: Know JavaScript fundamentals (Variables, Function)	2.1	Explain variables types									
	2.2	Explain types of functions									
	2.3	Create code on variable scope that demonstrate the difference between var, let and const in terms of scope and reassign ability									
	2.4	Create code on variable that illustrates the behavior of different variable types. E.g. reassign ability and type conversion									
	2.5	Create code on function hoisting example that illustrate how variable declarations are hoisted in JavaScript									
	2.6	Create code on function DE structure that uses DE structuring assignment to extract values from an object and an array									

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO3: Understand Document Object Model (DOM)	3.1	Explain the key concept of Document Object Model (DOM)									
	3.2	Create nodes that can be accessed and modified									
	3.3	Create code that show DOM Manipulation									
	3.4	Create code that transverse the DOM									
	3.5	Create code that query the DOM									
	3.6	Demonstrate some DOM Operation using HTML									
LO4: Know Event	4.1	Identify the key concepts of Event									
	4.2	Create code with Event Listeners									
	4.3	Create code using Event Propagation									
	4.4	Demonstrate handling a click event using event object									

Unit 11: CONTENT MANAGEMENT

Unit Reference Number: ICT/WEB/011/L2

NSQ Level: 2

Credit Value: 3

Guided Learning Hours: 30

Unit Purpose: *This unit provide learners with knowledge and skills of Content Management.*

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

1. Direct Observation/oral questions (DO)
2. Question and Answer (QA)
3. Professional Discussion (PD)
4. Assignment (ASS)

UNIT 11: CONTENT MANAGEMENT

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO 1: Understand Content Management Basics	1.1	Explain What Content Management is									
	1.2	Describe the key features of content management									
	1.3	Describe five common Content Management Platforms									
	1.4	Explain Content Management Best Practices									
LO2: Know Content Management Starting Steps	2.1	Select a CMS base on your technical skills									
	2.2	Set Up CMS by Installing the CMS									
	2.3	Configure basic Setting									
	2.4	Select a theme									
	2.5	Create Content by adding pages, posts and media									
	2.6	Install Plugins or extensions to add functionalities.									
	2.7	Set Up user roles and permissions									
LO3: Know how to use Custom Web Development frameworks	3.1	Explain what a Web Development framework is.									
	3.2	Describe Types of Web Development frameworks with examples									
	3.3	Illustrate the differences between a CMS framework and Custom Web framework									
	3.4	Install Web Development framework									
	3.5	Configure Web Development framework									
	3.6	Demonstrate how to detect installed frameworks and dependencies and their versions									
LO4: Know how to use Command Line Interfaces (CLI) in setting Web Development environment	4.1	Describe common Command Line									
		Demonstrate how to creating a directory, listing the contents of a directory									
	4.2	Use package manager to install frameworks and dependencies									
	4.3	Update and upgrade installed frameworks									
	4.4	Use package manager to uninstall frameworks and dependencies.									

PARTICIPANT FOR CRITIQUE WORKSHOP

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