



COMPETENCY STANDARD
FOR
WEB DESIGN AND DEVELOPMENT
FOR FREELANCER

(ICT Sector)

Level: 03

Competency Standard Code: ICTCS0007L3V1

National Skills Development Authority
Prime Minister's Office, Bangladesh

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Introduction

The National Skills Development Authority aims to enhance an individual's employability by certifying completeness with skills. NSDA works to expand the skilling capacity of identified public and private training providers qualitatively and quantitatively. It also aims to establish and operationalize a responsive skill ecosystem and delivery mechanism through a combination of well-defined set of mechanisms and necessary technical supports.

Key priority economic growth sectors identified by the government have been targeted by NSDA to improve current job skills along with existing workforce to ensure required skills to industry standards. Training providers are encouraged and supported to work with industry to address identified skills and knowledge to enable industry growth and increased employment through the provision of market responsive inclusive skills training programme.

"Web Design and Development for Freelancer" is selected as one of the priority occupations of **Information and Communication Technology** Sector. This standard is developed to adopt a demand driven approach to training with effective inputs from Industry Skills Councils (ISC's), employer associations and employers.

Generally, a competency standard informs curriculum, learning materials, assessment and certification of students enrolled in skills sector. Students who successfully pass the assessment will receive a qualification under National Skills Qualification Framework (NSQF) and will be listed on the NSDA's online portal.

This competency standard is developed to improve skills and knowledge in accordance with the job roles, duties and tasks of the occupation and ensure that the required skills and knowledge are aligned to industry requirements. A series of stakeholder consultations, workshops were held to develop this document.

The document also details the format, sequencing, wording and layout of the Competency Standard for an occupation which is comprised of Units of Competence and its corresponding Elements.

Overview

A **competency standard** is a written specification of the knowledge, skills and attitudes required for the performance of an occupation, trade or job corresponding to the industry standard of performance required in the workplace.

The purpose of a competency standards is to:

- provide a consistent and reliable set of components for training, recognising and assessing people's skills, and may also have optional support materials
- enable industry recognised qualifications to be awarded through direct assessment of workplace competencies
- encourage the development and delivery of flexible training which suits individual and industry requirements
- encourage learning and assessment in a work-related environment which leads to verifiable workplace outcomes

Competency standards are developed by a working group comprised of representative from NSDA, Key Institutions, ISC, and industry experts to identify the competencies required of an occupation in **Information and Communication Technology** sector.

Competency standards describe the skills, knowledge and attitude needed to perform effectively in the workplace. CS acknowledge that people can achieve technical and vocational competency in many ways by emphasizing what the learner can do, not how or where they learned to do it.

With competency standards, training and assessment may be conducted at the workplace or at training institute or any combination of these.

Competency standards consist of a number of units of competency. A unit of competency describes a distinct work activity that would normally be undertaken by one person in accordance with industry standards.

Units of competency are documented in a standard format that comprises of:

- unit title
- nominal duration
- unit code
- unit descriptor
- elements and performance criteria
- variables and range statement
- curricular content guide
- assessment evidence guides

Together, all the parts of a unit of competency:

- describe a work activity
- guide the assessor to determine whether the candidate is competent or not yet competent

The ensuing sections of this document comprise of a description of the relevant occupation, trade or job with all the key components of a unit of competency, including:

- a chart with an overview of all Units of Competency for the relevant occupation, trade or job including the Unit Codes and the Unit of Competency titles and corresponding Elements
- the Competency Standard that includes the Unit of Competency, Unit Descriptor, Elements and Performance Criteria, Range of Variables, Curricular Content Guide and Assessment Evidence Guide

Competency Standards for National Skill Certificate –3 in Web Design and Development for freelancer in ICT Sector

Level Descriptors of NTVQF / NSQF (BNQF 1-6)




Level & Job classification	Knowledge Domain	Skills Domain	Responsibility Domain
6-Mid-Level Manager/ Sub Assistant Engineer	Comprehensive actual and theoretical knowledge within a specific work or study area with an awareness of the validity and limits of that knowledge, able to analyse, compare, relate and evaluate.	Specialised and wider range of cognitive and practical skills required to provide leadership in the development of creative solutions to defined problems. Communicate professional issues and solutions to the team and to external partners/users.	Work under broad guidance and self-motivation to execute strategic and operational plan/s. Lead lower-level management. Diagnose and resolve problems within and among work groups.
5-Supervisor	Broad knowledge of the underlying, concepts, principles, and processes in a specific work or study area, able to scrutinize and break information into parts by identifying motives or causes.	Broad range of cognitive and practical skills required to generate solutions to specific problems in one or more work or study areas. Communicate practice-related problems and possible solutions to external partners.	Work under guidance of management and self-direction to resolve specific issues. Lead and take responsibility for the work and actions of group/team members. Bridge between management.
4-Highly Skilled Worker	Broader knowledge of the underlying, concepts, principles, and processes in a specific work or study area, able to solve problems to new situations by comparing and applying acquired knowledge.	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying the full range of methods, tools, materials and information. Communicate using technical terminology and IT technology with partners and users as per workplace requirements.	Work under minimal supervision in specific contexts in response to workplace requirements. Resolve technical issues in response to workplace requirements and lead/guide a team/ group.
3-Skilled Worker	Moderately broad knowledge in a specific work or study area, able to perceive ideas and abstract from drawing and design according to workplace requirements.	Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools. Communicate with his team and limited external partners upholding the values, nature and culture of the workplace	Work or study under supervision with considerable autonomy. Participate in teams and responsible for group coordination.
2-Semi Skilled Worker	Basic understanding of underpinning knowledge in a specific work or study area, able to interpret and apply common occupational terms and instructions.	Skills required to carry out simple tasks, communicate with his team in the workplace presenting and discussing results of his work with required clarity.	Work or study under supervision in a structured context with limited scope of manipulation
1–Basic Skilled Worker	Elementary understanding of ability to interpret the underpinning knowledge in a specific study area, able to interpret common occupational terms and instructions.	Specific Basic skills required to carry out simple tasks. Interpret occupational terms and present the results of own work within guided work environment/ under supervision.	Work under direct supervision in a structured context with limited range of responsibilities.

List of Abbreviations

CS	– Competency Standard
CSS	- Cascade style sheet
HTML	- Hypertext markup language
ISC	– Industry Skills Council
NSDA	- National Skills Development Authority
NSQF	– National Skills Qualifications Framework
NTVQF	– National Technical and Vocational Qualifications Framework
OSH	– Occupational Safety and Health
PPE	– Personal Protective Equipment
SCVC	– Standards and Curriculum Validation Committee
STP	– Skills Training Provider
SOP	– Standard Operating Procedures
UoC	– Unit of Competency

Approval of Competency Standard

Members of the Approval Committee:

Member	Signature
Dulal Krishna Saha Executive Chairman (Secretary) National Skills Development Authority	 21.06.21
Md. Nurul Amin Member (Admin & Finance) and (Registration & Certification) Joint Secretary National Skills Development Authority	 21.06.21
Alif Rudaba Member (Planning & Skills Standard) Joint Secretary National Skills Development Authority	


21.06.21

Dulal Krishna Saha

Executive Chairman (Secretary)
National Skills Development Authority
Date:

**Competency Standards for National Skill Certificate –3in
Web Design and Development in ICT Sector**

Course Structure

SL	Unit Code and Title		UoC Level	Nominal (Hours)
Generic Competencies				45
1	GU004L2V1	Work in a self-directed team	3	15
2	GU005L2V1	Carry out workplace interaction in English	3	15
3	GU013L3V1	Carry out communication with clients	3	15
Sector Specific Competencies				40
1	SUICT002L2V1	Operate office application software	2	25
2	SUICT004L3V1	Comply to ethical standards in ICT workplace	3	15
Occupation Specific Competencies				275
1	OUWDF001L3V1	Setup web design environment	3	30
2	OUWDF002L3V1	Create and edit website using HTML	3	45
3	OUWDF003L3V1	Use image editing software	3	30
4	OUWDF004L3V1	Design styles with CSS and CSS framework	3	90
5	OUWDF005L3V1	Develop website using JavaScript	3	80
Total Nominal Learning Hours				360

Units & Elements at Glance

Generic Competencies

Code	Unit of Competency	Elements of Competency	Duration (Hours)
GU004L3V1	Work in a self-directed team	<ol style="list-style-type: none"> 1. Identify team goals and processes 2. Communicate and cooperate with team members 3. Work as a team member 4. Solve problems as a team member 	15
GU005L3V1	Carry out workplace interaction in English	<ol style="list-style-type: none"> 1. Interpret workplace communication and etiquette 2. Interpret workplace documents 3. Participate in workplace meetings and discussions 4. Practice professional ethics at workplace 	15
GU013L3V1	Carry out communication with clients	<ol style="list-style-type: none"> 1. Interpret client-based communication and etiquette 2. Prepare documents for endeavor/working environment/platform 3. Conduct communication 	15
Total Hours:			45

Sector Specific Competencies

Code	Unit of Competency	Elements of Competency	Duration (Hours)
SUICT002L2V1	Operate office application software	<ol style="list-style-type: none"> 1. Operate computer 2. Install application software 3. Use word processor to prepare/create documents 4. Use spreadsheet to create /prepare worksheets 5. Use presentation software to create / prepare presentation 	25
SUICT004L3V1	Comply to ethical standards in IT workplace	<ol style="list-style-type: none"> 1. Uphold the requirements of clients 2. Deliver quality products and services 3. Maintain professionalism at workplace 4. Maintain workplace code of conduct. 	15
Total Hours:			40

Occupation Specific Competencies

Code	Unit of Competency	Elements of Competency	Duration (Hours)
OUWDF001L3V1	Setup web design environment	<ol style="list-style-type: none"> 1. Setup client server 2. Work with the browser 3. Introduce web design software and data layer 4. Interpret web server 5. Install FTP client 	30
OUWDF002L3V1	Create and edit website using HTML	<ol style="list-style-type: none"> 1. Plan a website 2. Create the website using hypertext mark-up language 3. Test the website 	45
OUWDF003L3V1	Use image editing software	<ol style="list-style-type: none"> 1. Select the image editing tool 2. Edit image using editing tool 	30
OUWDF004L3V1	Design styles with CSS and CSS framework	<ol style="list-style-type: none"> 1. Plan a website 2. Design the website using cascading style sheets (CSS) 3. Enhance website using CSS framework 4. Test and confirm website 	90
OUWDF005L3V1	Develop website using JavaScript	<ol style="list-style-type: none"> 1. Plan for website 2. Develop website using JavaScript 3. Test the website 	80
Total Hour:			275

Generic Competencies

Unit Code and Title	GU004L3V1: Work in A Self-Directed Team
Nominal Hours	15 Hours
Unit Descriptor	This unit Covered the knowledge, skills and attitude to communicate and work within a team in an interactive work environment as per the workplace standard.
Elements of Competency	Performance Criteria Bold & Underlined terms are elaborated in the Range of Variables Training Components
1. Identify team goals and processes	<p>1.1 <u>Team goals</u> and processes are identified</p> <p>1.2 Roles and responsibilities of team members are identified</p> <p>1.3 Relationships within team and with other work areas are identified</p>
2. Communicate and cooperate with team members	<p>2.1. Effective interpersonal skills are used to interact with team members and to contribute to activities and objectives</p> <p>2.2. Formal and informal forms of communication are used effectively to support team achievement</p> <p>2.3. Diversity is respected and valued in team functioning.</p> <p>2.4. Views and opinions of other team members are understood and reflected accurately</p> <p>2.5. <u>Workplace staff regulation</u> is used correctly to assist communication</p>
3. Work as a team member	<p>3.1 Duties, responsibilities, authorities, objectives and task requirements are identified and clarified with team</p> <p>3.2 Tasks are performed in accordance with organizational and team requirements, specifications and workplace procedures</p> <p>3.3 Team members support other members as required to ensure team achieves goals and requirements</p> <p>3.4 Agreed reporting lines are followed using standard operating procedures</p>
4. Solve problems as a team member	<p>4.1 Current and potential problems faced by team are identified</p> <p>4.2 Procedures for avoiding and managing problems are identified</p> <p>4.3 Problems are solved effectively and in a manner that supports the team</p>
Range of Variables	
Variable	Range (May include but not limited to)

1. Team goals and processes	<ul style="list-style-type: none"> 1.1 Identifying the problem 1.2 Consider solutions 1.3 Action 1.4 Follow-up
2. Workplace staff regulation	2.1 Organization / company's code of conduct, complaint handling / grievance policies and procedures
<p>Evidence Guide</p> <p>The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.</p>	
1. Critical aspects of competency	<p>Assessment required evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 communicated and worked within a team in an interactive work environment as per workplace standard 1.2 dealt with a range of communication/ information at one time 1.3 made constructive contributions in workplace issues 1.4 presented information clearly and effectively in written form 1.5 asked appropriate questions 1.6 provided accurate information
2. Underpinning knowledge	<ul style="list-style-type: none"> 2.1 Organization requirements for written and electronic communication methods 2.2 Effective verbal communication methods
3. Underpinning skill	<ul style="list-style-type: none"> 3.1 Organizing information 3.2 Planning for own work activities 3.3 Understanding and conveying intended meaning 3.4 Participating in a variety of workplace discussions 3.5 Compiling with Organization's requirements in the use of written and electronic communication methods
4. Underpinning Attitudes	<ul style="list-style-type: none"> 4.1 Commitment to occupational health and safety 4.2 Environmental concerns 4.3 Eagerness to learn 4.4 Tidiness and timeliness 4.5 Respect for rights of peers and seniors in workplace 4.6 Communication with peers and seniors in workplace
5. Resource implication	<ul style="list-style-type: none"> 5.1 Variety of Information 5.2 Communication tools 5.3 Simulated workplace
6. Methods of assessment	<ul style="list-style-type: none"> 6.1. Written Test 6.2. Demonstration 6.3. Oral Questioning 6.4. Portfolio

7. Context of assessment	<p>7.1 Competency assessment will be done in NSDA accredited center or in online platform.</p> <p>7.2 Assessment should be done by NSDA certified/ nominated assessor</p>
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Accreditation Requirements

Training Providers must be accredited by NSDA, the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of national skills qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

Unit Code and Title	GU005L3V1: Carryout Workplace Interaction in English
Nominal Hours	15 Hours
Unit Descriptor	<p>This unit covers the knowledge, skills and attitudes required to carry out workplace interaction.</p> <p>It specifically includes interpreting workplace communication and etiquette; interpreting and understand workplace documents; participating in workplace meetings and discussions; and practicing professional ethics at workplace.</p>
Elements of Competency	<p>Performance Criteria <u>Bold & Underlined</u> terms are elaborated in the Range of Variables Training Components</p>
1. Interpret workplace communication and etiquette	<p>1.1 Workplace code of conducts are interpreted as per organizational guidelines</p> <p>1.2 Appropriate lines of communication are maintained with supervisors and colleagues</p> <p>1.3 Workplace interactions are conducted in a <u>courteous manner</u> to gather and convey information</p> <p>1.4 Questions about routine <u>workplace procedures and matters</u> are asked and responded as required</p>
2. Interpret workplace documents	<p>2.1 Workplace documents are interpreted as per standard.</p> <p>2.2 Assistance is taken to aid comprehension when required from peers/supervisors</p> <p>2.3 Visual information/ symbols/signage's are understood and followed</p> <p>2.4 Specific and relevant information are accessed from <u>appropriate sources</u></p> <p>2.5 Appropriate medium is used to transfer information and ideas</p>
3. Participate in workplace meetings and discussions	<p>3.1 Team meetings are attended on time and followed meeting procedures and etiquette</p> <p>3.2 Own opinions are expressed and listened to those of others without interruption</p> <p>3.3 Inputs are provided consistent with the meeting purpose and interpreted and implemented meeting outcomes</p>
4. Practice professional ethics at workplace	<p>4.1 Responsibilities as a team member are demonstrated and kept promises and commitments made to others</p> <p>4.2 Tasks are performed in accordance with workplace procedures</p>

	<p>4.3 Confidentiality is respected and maintained</p> <p>4.4 Situations and actions considered inappropriate or which present a conflict of interest are avoided</p>
Range of Variables	
Variable	Range (may include but not limited to):
1. Courteous manner	<p>1.1 Effective questioning</p> <p>1.2 Active listening</p> <p>1.3 Speaking skills</p>
2. Workplace procedures and matters	<p>2.1 Notes</p> <p>2.2 Agenda</p> <p>2.3 Simple reports such as progress and incident reports</p> <p>2.4 Job sheets</p> <p>2.5 Operational manuals</p> <p>2.6 Brochures and promotional material</p> <p>2.7 Visual and graphic materials</p> <p>2.8 Standards</p> <p>2.9 OSH information</p> <p>2.10 Signs</p>
3. Appropriate sources	<p>3.1 HR Department</p> <p>3.2 Managers</p> <p>3.3 Supervisors</p>
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency	
1. Critical aspects of competency	<p>Assessment required evidence that the candidate:</p> <p>1.1 followed workplace code of conducts is as per organizational guidelines</p> <p>1.2 interpreted workplace documents as per standard</p> <p>1.3 interpreted workplace instructions and symbols</p> <p>1.4 interpreted and implemented meeting outcomes</p>
2. Underpinning knowledge	<p>2.1 Workplace communication and etiquette</p> <p>2.2 Workplace documents, signs and symbols</p> <p>2.3 meeting procedure and etiquette</p>
3. Underpinning skills	<p>3.1 Demonstrating performance of workplace communication and etiquette</p> <p>3.2 Planning for own work activities</p> <p>3.3 Following workplace instructions and symbol</p> <p>3.4 Following workplace code of conducts is as per organizational guidelines</p> <p>3.5 Interpreting workplace documents as per standard</p>

	3.6 Interpreting and implementing meeting outcomes
4. Underpinning attitudes	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers and seniors in workplace
5. Resource implications	The following resources must be provided: 5.1 Relevant tools, equipment, software and facilities needed to perform the activities. 5.2 Required learning materials.
6. Methods of assessment	6.1 Written Test 6.2 Demonstration 6.3 Oral Questioning 6.4 Portfolio
7. Context of assessment	7.1 Competency assessment will be done in NSDA accredited center or in online platform 7.2 Assessment should be done by NSDA certified/ nominated assessor
<p>Accreditation Requirements</p> <p>Training Providers must be accredited by NSDA, the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of national skills qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	

Unit Code and Title	GU013L3V1: Carryout Communication with Clients
Nominal Hours	15 Hours
Unit Descriptor	<p>This unit covers the knowledge, skills and attitudes required to carry out workplace interaction.</p> <p>It specifically includes interpreting workplace communication and etiquette; reading and understand workplace documents; participating in workplace meetings and discussions; and practicing professional ethics at workplace.</p>
Elements of Competency	<p>Performance Criteria <u>Bold & Underlined</u> terms are elaborated in the Range of Variables Training Components</p>
1. Interpret client-based communication and etiquette	<p>1.1 Code of conduct of communication are interpreted as per working environment/platform</p> <p>1.2 Manners and etiquette of communication is interpreted</p> <p>1.3 Questions about routine working environment/platform procedures and matters are explained as required</p>
2. Prepare documents for endeavor/working environment/platform	<p>2.1 Relevant <u>documents</u> are prepared for effective communication with work environment</p> <p>2.2 <u>Validated sources</u> are identified as per client's requirements</p> <p>2.3 Documents are validated by the authentic sources as per client's requirements</p> <p>2.4 Documents are submitted as per standard procedure</p>
3. Conduct communication	<p>3.1 Appropriate means/method/<u>way of communication</u> are maintained as per working environment/platform</p> <p>3.2 <u>Channels of communication</u> are identified and followed</p> <p>3.3 Communication is conducted in a <u>courteous manner</u> to gather and convey information</p> <p>3.4 Appropriate non-verbal communication is used as required</p>
Range of Variables	
Variable	Range (may include but not limited to):
1. Documents	<p>1.1 Personnel identification document</p> <p>1.2 Portfolio</p> <p>1.3 Financial document</p> <p>1.4 Task proposal</p>
2. Validated sources	2.1 Chamber of commerce

	<ul style="list-style-type: none"> 2.2 Related association 2.3 High commission 2.4 Related Bank 2.5 Local authority 2.6 Related legal entities
3. Way of Communication	<ul style="list-style-type: none"> 3.1 Verbal 3.2 Written 3.3 Online communication
4. Channels of communication	<ul style="list-style-type: none"> 4.1 Marketplace messenger 4.2 Zoom 4.3 Google meet 4.4 Microsoft team 4.5 Go meeting 4.6 Boithok 4.7 Webex 4.8 Skype 4.9 Whatsapp
5. Courteous Manner	<ul style="list-style-type: none"> 5.1 Effective questioning 5.2 Active listening 5.3 Speaking with due honour
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency	
1. Critical Aspects of Competency	<p>Assessment required evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Interpreted client-based communication and etiquette 1.2 Prepared documents for endeavour/working/environment/platform 1.3 Conducted communication
2. Underpinning Knowledge	<ul style="list-style-type: none"> 2.1. Working platforms 2.2. Terms and condition in platforms 2.3. Documents for communication 2.4. Validated sources 2.5. Way of communication 2.6. Channel of communication 2.7. Courteous manner
3. Underpinning Skills	<ul style="list-style-type: none"> 3.1 Handling personal computer/laptop 3.2 Planning for own work activities 3.3 Interpreting communication needs 3.4 Using channels of communication 3.5 Logging with online platform 3.6 Interpreting terms and condition

4. Underpinning Attitudes	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers and seniors in workplace
5. Resource Implications	The following resources must be provided: 5.1 Well-equipped computer lab with audio visual accessories 5.2 Dedicated internet facilities 5.3 Relevant tools, Equipment, software and facilities needed to perform the activities 5.4 Uninterrupted powers supply source 5.5 Required learning materials.
6. Methods of Assessment	Methods of assessment may include but not limited to: 6.1 written Test 6.2 demonstration 6.3 oral Questioning 6.4 portfolio
7. Context of Assessment	7.1 Competency assessment will be done in NSDA accredited center or in online platform 7.2 Assessment should be done by NSDA certified/ nominated assessor
<p>Accreditation Requirements</p> <p>Training Providers must be accredited by NSDA, the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of national skills qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	

Sector Specific Competencies

Unit Code and Title	SUICT002L3V1: Operate Office Application Software
Nominal Hours	25 hours
Unit Descriptor	<p>This unit covers the knowledge, skills and attitude required to operate office application software.</p> <p>It specifically includes operating computer, installing application software, using word processor to prepare/create documents, using spread sheet to create /prepare worksheets, using presentation software to create / prepare presentation, and printing a document.</p>
Elements of Competency	<p>Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variable Training Components</p>
1. Operate computer	<p>1.1 Safe workplace practices are observed according to IT workplace guideline.</p> <p>1.2 <u>Peripherals</u> are checked, connected and added with desktop computer/Laptop as per SOP</p> <p>1.3 Desktop computer/Laptop is put on as per SOP</p> <p>1.4 Computer <u>desktop/laptop / GUI settings</u> are arranged and customized as per requirement</p> <p>1.5 Files and folders are <u>manipulated</u> as per requirement</p> <p>1.6 Properties of files and folders are viewed and searched</p> <p>1.7 Disks are defragmented, formatted as per requirement</p> <p>1.8 Desktop computer/Laptop is Shutdown as per SOP</p>
2. Install application software	<p>2.1 Installation requirements of software are identified and listed as required</p> <p>2.2 Software sources and CD key/ password are assured</p> <p>2.3 <u>Appropriate software</u> is collected and selected as per requirement</p> <p>2.4 software is installed with necessary customization as per installation Instructions</p> <p>2.5 Correctness of Installation is checked and adjusted as required</p>
3. Use word processor to prepare/create documents	<p>3.1 Appropriate <u>word processor</u> is selected and started</p> <p>3.2 Documents are created as per requirement in Personal use and office environment</p> <p>3.3 Data, figures, pictures and other resources are inserted to document form web or other sources as required.</p>

	<p>3.4 Documents are formatted as required</p> <p>3.5 Document is saved in desired format and location</p> <p>3.6 Document is printed as required</p>
4. Use spreadsheet to create /prepare worksheets	<p>4.1. Spreadsheet applications are selected and started.</p> <p>4.2. Worksheets are created as per requirement in Personal use and office environment</p> <p>4.3. Functions and formulas are used for calculating and editing logical operation</p> <p>4.4. Sheets are formatted as per requirement</p> <p>4.5. Charts are created using data as required</p> <p>4.6. Charts/ Sheets are saved in desired format in and location</p> <p>4.7. Document is printed as required</p>
5. Use presentation software to create / prepare presentation	<p>5.1 Appropriate presentation applications are selected and started</p> <p>5.2 Presentation is created as per requirement in personal use and office environment</p> <p>5.3 Image, Illustrations, text, table, symbols and media are entered as per requirements</p> <p>5.4 Presentations are formatted and animated</p> <p>5.5 Presentations are viewed and saved</p> <p>5.6 Presentations are printed as required</p>
Range of Variables	
Variable	Range (May include but not limited to:)
1. Peripherals	<p>1.1 Monitor</p> <p>1.2 Keyboard</p> <p>1.3 Mouse</p> <p>1.4 Modem</p> <p>1.5 Scanner</p> <p>1.6 Printer</p>
2. Desktop/Laptop/ GUI settings	<p>2.1 Icons</p> <p>2.2 Taskbar</p> <p>2.3 View</p> <p>2.4 Resolutions</p>
3. Manipulate	<p>3.1 Create</p> <p>3.2 Open</p> <p>3.3 Copy</p> <p>3.4 Rename</p> <p>3.5 Delete</p> <p>3.6 Sort</p>
4. Appropriate software	<p>4.1 Word processor</p> <p>4.2 Spread sheet application</p> <p>4.3 Presentation application</p>

5. Word processor	<ul style="list-style-type: none"> 5.1 MS Word processor 5.2 Open office Org 5.3 Google docs 5.4 Word perfect 5.5 LibreOffice
6. Spread sheet applications	<ul style="list-style-type: none"> 6.1 MS Excel 6.2 Google Sheets 6.3 Apple Numbers by Apple
7. Presentation application	<ul style="list-style-type: none"> 7.1 MS PowerPoint 7.2 Google Slides 7.3 Prezi
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspects of competency	<p>Assessment required evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 installed Operating system 1.2 manipulated Files and folders as per requirement 1.3 installed application software 1.4 used functions and formula in spread sheet. 1.5 applied animations into presentation slide. 1.6 printed document.
2. Underpinning knowledge	<ul style="list-style-type: none"> 2.1. Desktop and laptop items 2.2. Computer hardware 2.3. Computer software 2.4. Software installation procedure 2.5. Computer peripherals 2.6. Different type of software and application packages 2.7. Use of word processor 2.8. File 2.9. Folder 2.10. Use of spread sheet 2.11. Use of presentation software 2.12. Type of printers 2.13. Type of charts 2.14. Different type of math and logical functions.
3. Underpinning skill	<ul style="list-style-type: none"> 3.1 Handling tools and equipment 3.2 Planning for own work activities 3.3 Interpreting job requirements 3.4 Interpreting instructions 3.5 Identifying and selecting peripherals 3.6 Following OSH 3.7 Maintaining green practices 3.8 Communicating in the workplaces
4. Required attitude	<ul style="list-style-type: none"> 4.1 Commitment to occupational health and safety

	<ul style="list-style-type: none"> 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> 5.1 Well-equipped computer lab with audio visual accessories 5.2 Dedicated internet facilities 5.3 Relevant tools, Equipment, software and facilities needed to perform the activities 5.4 Uninterrupted powers supply source 5.5 Required learning materials.
6. Methods of assessment	<ul style="list-style-type: none"> 6.1 Written Test 6.2 Demonstration 6.3 Oral Questioning 6.4 Portfolio
7. Context of assessment	<ul style="list-style-type: none"> 7.1 Competency assessment will be done in NSDA accredited center or in online platform. 7.2 Assessment should be done by NSDA certified/nominated assessor.
<p>Accreditation Requirements</p> <p>Training Providers must be accredited by NSDA, the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of national skills qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	

Unit Code and Title	SUICT004L3V1: Comply to Ethical Standards in It Workplace
Nominal Hours	15 Hours
Unit Descriptor	<p>This unit covers the knowledge, skills and attitudes required to comply to ethical standards in IT workplace.</p> <p>It specifically includes upholding the requirements of clients, delivering quality products and services, maintaining professionalism at workplace, and maintaining workplace code of conduct.</p>
Elements of Competency	<p>Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variables</p>
1. Uphold the requirements of clients	<p>1.1 Clients' requirements are identified</p> <p>1.2 Confidentiality of information is maintained in accordance with workplace policies / organizational policies/national legislation</p> <p>1.3 Potential conflicts of interest are identified and involved parties of potential conflicts are notified</p> <p>1.4 Proprietary rights of client/customer are asserted</p>
2. Deliver quality products and services	<p>2.1. Products and services are provided according to the clients' requirements</p> <p>2.2. Work is completed as per standards</p> <p>2.3. Quality processes are implemented when developing products and services</p>
3. Maintain professionalism at workplace	<p>3.1 Work processes are delivered as per standards</p> <p>3.2 Skills, knowledge and qualifications are presented in a professional manner</p> <p>3.3 Services and products developed by self and others are delivered as per workplace standard</p> <p>3.4 Unbiased and objective information are provided to clients</p> <p>3.5 Realistic estimates for time, cost and delivery of outputs are presented during negotiation</p>
4. Maintain workplace code of conduct	<p>4.1 Workplace code of conduct are interpreted</p> <p>4.2 Workplace code of conduct is followed</p>
Range of variables	
Variables	Range (may include but not limited to):
Evidence Guide	

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency	
1. Critical aspects of competency	<p>Assessment required evidence that the candidate:</p> <ol style="list-style-type: none"> 1.1 asserted proprietary rights of client/customer 1.2 completed work as per standards. 1.3 implemented quality processes when developing products and services 1.4 delivered services and products developed by self and others 1.5 provided unbiased and objective information to clients 1.6 followed workplace code of conduct
2. Underpinning knowledge	<ol style="list-style-type: none"> 2.1. Corporate code of confidentiality of information 2.2. Organizational policies 2.3. National legislation and workplace policies in relation to IT sector 2.4. Law and regulations pertaining to proprietary rights 2.5. Quality processes for products and services 2.6. Procedure of provided to client information 2.7. Method of estimating for time, cost and delivery products and services 2.8. Workplace code of conduct in IT sector
3. Underpinning skills	<ol style="list-style-type: none"> 3.1. Upholding client's dignity and honor 3.2. Planning for own work activities 3.3. Handling tools and equipment 3.4. Interpreting client's requirements 3.5. Maintaining green practices 3.6. Communicating in the workplaces 3.7. Following workplace code of conduct
4. Underpinning attitudes	<ol style="list-style-type: none"> 4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers and seniors in workplace
5. Resource Implications	<p>The following resources must be provided:</p> <ol style="list-style-type: none"> 5.1 Well-equipped computer lab with audio visual accessories 5.2 Dedicated internet facilities 5.3 Relevant tools, Equipment, software and facilities needed to perform the activities

	5.4 Uninterrupted powers supply source 5.5 Required learning materials
6. Methods of assessment	6.1 Written Test 6.2 Demonstration 6.3 Oral Questioning 6.4 Portfolio
7. Context of assessment	7.1 Competency assessment will be done in NSDA accredited center or in online platform. 7.2 Assessment should be done by NSDA certified/nominated assessor.

Accreditation Requirements

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Occupation Specific Competencies

Unit Code and Title	Ouwdf001L3V1: Setup Web Design Environment
Nominal Hours	30 Hours
Unit Descriptor	<p>This unit covers the knowledge, skills and attitudes required to setup web design environment.</p> <p>It specifically includes setting up client server, working with the browser, introducing web design software, interpreting web server, installing FTP clients, and interpreting data layer.</p>
Elements of Competency	<p>Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variables</p>
1. Setup client server	<p>1.1 Client server architecture is identified</p> <p>1.2 <u>Types of network</u> and their functionality are interpreted</p> <p>1.3 <u>Type of websites</u> is categorized</p> <p>1.4 Local Web server is installed and tested for functionality</p>
2. Work with the browser	<p>2.1. Web browser is identified</p> <p>2.2. Types of <u>web browser</u> is introduced</p> <p>2.3. Web browser is installed and used</p> <p>2.4. Features/options of different web browsers are outlined</p> <p>2.5. Cross browser compatibility of websites is interpreted</p> <p>2.6. <u>Developer tools</u> are identified and selected</p> <p>2.7. Plug-in and extensions are installed and used as required</p>
3. Introduce web design software and data layer	<p>3.1 <u>Web design software</u> is interpreted</p> <p>3.2 Web design platform is introduced</p> <p>3.3 Web design software is familiarized</p> <p>3.4 Data layer is defined</p> <p>3.5 <u>Data layer Applications</u> are interpreted</p> <p>3.6 Web API is introduced</p>
4. Interpret web server	<p>4.1. Web server is identified</p> <p>4.2. Local web server is defined</p> <p>4.3. Web server is interpreted</p>
5. Install FTP client	<p>5.1 <u>FTP client</u> is interpreted</p> <p>5.2 FTP client is installed</p>
Range of Variables	
Variables	Range (may include but not limited to):
1. Types of networks	<p>1.1 Intranet</p> <p>1.2 Extranet</p> <p>1.3 Internet</p>

2. Types of websites	2.1 Static 2.2 Dynamic 2.3 Interactive
3. Web browser	3.1 Mozilla Firefox 3.2 Google Chrome 3.3 Safari 3.4 Opera 3.5 Microsoft edge
4. Developer tools	4.1 Inspect elements 4.2 Console 4.3 View sources 4.4 Network
5. Web design software	5.1 Web editors (notepad++, text pad, Sublime text) 5.2 Graphic design tools (Photoshop, illustrator, InDesign, XD) 5.3 Audio-Video Players
6. Data layer Applications	6.1 Web API (AWS, Azure etc.) 6.2 Static file (Excel, CSV, PDF) 6.3 Google sheet 6.4 PhpMyAdmin 6.5 MySQL 6.6 Apache
7. FTP client	7.1 FileZilla 7.2 CyberDuck 7.3 File Manager
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency	
1. Critical aspects of competency	1.1 Installed and tested local Web server 1.2 Identified developer tool on a web browser 1.3 Installed plug-in and extension 1.4 Interpreted data layer applications 1.5 Installed FTP client
2. Underpinning knowledge	2.1 Client server architecture 2.2 Network types 2.3 Website types 2.4 Local web server 2.5 Web browsers 2.6 Developer tools 2.7 Plug-in installing procedure 2.8 Extensions 2.9 Cross browser compatibility 2.10 FTP client

	<ul style="list-style-type: none"> 2.11 Data layer 2.12 Web API
3. Underpinning skills	<ul style="list-style-type: none"> 3.1 Handling personal computer/laptop 3.2 Planning for own work activities 3.3 Interpreting client's requirements 3.4 Communicating with clients 3.5 Handling clients with ethical manner 3.6 Using web browser
4. Required attitude	<ul style="list-style-type: none"> 4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers and seniors in workplace
5. Resource Implication	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> 5.1 Well-equipped computer lab with audio visual accessories 5.2 Uninterrupted internet facilities 5.3 Relevant tools, Equipment, software and facilities needed to perform the activities 5.4 Uninterrupted powers supply source 5.5 Required learning materials
6. Methods of assessment	<p>Methods of assessment may include but not limited to:</p> <ul style="list-style-type: none"> 6.1 Written test 6.2 Demonstration 6.3 Oral questioning 6.4 Portfolio
7. Context of assessment	<ul style="list-style-type: none"> 7.1 Competency assessment will be done in NSDA accredited center or in online platform 7.2 Assessment should be done by NSDA certified/ nominated assessor
<p>Accreditation Requirements Training Providers must be accredited by NSDA, the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of national skills qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	

Unit Code and Title	OUWDF002L3V1: Create and Edit Website Using HTML
Nominal Hours	45 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to create and edit website using HTML. It specifically includes planning a website, creating the website using hypertext mark-up language and testing the website.
Elements of Competency	Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variables
1. Plan a website	1.1 The purposes and intended audience of the website are identified as per client requirements 1.2 The design requirements and constraints are identified 1.3 A conceptual design is developed 1.4 Necessary <u>software</u> is installed as per requirements
2. Create the website using hypertext mark-up language	2.1. <u>Web layout</u> is selected and collected as per client requirements 2.2. Web layout is converted to HTML using <u>Text editor</u> 2.3. Website is saved and executed
3. Test the website	3.1 The website is tested to ensure functionality and errors are corrected as per standard operating procedure 3.2 The website is opened with common <u>browsers</u> and check for <u>accessibility</u> , readability, legibility and presentation in accordance with client requirements 3.3 The website is evaluated for fitness in terms of the purpose, target audience and specifications of client requirements
Range of Variables	
Variables	Range (may include but not limited to):
1. Software	1.1 Office application software 1.2 Design related software 1.2.1 Photoshop 1.2.2 XD 1.2.3 Figma 1.2.4 PDF reader
2. Web layout	2.1 PSD 2.2 PDF 2.3 Figma

	2.4 XD
3. Text editor	3.1 Notepad 3.2 Notepad++ 3.3 Brackets 3.4 Sublime text
4. Browsers	4.1 Google Chrome 4.2 Microsoft edge 4.3 Mozilla Firefox 4.4 Safari
5. Accessibility	5.1 Cultural awareness 5.2 Ethnicity 5.3 Physical impairments 5.4 Remote locations
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency	
1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1 identified design requirements and constraints 1.2 developed conceptual design 1.3 converted web layout to HTML using HTML editor 1.4 tested website to ensure functionality, correct errors according to the testing procedures in the plan 1.5 opened website with common browsers and check for accessibility, readability, legibility and presentation in accordance with client requirements
2. Underpinning knowledge	2.1 Web layout 2.2 Text editor 2.3 Accessibility 2.4 Readability 2.5 legibility 2.6 HTML 2.6.1 HTML tags and attributes 2.6.2 HTML Forms 2.6.3 HTML Graphics 2.6.4 HTML Media 2.7 Site map
3. Underpinning skills	3.1 Operating personal computer 3.2 Planning for own work activities 3.3 Using text editors 3.4 Using office application software 3.5 Using design related software

	<ul style="list-style-type: none"> 3.6 Using development related software 3.7 Using internet and browsers 3.8 Communicating with competent personnel 3.9 Using file and folders
4. Required attitude	<ul style="list-style-type: none"> 4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers and seniors in workplace
5. Resource Implication	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> 5.1 Well-equipped computer lab with audio visual accessories 5.2 Uninterrupted internet facilities 5.3 Relevant tools, Equipment, software and facilities needed to perform the activities 5.4 Uninterrupted powers supply source 5.5 Required learning materials
6. Methods of assessment	<p>Methods of assessment may include but not limited to:</p> <ul style="list-style-type: none"> 6.1 written test 6.2 demonstration 6.3 oral questioning 6.4 portfolio
7. Context of assessment	<ul style="list-style-type: none"> 7.1 Competency assessment will be done in NSDA accredited center or in online platform 7.2 Assessment should be done by NSDA certified/ nominated assessor

Accreditation Requirements

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Unit Code and Title	Ouwdf003L3V1: Use Image Editing Software
Nominal Hours	30 Hours
Unit Descriptor	<p>This unit covers the knowledge, skills and attitudes required to use image editing software.</p> <p>It specifically includes selecting the image editing tool and editing image using editing tool.</p>
Elements of Competency	<p>Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variables</p>
1 Select the image editing tool	<p>1.1 Appropriate image editing <u>software</u> is selected as required</p> <p>1.2 Necessary plug-ins are installed and checks another requirement</p>
2 Edit image using editing tool	<p>2.1. <u>Image</u> is opened in layer and be aware of <u>legislation</u></p> <p>2.2. Layers are added to the image as required</p> <p>2.3. Format, color, brushes, effects and swatches are applied as required</p> <p>2.4. Optimized and previewing of Image is demonstrated</p> <p>2.5. Image is exported as required</p>
Range of Variables	
Variables	Range (may include but not limited to):
1. Software	<p>1.1 Photoshop expresses</p> <p>1.2 Canva</p> <p>1.3 InPixio</p> <p>1.4 Lightroom</p> <p>1.5 Ashampoo</p>
2. Image	<p>2.1 Jpg</p> <p>2.2 Jpeg</p> <p>2.3 Png</p> <p>2.4 Gif</p> <p>2.5 Psd</p>
3. Legislation	<p>3.1 Relevant section of copyright Act</p> <p>3.2 Relevant section of ICT act</p> <p>3.3 Relevant section of national cyber policy</p> <p>3.4 Intellectual property rights law and subsequent amendments</p>

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency

1. Critical aspects of competency	<ul style="list-style-type: none">1.1 started image editing software1.2 installed plug-ins1.3 applied formatting, color, brushes, effects and swatches1.4 exported image
2. Underpinning knowledge	<ul style="list-style-type: none">2.1 Image2.2 Image editing software2.3 Legislation<ul style="list-style-type: none">2.3.1 Relevant section of copyright act2.3.2 Relevant National Cyber Policy2.3.3 Relevant Intellectual property rights law and subsequent amendments2.4 Image editing procedure2.5 Layers2.6 Formatting2.7 Color2.8 Brushes2.9 Effects and swatches2.10 Image exporting procedure
3. Underpinning skills	<ul style="list-style-type: none">3.1 Operating personal computer3.2 Using office application software3.3 Using design related software3.4 Planning for own work activities3.5 Using development related software3.6 Using internet and browsers3.7 Communicating with competent personnel3.8 Using file and folders
4. Required attitude	<ul style="list-style-type: none">4.1 Commitment to occupational health and safety4.2 Promptness in carrying out activities4.3 Sincere and honest to duties4.4 Environmental concerns4.5 Eagerness to learn4.6 Tidiness and timeliness4.7 Respect for rights of peers and seniors in workplace4.8 Communication with peers and seniors in workplace
5. Resource Implication	<p>The following resources must be provided:</p> <ul style="list-style-type: none">5.1 Well-equipped computer lab with audio visual accessories5.2 Uninterrupted internet facilities

	5.3 Relevant tools, Equipment, software and facilities needed to perform the activities 5.4 Uninterrupted powers supply source 5.5 Required learning materials
6. Methods of assessment	6.1 Written test 6.2 Demonstration 6.3 Oral questioning 6.4 Portfolio
7. Context of assessment	7.1 Competency assessment will be done in NSDA accredited center or in online platform 7.2 Assessment should be done by NSDA certified/ nominated assessor

Accreditation Requirements

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Unit Code and Title	O UWDF004L3V1: Design Styles with CSS and CSS Framework
Nominal Hours	90 hours
Unit Descriptor	<p>This unit of competency covers the knowledge, skills and attitude to design styles with CSS and CSS framework.</p> <p>It specifically includes planning a website, designing the website using CSS, enhancing website using front end framework, and testing and confirm website.</p>
Elements of Competency	Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variable
1. Plan a website	<p>1.1 The purpose and intended audience of the website are identified</p> <p>1.2 The design requirements and constraints are identified</p> <p>1.3 A conceptual design is developed</p> <p>1.4 Necessary <u>software</u> installed as per requirement</p>
2. Design the website using cascading style sheets (CSS)	<p>2.1 Web layout is selected as per design requirement</p> <p>2.2 Web layout is designed using CSS as per client's requirements</p> <p>2.3 HTML and CSS file is integrated as required</p> <p>2.4 Web site is saved and executed</p>
3. Enhance website using CSS framework	<p>3.1 Framework is collected and configured with website</p> <p>3.2 HTML and CSS framework are integrated</p> <p>3.3 CSS framework is customized using CSS as per requirements</p> <p>3.4 Web site is saved and executed</p>
4. Test and confirm website	<p>4.1 The website is tested to ensure functionality and errors are corrected as per standard operating procedure</p> <p>4.2 The website is opened with common <u>browsers</u> and check for accessibility, readability, legibility and presentation in accordance with client requirements</p> <p>4.3 The website is evaluated for fitness in terms of the purpose, target audience and specifications of client requirements</p>
Range of Variables	
Variable	Range (May include but not limited to:)
1. Software	1.1 IDE

	<ul style="list-style-type: none"> 1.1.1 Visual Studio Code 1.1.2 Atom 1.1.3 Bracket 1.1.4 Sublime text 1.1.5 Text pad 1.1.6 Notepad++
2. Testing	<ul style="list-style-type: none"> 2.1 Link up 2.2 Inspect elements 2.3 Correct case 2.4 Start and End tags 2.5 Source code formatting 2.6 Comments
3. Browsers	<ul style="list-style-type: none"> 3.1 Chrome 3.2 Mozilla 3.3 Safari 3.4 Microsoft edge 3.5 Opera
<p>Evidence Guide</p> <p>The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.</p>	
1. Critical aspects of competency	<ul style="list-style-type: none"> 1.1 integrated HTML and CSS file 1.2 saved and executed web page 1.3 integrated HTML and front-end framework 1.4 tested the website
2. Underpinning knowledge	<ul style="list-style-type: none"> 2.1. CSS syntax 2.2. HTML tags and attributes 2.3. Web layout 2.4. File management 2.5. HTML files 2.6. CSS files 2.7. CSS Framework
3. Underpinning skill	<ul style="list-style-type: none"> 3.1. Operating personal computer 3.2. Planning for own work activities 3.3. Using text editors 3.4. Using office application software 3.5. Using design related software 3.6. Using development related software 3.7. Using internet and browsers 3.8. Communicating with competent personnel 3.9. Using file and folders 3.10. Handling computer peripherals

	3.11. Using HTML tags and attributes
4. Required attitude	<ul style="list-style-type: none"> 4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> 5.1 Well-equipped computer lab with audio visual accessories 5.2 Uninterrupted internet facilities 5.3 Relevant tools, Equipment, software and facilities needed to perform the activities 5.4 Uninterrupted powers supply source 5.5 Required learning materials
6. Methods of assessment	<ul style="list-style-type: none"> 6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio
7. Context of assessment	<ul style="list-style-type: none"> 7.1 Competency assessment will be done in NSDA accredited center or in online platform 7.2 Assessment should be done by NSDA certified/ nominated assessor

Accreditation Requirements

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Unit Code and Title	Ouwdf005L3V1: Develop Website Using JavaScript
Nominal Hours	80 hours
Unit Descriptor	<p>This unit of competency specifies the knowledge, skills and attitude to develop website using JavaScript.</p> <p>It specifically includes planning for website, developing website using JavaScript and testing the website.</p>
Elements of Competency	<p>Performance Criteria</p> <p><u>Bold and underlined</u> terms are elaborated in the Range of Variable.</p>
1. Plan for website	<p>1.1 The purpose and intended audience of the website are identified</p> <p>1.2 Functional requirements and constraints are identified</p> <p>1.3 Coding plan is developed as required</p> <p>1.4 Necessary <u>software</u> installed and functionality is checked</p>
2. Develop website using JavaScript	<p>2.1 JavaScript is coded as per functional requirements</p> <p>2.2 JavaScript files are integrated with website as per standard procedure</p> <p>2.3 JavaScript is executed to finalize the website</p>
3. Test the website	<p>3.1 The website is tested to ensure functionality and errors are corrected as per standard operating procedure</p> <p>3.2 The website is opened with common <u>browsers</u> and check for accessibility, readability, legibility and presentation in accordance with client requirements</p> <p>3.3 The website is evaluated for fitness in terms of the purpose, target audience and specifications of client requirements</p>
Range of Variables	
Variable	Range (May include but not limited to)
1. Software	<p>1.1 local server</p> <p>1.2 IDE</p> <p>1.2.1 Sublime</p> <p>1.2.2 Brackets</p> <p>1.2.3 VS code</p> <p>1.2.4 Notepad++</p>
2. Browsers	<p>2.1 Chrome</p> <p>2.2 Mozilla</p> <p>2.3 Safari</p>

	2.4 Microsoft edge 2.5 Opera
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent & recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspects of competency	1.1 developed coding plan 1.2 installed necessary software 1.3 integrated website and JavaScript 1.4 saved and executed JavaScript 1.5 tested the website
2. Underpinning knowledge	2.1. HTML tags and attributes 2.2. CSS syntax 2.3. File management 2.4. Uses of IDE 2.5. Browser 2.6. Scripting language – JavaScript <ul style="list-style-type: none"> • jQuery • Ajax • Json
3. Underpinning skill	3.1. Operating personal computer 3.2. Planning for own work activities 3.3. Using text editors 3.4. Using design related software 3.5. Using development related software 3.6. Using internet and browsers 3.7. Communicating with competent personnel 3.8. Using file and folders 3.9. Using CSS syntax
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and time lines 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	The following resources must be provided: 5.1 Well-equipped computer lab with audio visual

	<p>accessories</p> <p>5.1 Well-equipped computer lab with audio visual accessories</p> <p>5.2 Uninterrupted internet facilities</p> <p>5.3 Relevant tools, Equipment, software and facilities needed to perform the activities</p> <p>5.4 Uninterrupted powers supply source</p> <p>5.5 Required learning materials</p>
6 Methods of assessment	<p>6.1 Demonstration with oral questioning</p> <p>6.2 Direct observation</p> <p>6.3 Written test</p> <p>6.4 Portfolio</p>
7 Context of assessment	<p>7.1 Competency assessment will be done in NSDA accredited center or in online platform</p> <p>7.2 Assessment should be done by NSDA certified/nominated assessor</p>

Accreditation Requirements

Training Providers must be accredited by NSDA, the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of national skills qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

Development of First Draft of Competency Standard

The Competency Standards for National Skills Certificate level-03 in **Web Design and Development for freelancer**, is developed by the following members and approved by NSDA

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2.	Md. Mahabubul Aziz Sumon, CEO Codeware Ltd, Cell: 01672691228, Email: sumon@codewareltd.com	Member
3.	Mirza Md. Hasan, Captain Themefic, Cell: 01916499260, Email: info@themefic.com	Member
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Development of Second Draft of Competency Standard

The Competency Standards for National Skills Certificate level-03 in **Web Design and Development for freelancer**, is developed by the following members and approved by NSDA

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Validation of Competency Standard by SCVC

The Competency Standards for National Skills Certificate in **Web Design and Development for freelancer**, is validated by SCVC on 30 and 31 May 2021 and approved by NSDA.

Respectable members of the SCVC:

WEB DESIGN AND DEVELOPMENT FOR FREELANCER		
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This Competency Standard for **Web Design and Development for freelancer** is a document for the development of curricula, teaching and learning materials, and assessment tools. It also serves as the document for providing training consistent with the requirements of industry in order for individuals who graduated through the established standard via competency-based assessment to be suitably qualified for a relevant job.

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