NATIONAL SKILLS QUALIFICATION

LEVEL 3

TITLE:
(WEB DEVELOPMENT)

YEAR: 2024

NATIONAL SKILLS QUALIFICATION

NSQ LEVEL 3- *(WEB DEVELOPMENT)*

GENERAL INFORMATION

QUALIFICATION PURPOSE

The purpose of this qualification is to equip learners with foundational skills and knowledge necessary for developing modern web applications.

QUALIFICATION OBJECTIVES

The learner should be able to: -

i. Understand Information Technology Ethics
ii. Understand the fundamentals of web application development and the software development life cycle.
iii. Utilize version control systems (Git) for managing and tracking changes in web projects.
iv. Develop client-side web applications using HTML, CSS, and JavaScript.
v. Implement server-side web functionality with introductory server-side languages like PHP or Node.js.
vi. Work with databases and web servers to store, retrieve, and manage data in web applications.
vii. Set up and configure web servers for development purposes.
viii. Build and manage websites using Content Management Systems (CMS) such as WordPress.
ix. Perform basic web application maintenance and optimization tasks, including debugging and performance tuning.
x. Leverage open-source software and tools in web application development projects.

Mandatory Units

Unit No	Reference Number	NOS Title	Credit Value	Guided Learning Hours	Remark
1	ICT/WEB/001/L3	Occupational Health and Safety	2	20	
2	ICT/WEB /002/L3	Communication and Interpersonal Skills	2	20	
3	ICT/WEB/003/L3	Team Work	2	20	
4	ICT/WEB/004/L3	Introduction to Web Application Development	3	30	
5	ICT/WEB/005/L3	Version Control with Git	3	30	
6	ICT/WEB/006/L3	Web Programming Fundamentals	4	40	
7	ICT/WEB/007/L3	Databases and Web Servers	4	40	
8	ICT/WEB/008/L3	Content Management Systems (CMS) Basics	3	30	
9	ICT/WEB/009/L3	Introduction to Open-Source Software	2	20	
Total			25	250	

Optional Units

Unit No	Reference Number	NOS Title	Credit Value	Guided Learning Hours	Remark
10	ICT/WEB/010/L3	Client-Side Web Development	3	30	
11	ICT/WEB/011/L3	Server-Side Web Development	3	30	
12	ICT/WEB/012/L3	Web Application Maintenance and Optimization	2	20	
Total			10	100	

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Unit 1: OCCUPATIONAL HEALTH AND SAFETY

Unit Reference Number: ICT/WEB/001/L3

NSQ Level: 3

Credit Value: 2

Guided Learning Hours: 20

Unit Purpose: *This unit aims to equip leaners with skills and knowledge required to demonstrate understanding of safe work practices*.

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. Witness Testimony (WT)
4. Assignment (ASS), etc.

(This depends on the Trade Areas to be assessed)

UNIT 1: OCCUPATIONAL HEALTH AND SAFETY

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence 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									

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Unit 2: COMMUNICATION AND INTERPERSONAL SKILLS

Unit Reference Number: ICT/WEB/002/L3

NSQ Level: 3

Credit Value: 2

Guided Learning Hours: 20

Unit Purpose: *This unit aims to equip leaners with skills and knowledge 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. Witness Testimony (WT)
4. Assignment (ASS), etc.

(This depends on the Trade Areas to be assessed)

Unit 2: COMMUNICATION AND INTERPERSONAL SKILLS

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,									

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UNIT 3: TEAM WORK

Unit Reference Number: ICT/WEB/003/L3
QCF Level: 3
Credit Value: 2
Guided Learning Hours: 20

Unit Purpose:
This unit aims learners with skills and knowledge 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. Witness Testimony (WT)
4. Assignment (ASS), etc.

(This depends on the Trade Areas to be assessed)

UNIT 3: TEAM WORK

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
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 effect 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									

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UNIT 4: INTRODUCTION TO WEB APPLICATION DEVELOPMENT

Unit Reference Number: ICT/WEB/004/L3
QCF Level: 3
Credit Value: 3
Guided Learning Hours: 30

Unit Purpose:
To equip learners with skills and knowledge of fundamental concepts and processes involved in web application 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. Witness Testimony (WT)
4. Assignment (ASS), etc.

(This depends on the Trade Areas to be assessed)

UNIT 4: INTRODUCTION TO WEB APPLICATION DEVELOPMENT

LEARNING OBJECTIVE (LO) **The learner will:**		**PERFORMANCE CRITERIA** **The learner can:**	**Evidence Type**					**Evidence Ref. Page No.**			
LO 1: Understand the basic architecture of web applications.	1.1	Explain the client-server model.									
	1.2	Identify key components of a web application (frontend, backend, and database).									
	1.3	Describe how data flows between the client, server, and database.									
	1.4	Compare static and dynamic web applications.									
LO 2: Understand the Software Development Life Cycle (SDLC).	2.1	List the phases of the SDLC.									
	2.2	Describe the role of each SDLC phase in web development.									
	2.3	Explain the importance of iterative development in web applications.									
	2.4	Discuss common web development methodologies like Agile and Waterfall.									
LO 3: Identify key tools and technologies used in web development.	3.1	Describe the roles of HTML, CSS, and JavaScript in web development.									
	3.2	List popular web development frameworks and libraries.									
	3.3	Explain the purpose of version control systems in development.									
	3.4	Identify tools for debugging and optimizing web applications.									
LO 4: Recognize the importance of responsive design in web applications.	4.1	Explain what responsive design is and why it's important.									
	4.2	Identify techniques for building responsive web applications.									
	4.3	Discuss mobile-first design approaches.									
	4.4	Demonstrate how to test a web application for responsiveness.									

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UNIT 5: VERSION CONTROL WITH GIT

Unit Reference Number: ICT/WEB/005/L3
QCF Level: 3
Credit Value: 3
Guided Learning Hours: 30

Unit Purpose:
This unit aims to equip learners with skills and knowledge of version control using Git for managing and tracking changes in web development projects.

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. Witness Testimony (WT)
4. Assignment (ASS), etc.

(This depends on the Trade Areas to be assessed)

UNIT 5: VERSION CONTROL WITH GIT

LEARNING OBJECTIVE (LO) **The learner will:**		**PERFORMANCE CRITERIA** **The learner can:**	**Evidence Type**					**Evidence Ref. Page No.**			
LO 1: Understand the fundamentals of Git and version control.	1.1	Explain the purpose of version control systems in software development.									
	1.2	Define common Git terminology (repository, commit, branch, merge).									
	1.3	Identify differences between centralized and distributed version control systems.									
	1.4	Set up a Git repository for a web development project.									
LO 2: Learn how to track and manage changes using Git.	2.1	Demonstrate how to stage and commit changes to a repository.									
	2.2	Explain the importance of commit messages.									
	2.3	Use Git commands to view the history of commits.									
	2.4	Create and switch between branches in a project.									
LO 3: Collaborate effectively using Git.	3.1	Explain the concept of remote repositories.									
	3.2	Push and pull changes from remote repositories.									
	3.3	Resolve merge conflicts during collaboration.									
	3.4	Utilize GitHub or similar platforms for collaborative development.									
LO 4: Implement version control best practices.	4.1	Create a branching strategy for a project.									
	4.2	Apply proper naming conventions for branches and commits.									
	4.3	Use pull requests for code reviews.									
	4.4	Apply continuous integration (CI) workflows using Git.									

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UNIT 6: WEB PROGRAMMING FUNDAMENTALS

Unit Reference Number: ICT/WEB/006/L3
QCF Level: 3
Credit Value: 4
Guided Learning Hours: 40

Unit Purpose:
This unit aims to equip learners with skills and knowledge of fundamental concepts and syntax of web programming languages used for building web applications.

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. Witness Testimony (WT)
4. Assignment (ASS), etc.

(This depends on the Trade Areas to be assessed)

UNIT 6: WEB DEVELOPMENT FUNDAMENTALS

LEARNING OBJECTIVE (LO) **The learner will:**		**PERFORMANCE CRITERIA** **The learner can:**	**Evidence Type**					**Evidence Ref. Page No.**			
LO 1: Understand the role of HTML in web development.	1.1	Explain the structure and purpose of HTML documents.									
	1.2	Use common HTML tags to build a basic web page.									
	1.3	Create forms and capture user inputs with HTML.									
	1.4	Ensure proper HTML validation and syntax.									
LO 2: Develop web interfaces using CSS.	2.1	Apply CSS styles to HTML elements.									
	2.2	Use selectors, classes, and IDs effectively in CSS.									
	2.3	Implement layout techniques using Flexbox and CSS Grid.									
	2.4	Test and ensure cross-browser compatibility of CSS styles.									
LO 3: Add interactivity using JavaScript.	3.1	Explain the purpose of JavaScript in web development.									
	3.2	Write JavaScript to manipulate the Document Object Model (DOM).									
	3.3	Use basic JavaScript functions and events.									
	3.4	Debug and test JavaScript code in a web browser.									
LO 4: Understand the client-server interaction in web programming.	4.1	Explain how web browsers interact with web servers.									
	4.2	Use JavaScript to make basic HTTP requests (AJAX).									
	4.3	Handle user input and form submissions with JavaScript.									
	4.4	Test and debug client-server interactions in web applications.									

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UNIT 7: DATABASES AND WEB SERVERS

Unit Reference Number: ICT/WEB/007/L3
QCF Level: 3
Credit Value: 4
Guided Learning Hours: 40

Unit Purpose:
To equip learners with the skills to use databases and web servers in web application 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. Witness Testimony (WT)
4. Assignment (ASS), etc.

(This depends on the Trade Areas to be assessed)

UNIT 7: DATABASES AND WEB SERVERS

LEARNING OBJECTIVE (LO) **The learner will:**		**PERFORMANCE CRITERIA** **The learner can:**	**Evidence Type**					**Evidence Ref. Page No.**			
LO 1: Understand the role of databases in web applications.	1.1	Explain the difference between SQL and NoSQL databases.									
	1.2	Describe how data is stored and retrieved from a database.									
	1.3	Write basic SQL queries to interact with a database.									
	1.4	Identify common database management systems (MySQL, MongoDB, etc.).									
LO 2: Set up and configure a web server.	2.1	Install and configure a web server (Apache, Nginx).									
	2.2	Host and serve a web application on a local server.									
	2.3	Configure server settings for performance and security.									
	2.4	Test the connection between the web server and database.									
LO 3: Integrate databases with web applications.	3.1	Establish a connection between a web application and a database.									
	3.2	Write server-side code to interact with a database.									
	3.3	Handle database queries within a web application.									
	3.4	Test database functionality in a web application environment.									
LO 4: Ensure web server and database security.	4.1	Identify potential security threats to databases and web servers.									
	4.2	Implement basic security measures (e.g., firewalls, SSL/TLS).									
	4.3	Set up database access controls and permissions.									
	4.4	Regularly update server software to address vulnerabilities.									

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Unit 08: CONTENT MANAGEMENT SYSTEM BASIC

Unit Reference Number: ICT/WEB/008/L3

NSQ Level: 3

Credit Value: 3

Guided Learning Hours: 30

Unit Purpose: *This unit aims to equip learners with skills on how to use Content Management (CMS) to build, manage, and customize websites.*

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: CONTENT MANAGEMENT SYSTEM BASIC

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 the purpose of a CMS in web development.									
	1.2	Describe the key features of content management									
	1.3	Compare popular CMS platforms (WordPress, Joomla, Drupal, etc)									
	1.4	Explain Content Management Best Practices									
LO2: Install Content Management System	2.1	Set up a CMS on a local or remote server.									
	2.2	Configure basic CMS settings (site title, users, roles, etc.).									
	2.3	Install and activate themes and plugins.									
	2.4	Test and troubleshoot common installation issues.									
	2.5	Set Up user roles and permissions									
LO3: Create content with a Content Management System (CMS)	3.1	Create, edit, and publish pages and posts using a CMS.									
	3.2	Manage media (images, videos) in the CMS media library.									
	3.3	Use categories and tags to organize content.									
	3.4	Optimize content for SEO within the CMS.									
LO4: Customize the appearance and functionality of a CMS	4.1	Apply and customize themes to match design requirements.									
	4.2	Install and configure plugins for additional functionality.									
	4.3	Create custom menus and navigation.									
	4.4	Troubleshoot and resolve theme or plugin conflicts.									

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Unit 09: INTRODUCTION TO OPEN-SOURCE SOFTWARE

Unit Reference Number: ICT/WEB/009/L3

NSQ Level: 3

Credit Value: 2

Guided Learning Hours: 20

Unit Purpose: *This unit aims to equip learners with skills and knowledge of concepts and benefits of open-source software and how to utilize open-source tools in web development projects.*

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: INTRODUCTION TO OPEN-SOURCE SOFTWARE

LEARNING OBJECTIVE (LO) **The learner will:**		**PERFORMANCE CRITERIA** **The learner can:**	**Evidence Type**					**Evidence Ref. Page No.**			
LO 1: Understand the concept and principles of open-source software.	1.1	Define open-source software and its core principles.									
	1.2	Explain the differences between open-source and proprietary software.									
	1.3	Discuss the advantages and challenges of using open-source tools.									
	1.4	Identify popular open-source licenses (GPL, MIT, Apache).									
LO2: Identify popular open-source tools for web development.	2.1	List common open-source development tools (e.g., VS Code, Git, Linux).									
	2.2	Compare open-source frameworks and libraries (e.g., Laravel, React).									
	2.3	Use open-source tools to manage and develop web projects.									
	2.4	Explain the role of communities in maintaining open-source projects.									
LO3: Contribute to open-source projects.	3.1	Fork and clone an open-source project from GitHub or similar platforms.									
	3.2	Make contributions by fixing bugs or adding features.									
	3.3	Submit pull requests for review and acceptance.									
	3.4	Engage with the open-source community through forums and documentation.									
LO4: Implement open-source best practices in web development projects.	4.1	Follow licensing and attribution guidelines when using open-source software.									
	4.2	Use version control to manage contributions and changes.									
	4.3	Ensure open-source software is secure and updated regularly.									
	4.4	Document and share improvements made to open-source projects.									

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Unit 10: CLIENT-SIDE WEB DEVELOPMENT

Unit Reference Number: ICT/WEB/010/L3

NSQ Level: 3

Credit Value: 3

Guided Learning Hours: 30

Unit Purpose: *This unit aims to equip learners with skills and knowledge to develop dynamic, responsive, and user-friendly interfaces using client-side technologies such as HTML, CSS, and 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: CLIENT-SIDE WEB DEVELOPMENT

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO 1: Understand the structure and purpose of HTML	1.1	Create well-structured HTML documents.									
	1.2	Use semantic HTML elements to improve accessibility.									
	1.3	Build forms and capture user input with HTML.									
	1.4	Ensure HTML is valid and cross-browser compatible.									
LO2: Use CSS to style and layout web pages.	2.1	Apply styles to HTML elements using CSS selectors.									
	2.2	Implement responsive design using media queries.									
	2.3	Utilize Flexbox and CSS Grid for complex layouts.									
	2.4	Optimize CSS for performance and cross-browser compatibility.									
	2.5	Apply styles to HTML elements using CSS selectors.									
LO3: Enhance interactivity with JavaScript.	3.1	Manipulate the DOM using JavaScript.									
	3.2	Add event listeners to handle user interactions.									
	3.3	Implement client-side form validation.									
	3.4	Debug and optimize JavaScript code for performance.									
LO4: Understand client-side storage options.	4.1	Use cookies to store data on the client-side.									
	4.2	Implement localStorage and sessionStorage for persistent data storage.									
	4.3	Use JSON for data interchange between client and server.									
	4.4	Secure client-side data to prevent unauthorized access.									

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Unit 11: SERVER-SIDE WEB DEVELOPMENT

Unit Reference Number: ICT/WEB/011/L3

NSQ Level: 3

Credit Value: 3

Guided Learning Hours: 30

Unit Purpose: *This unit aims to equip learners with the skills and knowledge to create and manage server-side functionality, enabling dynamic content and database integration in web applications.*

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: SERVER-SIDE WEB DEVELOPMENT

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO 1: Understand server-side programming languages and frameworks.	1.1	Explain the role of server-side scripting in web development.									
	1.2	Develop basic server-side scripts using PHP, Node.js, or similar languages.									
	1.3	Understand the MVC (Model-View-Controller) pattern.									
	1.4	Utilize frameworks like Laravel or Express.js for building server-side applications.									
LO2: Handle form data and user requests on the server.	2.1	Process user input from web forms on the server.									
	2.2	Use POST and GET methods to handle HTTP requests.									
	2.3	Validate and sanitize user inputs on the server-side.									
	2.4	Return appropriate server responses (e.g., HTML, JSON).									
LO3: Integrate databases with server-side applications.	3.1	Connect a web application to a SQL or NoSQL database.									
	3.2	Perform CRUD operations (Create, Read, Update, Delete) using server-side code.									
	3.3	Implement server-side data validation and error handling.									
	3.4	Optimize database queries to improve performance.									
LO4: Ensure security in server-side development.	4.1	Implement basic authentication and authorization mechanisms.									
	4.2	Prevent SQL injection and cross-site scripting (XSS) attacks.									
	4.3	Use HTTPS to secure server-client communication.									
	4.4	Regularly update server software to mitigate security vulnerabilities.									

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Unit 12: WEB APPLICATION MAINTENANCE AND OPTIMIZATION

Unit Reference Number: ICT/WEB/012/L3

NSQ Level: 3

Credit Value: 2

Guided Learning Hours: 20

Unit Purpose: *To equip learners with the skills and knowledge to maintain and optimize web applications for better performance, security, and user experience.*

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 12: WEB APPLICATION MAINTENANCE AND OPTIMIZATION

LEARNING OBJECTIVE (LO) **The learner will:**		**PERFORMANCE CRITERIA** **The learner can:**	**Evidence Type**					**Evidence Ref. Page No.**			
LO 1: Perform routine maintenance on web applications.	1.1	Update web application components (CMS, plugins, dependencies).									
	1.2	Back up web application data and configurations.									
	1.3	Test web applications after updates to ensure functionality.									
	1.4	Monitor web server performance and address issues.									
LO2: Optimize web application performance.	2.1	Use tools like Google PageSpeed Insights to evaluate performance.									
	2.2	Implement caching mechanisms (browser, server, and database caching).									
	2.3	Minimize the size of HTML, CSS, and JavaScript files (minification).									
	2.4	Optimize images and other media for faster loading times.									
LO3: Enhance the security of web applications.	3.1	Apply security patches and updates regularly.									
	3.2	Use firewalls and security plugins to prevent unauthorized access.									
	3.3	Perform regular vulnerability scans on the web application.									
	3.4	Implement secure login protocols and password management.									
LO4: Ensure cross-browser and device compatibility.	4.1	Test the web application on multiple browsers and devices.									
	4.2	Fix any layout or functionality issues identified during testing.									
	4.3	Use responsive design techniques to ensure compatibility across different screen sizes.									
	4.4	Implement fallback solutions for older browsers.									

PARTICIPANT FOR CRITIQUE WORKSHOP

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