



THE REPUBLIC OF UGANDA
Ministry of Education and Sports

**Business, Technical, Vocational Education and Training [BTVET]
Subsector Reform**



Qualification Level: 1

Occupational Cluster: Information, Communication and Technology

January 2022

Developed by:

**Qualifications Standards Department
Directorate of Industrial Training**

Funded by:

Government of Uganda

Under BTVET Act, 2008, the functions of the Directorate of Industrial Training are:

- (a) To identify the needs of the labour market for occupational competencies that fall under the UVQF.
- (b) To regulate apprenticeship schemes.
- (c) To foster and promote entrepreneurial values and skills, as an integral part of the UVQF.
- (d) To secure adequate and sustainable financing for the efficient operations of the Directorate.
- (e) To accredit training institutions or companies as assessment centres.
- (f) To determine fees payable under the Act.
- (g) To develop, apply, expand and improve the purposeful application of Uganda vocational qualifications defined in the UVQF.
- (h) To assess and award Uganda Vocational Qualifications.
- (i) To promote on-the-job training in industry for apprenticeship, traineeship and indenture training and for other training such as further skills training and upgrading.
- (j) To prescribe the procedure for the making of training schemes.

Further to the above provisions, there is an established Uganda Vocational Qualifications Framework (UVQF), under part V of the BTVET Act, 2008. It is stated that:

The purpose of the UVQF is to; c

- (a) Define occupational standards in the world of work.
- (b) Define assessment standards.
- (c) Award vocational qualifications of learners who meet the set standards of different studies.
- (d) Provide guidelines for modular training.

The UVQF shall follow principles of Competence Based Education and Training (CBET) which include:

- (a) Flexible training or learning modules.
- (b) Positive assessment and Certification.
- (c) Assessment of Prior Learning.
- (d) Recognition of formal and non-formal training.
- (e) Self-paced or individual learning.
- (f) Work place learning.

For award and recognition of certificates, the BTVET Act, 2008 provides that:

- (1) The Directorate and other examination boards established under the Act shall award certificates and diplomas for Business, Technical or Vocational education and training under the UVQF;
- (2) The Certificates and Diplomas to be awarded shall be in the form prescribed by the Minister on the recommendation of the Industrial Training Council;
- (3) The Certificates and Diplomas awarded under the Act shall be recognised in the Uganda education system and by the labour market.

Under the TVET Implementation Standards 2020, the proposed new mandate of the Directorate of Industrial Training shall be restricted to promoting the highest standards in the quality and efficiency of industrial training in the country and ensuring an adequate supply of properly trained manpower at all levels in the industry and the world of work.

The functions shall include:

- a) Regulating Industrial training and trainers,
- b) Developing industrial training curricula,
- c) Harmonizing curricula and certificates of competence,
- d) Assessing industrial training,
- e) Development of occupational standards and Assessment and Training Packages (ATPs) for Trade Testing for the industry and world of work and
- f) Awarding certificates in that respect.

At operational level in the Directorate, the Qualification Standards Department performs development tasks related to concepts, procedures and instruments for establishment of the UVQF in close collaboration with both public and private stakeholders in vocational training.

In particular, the Department organizes and coordinates the development of Assessment and Training Packages for use in competence-based vocational training as well as standards-based assessment and certification.

The Directorate has therefore produced this Assessment and Training Package for use in implementing Competence-Based Education and Training mechanisms.

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Word from Permanent Secretary

The Ministry of Education and Sports (MoES) through the Directorate of Industrial Training conducts Competence Based Assessment.

The foreseen advantages of CBA include improved access, equity and relevance of skills development, reduced unit costs of training, and recognition of Prior Learning (or on-the-job- training), among others.

As the Ministry executes its obligation of ensuring quality in training standards, the public-private partnership is being strengthened to improve occupational competence of the country's workforce without gender bias.

To achieve the set-out targets, the Directorate embarked on the anticipated UVQF design and development piloting its instruments and mechanisms in order to effectively enhance Competence-Based Assessment (CBA) in Uganda.

To date, the Qualifications Standards Department of DIT has produced Assessment and Training Packages (ATP) for various occupations. Each ATP contains 3 parts namely:

- 1.Occupational/job Profile
- 2.Training modules and
- 3.Assessment instruments Banks

The ATP can be used by any training provider and/or those who wish to present themselves for Occupational Assessment and Certification.

Herewith, the Directorate of Industrial Training presents the "Assessment & Training Package (ATP)" for training, assessment and certification of **WEBSITE DEVELOPER – QUALIFICATION LEVEL 1**.

Finally, I thank all individuals, organizations and development partners who have contributed and/or participated in the review of this noble document.

Ketty Lamaro
Permanent Secretary

Executive Summary

This Assessment and Training Package is a Competence-Based Education and Training (CBET) tool and consists of three major parts:

- 0.1. PART I: The “Occupational Profile” (OP) of a WEBSITE DEVELOPER.** This Occupational Profile, which was developed by **WEBSITE DEVELOPER** practicing in the world of work mirrors the duties, and tasks Tailors are expected to perform.
- 0.2. PART II: “Training Modules”** in the form of guidelines to train **WEBSITE DEVELOPERs** both on the job as well as in training centers (or combinations of both venues of learning). The Training Modules herein have been developed basing on the Occupational Profile and hence are directly relevant for employment.
- 0.3. PART III: “Assessment Instruments”** in the form of performance (Practical) and written (theory) test items that can and should be used to assess whether a person complies with the requirements of employment as a **WEBSITE DEVELOPER**. These assessment-based instruments were developed by Job practitioners (Tailors) based on the occupational profile and training modules.
- 0.4.** While the Occupational Profile (OP) contained in PART I of this document provides the information on **WHAT a person is expected to do** competently in the world of work, the test items, - including performance criteria- of PART III qualify the **HOW and/or HOW WELL a person must do the job.**
- 0.5.** The modular format of the curriculum (PART II) allows learners to acquire job specific skills and knowledge (i.e., competencies) module by module. A single module can be accomplished within a relatively short duration of time allowing flexibility for learners to move directly into an entry level job, go for further modules or advance to higher levels of training. Modular courses allow more learners to access the training system because training centers as well as companies can accommodate more students in a given period of time.
- 0.6.** In addition to improved access, equity and relevance of BTVET, the UVQF will also enable people who are convinced to have acquired competencies laid down in this ATP through prior training and on-the-job experience to access assessment and certification directly; be it on the basis of a single module, a group of modules or all modules pertaining to the occupation at once. This achievement will facilitate Recognition of Prior Learning (RPL).

0.7. The parts of this Assessment and Training Package were sequentially developed as follows:

- i Part 1: Occupational Profile: **January 2022**
- ii Part 2: Training Modules: **January 2022**
- iii Part 3: Assessment Instruments: **January 2022**

This ATP (or parts of it) may be periodically revised to match the dynamic trends in the occupation and hence issued in different versions.

Patrick Byakatonda
Ag. Director DIT

Acknowledgement

The Qualifications Standards Department of DIT wishes to sincerely acknowledge the valuable contributions to the development of this Assessment and Training Package by the following persons, Institutions and organizations:

- Members of the DIT Industrial Training Council;
- The Director and staff of DIT;
- Ministry of Education and Sports;
- The practitioners from the world of work;
- Art and Design Curriculum Specialists from NCDC
- Examination Specialists from UNEB
- The facilitators involved in guiding the review panel in their activities
- The Government of Uganda for financing the development of this ATP

Abbreviations and Acronyms

A&C	Assessment and Certification
ATP	Assessment and Training Packages
BTVET	Business, Technical and Vocational Education and Training
CBA	Competence Based Assessment
CBET	Competency Based Education and Training
DACUM	Develop a Curriculum
DIT	Directorate of Industrial Training
ITC	Industrial Training Council
GoU	Government of Uganda
LWA	Learning-working Assignment
MC	Modular Curriculum
MoES	Ministry of Education and Sports
OP	Occupational Profile
PEX	Practical Exercise
PTI	Performance (Practical) Test Item
QS	Qualification Standards
RPL	Recognition of Prior Learning
TIB	Test Item Bank
TVET	Technical and Vocational Education and Training
UVQ	Uganda Vocational Qualification
UVQF	Uganda Vocational Qualifications Framework
WTI	Written (Theory) Test Item
SDD	Software Design Document
SRS	Software Requirements Specification
DBMS	Database Management System
APP	Application

Key Definitions

Assessment	Assessment is the means by which evidence is gathered and judged to decide if an individual has met the stipulated assessment standards or not. Testing is a form of formal assessment.
Certification	Certification is a formal procedure to issue a certificate (qualification) to an individual that has demonstrated during formal assessment that he/she is competent to perform the tasks specified in the occupational profile.
Competence	Integration of skills, knowledge, attitudes, attributes and expertise in doing/ performing tasks in the world of work to a set standard.
Competency	(Occupational) competency is understood as the ability to perform tasks common to an occupation to a set standard.
CBET	Competence-based education and training means that programmes: <ol style="list-style-type: none">1. have content directly related to work2. focus is on 'doing something well'3. assessment is based upon industry work standards, and4. curricula are developed in modular form
Duty	A Duty describes a large area of work in performance terms. A duty serves as a title for a cluster of related Tasks (see also: TASK).
Learning-Working Assignment (LWA)	LWA are simulated or real job situations / assignments that are suitable for learning in a training environment (e.g. "small projects"). In a working environment LWA are real work situations/assignments.
Modules	Modules are part(s) of a whole curriculum. Modules can be considered as "self-contained" partial qualifications which are described by learning outcomes or competencies and which can be assessed and certified individually.
Occupational Profile (OP)	An Occupational Profile is an overview of the duties and tasks a job incumbent is expected to perform competently in employment.

Occupational Profiles developed by practitioners from the world of work enhance the relevance of training and learning to the requirements of the world of work.

Occupational Profiles define WHAT a person is supposed to do in performance terms. It also contains generic information regarding related knowledge and skills, attitudes/behaviour, tools, materials and equipment required to perform as well as trends/ concerns in the occupation.

Occupational profiles are the reference points for developing modular curricular and assessment standards

Qualification

A qualification is a formal reward for demonstrating competence, based on formal assessment against set standards and provided to the individual in the form of a certificate specifying the nature of the competence.

Task

Job TASKS represent the smallest unit of job activities with a meaningful outcome. Tasks result in a product, service, or decision. They represent an assignable unit of work and have a definite beginning and ending point. Tasks can be observed and measured. *(see also: Duty)*

1.0 ATP-PART I

Occupational Profile for WEBSITE DEVELOPER

- 1.1 The OCCUPATIONAL PROFILE (OP) for “**WEBSITE DEVELOPER**” below defines the **Duties** and **Tasks** a competent **WEBSITE DEVELOPER** is expected to perform in the world of work (on the job) in Uganda and the East African region today.
- 1.2 Since it reflects the skill requirements of work life, the Occupational Profile is the reference document for the subsequent development of training modules and assessment instruments (test items) which are directly relevant to employment in Ugandan and the East African businesses and industries.
- 1.3 To ensure that the Occupational Profile is relevant for employment in Uganda and East Africa, the DIT used the method of “occupational/job profiling.

This approach involves the brainstorming of a panel of 8 to 12 competent job practitioners guided by trained and experienced facilitators. During a two-day workshop the panellists define the duties and tasks performed in employment, as well as the prerequisite skills, knowledge, attitudes, tools and equipment, and the future trends and concerns in the occupation/job.

- 1.4 The panellists, facilitators and coordinators who participated in developing this Occupational Profile for **WEBSITE DEVELOPER** are listed on the following page.

Job Expert Panel
Dungu Abdul
MoES
Nsubuga Hood
NCDC
Mutonyi Josephine
UNEB
Banda Eva Lucy
Senior UNEB Examiner
Kiwanuka Isaac Kaweesa
Teacher

Masanja Moses
Practitioner

Exavier Lukera
Practitioner

Jonathan Kayemba
Practitioner

Murungi Leslie
Practitioner

Owen Mwesigye
Practitioner

Co-ordinator
Mukyala E. Ruth
Directorate of Industrial Training

Facilitators

Asiimwe Maureen
Directorate of Industrial Training

Nyanja John Fisher
Directorate of Industrial Training

Funded by
The Government of Uganda



THE REPUBLIC OF UGANDA
Ministry of Education and Sports

**Business, Technical and Vocational
Education and Training (BTJET) Sub
sector Reform**

Occupational Profile

For a

“WEBSITE DEVELOPER”

**Developed by: Qualifications Standards
Department of the
Directorate of Industrial
Training**

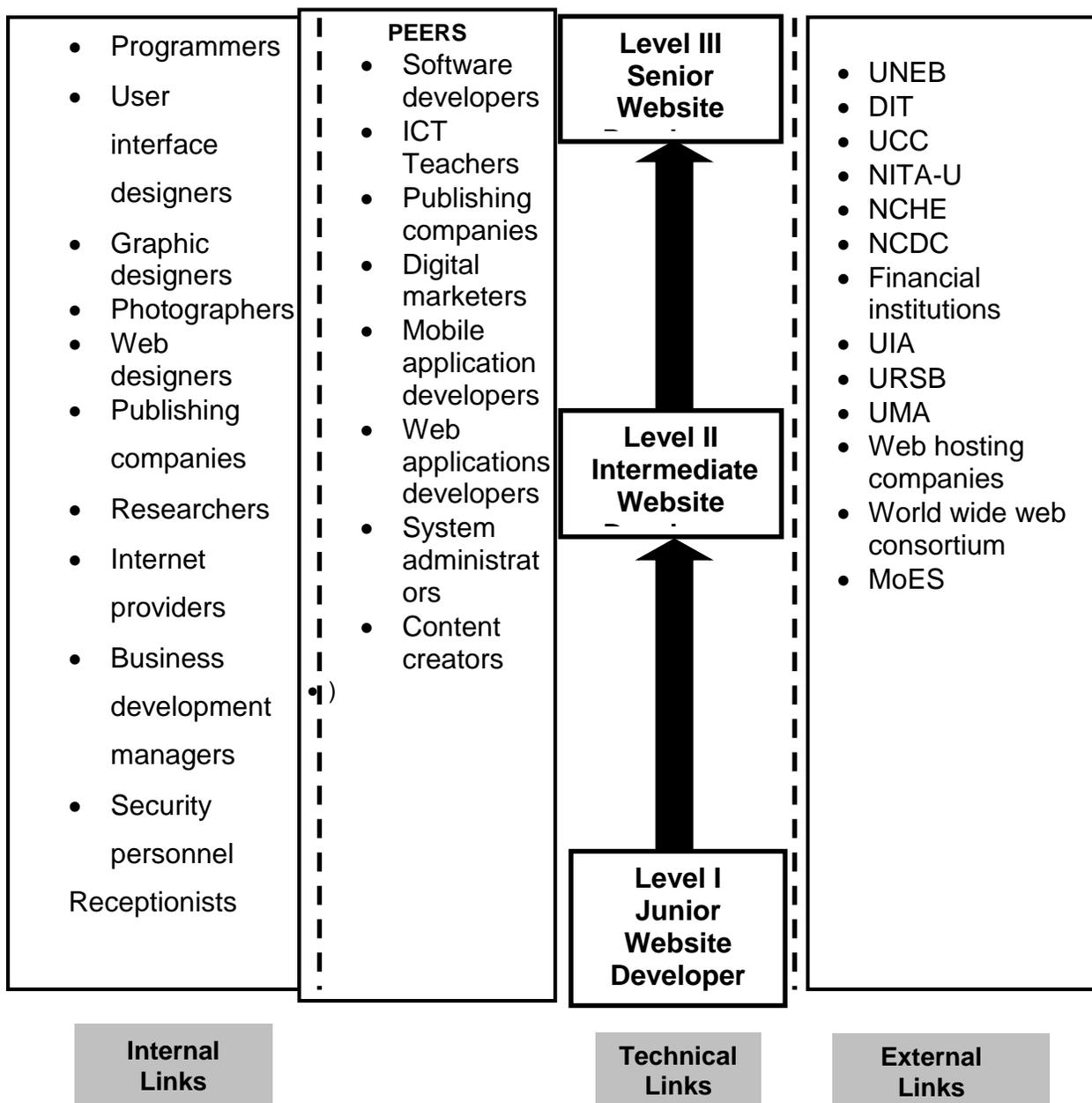
Date of workshop: 13th –17th January, 2022

NOMENCLATURE FOR THE OCCUPATION WEBSITE DEVELOPER

Definition of A website Developer

This is a person who can plan, design, code, publish and maintain a website.

JOB ORGANISATION CHART FOR A WEBSITE DEVELOPER



UVQ Level I (Junior website developer); Is a person who is able to do user requirement gathering, perform basic visual designing, editing and website maintenance.

UVQ Level II (intermediate website developer); Is a person who is able to do user requirement analysis, create a website prototype, perform coding, publish and do advanced website maintenance

UVQ Level III (senior website developer); Is a person who is able to generate a user requirement document, develop, maintain, publish and coordinate website project.

Duties and Tasks

A. PLAN WEBSITE WORK	A1 Carryout Feasibility Study	A2 Prepare a Budget	A3 Observe Ethical and Privacy Standards	A3 Draft a Contract	A4 Determine Domain Name
	A5 Collect Website Content	A6 Develop Work Break Down structure	A7 Determine Resources		

B. DESIGN WEBSITE	B1 Develop Brand Identity	B2 Build Mockups	B3 Select Content	B4 Optimize Content	B5 Share Designs with Clients
	B6 Draw Website Map				

C. IMPLEMENT WEBSITE DESIGN	C1 Install Software	C2 Create Layout	C3 Create Webpages	C4 Upload webpage Content	C5 Hyperlink Content
	C6 Develop Functional Modules	C7 Carryout Unit Testing	C7 Perform Search Engine Optimization		

D. PUBLISH WEBSITE	D1 Set Up Hosting Server	D2 Upload Website	D3 Configure SSL Certificate	D4 Perform System Test	D5 Set up Domain based Emails
	D6 Integrate Webpages with Search engine				

MAINTAIN WEBSITE	1.Perform User Acceptance Testing	2.Train Users	3.Monitor Website Performance	4.Debug Website
	5.Upgrade Software	6.Update Content	7.Perform Basic Website Backup	8.Carryout Website Restoration
	9.Offer After Sales Support			

E. PERFORM ADMINISTRATIVE TASK	E1 Develop Operating Guidelines	E2 Develop Strategic Plans	E3 Manage Human resources
	E4 Comply with Policies and regulation	E5 Manage finances	E6 Market Services
	E8 Keep Records	E9 Procure Supplies	

F. OCCUPATIONAL HEALTH, SAFETY AND ENVIRONMENTAL PRACTICES	F1 Comply with personal Health and safety regulation	F2 display safety signs	F3 manage waste
	F4 Interpret user manuals	F5 Administer first aid	F6 Sensitize workers on communicable and non-communicable diseases
	F7 Perform fire fighting	F8 Observe green computing guidelines	

Additional Information

Generic Knowledge & Skills

1. Website security management
2. Troubleshooting website
3. E-marketing skills
4. Computer hardware and software specifications
5. Client and Server Architecture
6. Domains and Hosting
7. Web Standards
8. Scripting Languages
9. Content Management Systems
10. Responsive Web Design
11. Web technologies
12. Backing up data
13. Formatting data
14. Updating data
15. Computer networking
16. Software installations
17. Malware
18. Encryption methods
19. Communication and interpersonal skills
20. Safety and health precautions
21. ICT literacy
22. Basic calculus
23. Intellectual property rights
24. ICT policies and regulations
25. ICT Laws and ethics
26. Planning
27. Budgeting
28. Graphics design
29. Data collection
30. Systems testing

Tools, Materials and Equipment	
1. Servers	25. Soft brushes
2. Projector Screen	26. Hub
3. Smart phone	27. Switch
4. Whiteboard	28. Router
5. Markers	29. Bridge
6. Printer	30. Gateway
7. Laptop	31. Modem
8. Desktop	32. Network cable tester
9. Scanner	33. Uninterrupted power supply
10. Computers	34. Extension cable
11. Software	35. Tape measure
12. Cameras	36. Soldering gun
13. Portable storage media	37. Soldering wire
14. Internet connectivity	38. Solder sucker
15. Ethernet cables	39. Driller
16. Electricity	40. Tweezer
17. Blower	
18. RJ-45 connectors	
19. Crimping tool	
20. Screw driver	
21. Slicers	
22. Air conditioners	
23. Firefighting equipment	
24. Anti-static wrist strap	

<ol style="list-style-type: none">1. God fearing2. Patriotic3. Smart4. Entrepreneurial5. Pragmatic6. Patience7. Punctual8. Respectful9. Hardworking10. Honest11. Organized12. Responsible13. Ethical14. Duty consciousness15. Disciplined16. Safety conscious17. Innovative18. Caring19. Accountable20. Enthusiastic21. Creative22. Flexibility23. Team player24. Negotiation25. Critical thinking and problem solving26. Professionalism	<p style="text-align: center;">Future Trends and Concerns</p> <ol style="list-style-type: none">1. Digital divide2. Artificial intelligence and cloud computing3. Green computing4. Public health5. Climate change6. Global citizenship7. Politics8. Globalization9. Technological advancements10. Unfavourable government policies11. Ergonomics12. E-waste management13. Netiquette14. Digital literacy15. Ethical and legal practice16. Multi-cultural awareness17. Inclusiveness (Diversity)18. Price fluctuations19. Cyber crime20. Malware21. Internet of things
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2.0 ATP – PART II

Training Modules for WEBSITE DEVELOPER

- 2.1 A curriculum is a “guide /plan for teaching and learning” which provides a guide to teachers, instructors and learners. In the envisaged system of competence-based or outcome-oriented education and training (CBET), Curricula are no longer the benchmark against which assessment is conducted. It is rather the Occupational Profile that provides the benchmark for Curriculum development as well as assessment.
- 2.2 This modular format of the curriculum allows learners of the Website Developer occupation to acquire job specific skills and knowledge (i.e., competencies) module by module. A single module can be accomplished within a relatively short duration of time allowing learners to move directly into an entry level job, do further modules and advance to higher levels of training. Modular courses allow more learners to access the training system because training centers, as well as companies can accommodate more students in a given period of time.
- 2.3 The modules were developed jointly by both instructors and job practitioners. They were developed using the Occupational Profile as a reference point and taking into account the specifications of training and learning outcomes.
- 2.4 The modules contain “Learning-Working Assignments” (LWAs) and related “Practical Exercises” (PEXs) as key elements.

LWAs are simulated or real job situations/assignments that are suitable for learning in a training environment (e.g., “small projects”). In a working environment, LWAs are real work situations.

PEXs are therefore sub-sets of an LWA.

- 2.5 In principle, and following the philosophy of Competence-Based Education and Training (CBET), the modules can be used as a guide for learning in a training Centre, at the workplace; or a combination of both.

WHO IS WEBSITE DEVELOPER QUALIFICATION LEVEL 1?

This is a person who is able to do user requirement gathering, perform basic visual designing, editing and website maintenance

OVERVIEW OF MODULES FOR A WEBSITE DEVELOPER UVQ LEVEL 1

Code	Module Title	Average duration	
		Contact hours	Weeks
UE/MAD/M1.1	Plan Website Development	120	3
UE/MAD/M1.2	Design Website Layout	200	5
UE/MAD/M1.3	Prepare Multi-Media Content	200	5
UE/MAD/M1.4	Develop Website	400	10
UE/MAD/M1.5	Upload Website	80	2
UE/MAD/M1.6	Maintain Website	80	2
UE/MAD/M1.7	Establish Website Development Enterprise	80	2
Summary	07 Training modules	1160 Hours	28 Weeks

Note: Average duration is contact time but NOT calendar duration

It is assumed that:

- 1 day is equivalent to 8 hours of nominal learning and
- 1 month is equivalent to 160 hours of nominal learning.

Information given on the average duration of training should be understood as a guideline. Quick learners may need less time than indicated or vice versa.

At completion of a module, the learner should be able to satisfactorily perform the included Learning Working Assignments, their Practical Exercises and attached theoretical instruction, as the minimum exposure.

Prior to summative assessment by recognised Agencies, the users of these Module Guides are encouraged to carefully consider continuous assessment using samples of (or similar) performance (practical) and written test items available in part 3 of this ATP for **WEBSITE DEVELOPER**.

Code	UE/WSD/M1.1
Module title	M1.1: Plan Website Development
Related Qualification	<u>Part of:</u> Uganda Vocational Qualification (WEBSITE DEVELOPER UVQ1)
Qualification Level	1
Module purpose	On completion of this module, the trainee will be able to collect website data and develop a website proposal.
Learning-Working Assignments (LWAs)	<p>LWA 1/1: Gather client Data LWA 1/2 Analyse clients' needs LWA 1/3: Manage records LWA 1/4: Perform Occupational health, safety and environmental practices</p> <p>Note:</p> <ol style="list-style-type: none"> <i>The learning exercises may be repeated till the trainee acquires a targeted competence.</i> <i>The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.</i>
Related Practical Exercises (PEXs)	<p>LWA 1/1: Gather client Data</p> <p>PEX 1.1: Schedule Meeting PEX 1.2: Assemble tools equipment and materials PEX 1.3: Attend Meeting PEX 1.4: Capture clients' needs PEX 1.5: Collect user data PEX 1.6: File data</p>

	<p>LWA 1/2: Analyse clients' needs</p> <p>PEX 2.1: Sort data PEX 2.2: Reserve Domain Name PEX 2.3: Bench mark other websites PEX 2.4: Determine Resources PEX 2.5: Compile website proposal</p>
	<p>LWA 1/3: Manage records</p> <p>PEX 3.1: Prepare financial documents PEX 3.2: Write proposal PEX 3.3: Prepare requirements list PEX 3.4: Store files</p>
	<p>LWA 1/4: Perform occupational health, safety and environment protection practices</p> <p>PEX 4.1: Use PPEs PEX 4.2: Display safety signs PEX 4.3: Administer first aid PEX 4.4: Manage waste PEX 4.5: Apply Ergonomics</p>

Occupational health and safety	Precautions, rules and regulations on occupational health, safety and environmental protection, included in the related knowledge listings as well as in test items should be observed and demonstrated during LWAs and PEXs.
Pre-requisite modules	None
Related knowledge/ theory	<p><i>For Occupational theory suggested for instruction/ demonstration, the Trainer is not limited to the outline below. In any case, related knowledge/ theory may be obtained from various recognised reference materials as appropriate:</i></p> <ul style="list-style-type: none"> • Proposal writing • Data collection techniques • Research procedures • Budgeting • Tool usage • Analytical skills • Communication Skills • Digital literacy

	<ul style="list-style-type: none"> • Data management
Average duration of learning	120 hours (15 days) of nominal learning suggested to include: <ul style="list-style-type: none"> • <i>5 days of occupational theory and</i> • <i>10 days of occupational practice</i>
Suggestions on organization of learning	The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided all equipment and materials required for training are in place.
Assessment	Assessment to be conducted according to established regulations by recognised assessment body using related practical and written test items from Item bank
Minimum required tools/ equipment/ implements or equivalent	Laptop, Multimedia Software, Camera, Scanner, Printer, Pens Notebooks, pencils, Text Editors Laptop / desktop Computer, Pen, Paper, camera, Text editing Software, Storage Medium, printer, scanner, occupation health safety and environment protection practice document, Furniture, Smart Phone, Internet Device
Minimum required materials and consumables or equivalent	Internet connectivity
Special notes	Trainee should have basic computer literacy

Code	UE/ WSD /M1.2
Module title	M1.2: DESIGN WEBSITE LAYOUT
Related Qualification	Part of: Uganda Vocational Qualification (WEBSITE DEVELOPER UVQ1))
Qualification Level	1
Module purpose	After completion of this module, the trainee should be able to develop a graphical website interface design
Learning-Working Assignments (LWAs)	<p>LWA 2/1: Set up design software LWA 2/2: Create Brand identity LWA 2/3: Create website mock-ups LWA 2/4: Perform occupational health, safety, and environmental protection</p> <p>Note:</p> <ol style="list-style-type: none"> 1. The learning exercises may be repeated till the trainee acquires a targeted competence. 2. The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.
Related Practical Exercises (PEXs)	<p>LWA 2/1: Set Up Design Software PEX 1.1: Identify design tools PEX 1.2: Install design software PEX 1.3: Configure design tools</p>
	<p>LWA 2/2: Create Brand identity PEX 2.1: Generate colour scheme PEX 2.2: Create font guide PEX 2.3: Create logo</p> <p>LWA 2/3: Create website mock-ups PEX 3.1: Create wireframes PEX 3.2: Design mock-ups PEX 3.3: Create mock-up flows</p>

	<p>LWA 2/4: Perform occupational health, safety, and environmental protection</p> <p>PEX 4.1: Use PPEs PEX 4.2: Display safety signs PEX 4.2: Administer first aid PEX 4.3: Manage waste PEX 4.4: Apply Ergonomics</p>
Occupational health and safety	Precautions, rules and regulations on occupational health, safety and environmental protection, included in the related knowledge listings as well as in test items should be observed and demonstrated during LWAs and PEXs.
Pre-requisite modules	None
Related knowledge/ theory	<p><i>For Occupational theory suggested for instruction/ demonstration, the Trainer is not limited to the outline below. In any case, related knowledge/ theory may be obtained from various recognised reference materials as appropriate:</i></p> <ul style="list-style-type: none"> • Image Editing • Video Editing • Fine art skills • Knowledge in Installation of software • Document Formatting • Measurements and Dimensions • Branding • Drawing skills
Average duration of learning	<p>120 hours (15 days) of nominal learning suggested to include:</p> <ul style="list-style-type: none"> • 3 days of occupational theory and • 12 days of occupational practice
Suggestions on organization of learning	The acquisition of competencies (Skills-Knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided all equipment and materials required for training are in place.

Assessment	Assessment to be conducted according to established regulations by recognised assessment body using related practical and written test items from Item bank
Minimum required tools/ equipment/ implements or equivalent	Laptop / desktop Computer, Printer, scanners, Internet Device, Furniture, Fire extinguisher, first Aid Kit .
Minimum required materials and consumables or equivalent	Pen, Pencils, Graphics Software, , Text editing Software, Sketch books, occupation health safety and environment protection practice document, Storage Medium, Wire framing Software.
Special notes	Trainee should posses basic Knowledge in Graphics Designing

Code	UE/ WSD /M1.3
Module title	M1.3: PREPARE MULTIMEDIA CONTENT
Related Qualification	<u>Part of:</u> Uganda Vocational Qualification (WEBSITE DEVELOPER UVQ1)
Qualification Level	1
Module purpose	After the completion of this module, the trainee should be able to work with various forms of media and optimise it for use on website.
Learning-Working Assignments (LWAs)	<p>LWA 3/1 Organise Images LWA 3/2 Edit Text LWA 3/3 Modify Video LWA 3/4 Modify Audio LWA 3/5 Process Documents LWA 3/6 Perform Occupational Health Safety and Environmental Protection Practices</p> <p>Note:</p> <ol style="list-style-type: none"> 1 <i>The learning exercises may be repeated till the trainee acquires a targeted competence.</i> 2 <i>The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.</i>
Related Practical Exercises (PEXs)	<p>LWA 3/1 Organise Images PEX 1.1 Select Photos PEX 1.2 Edit photos PEX 1.3 Design Graphics PEX 1.4 Optimise Images PEX 1.5 Save edited images</p> <p>LWA 3/2 Edit TEXT PEX 2.1 Digitize Text PEX 2.2 Select Text PEX 2.3 Format Text PEX 2.4 Save edited text</p> <p>LWA 3/4 Modify Video PEX 4.1 Select Video PEX 4.2 Edit Video PEX 4.3 Optimise Video PEX 4.4 Save edited video</p>

	<p>LWA 3/4 Modify Audio PEX 4.1 Select Audio PEX 4.2 Edit Audio PEX 4.3 Optimise Audio PEX 4.4 Save edited audio</p> <p>LWA 3/5 Process Documents PEX 5.1 Select Documents PEX 5.2 Digitize Documents PEX 5.3 Edit Documents PEX 5.4 Optimise Documents PEX 5.5 Save processed Documents</p> <p>LWA 3/6: Perform occupational health, safety, and environmental protection PEX 6.1: Use PPEs PEX 6.2: Display safety signs PEX 6.3: Administer first aid PEX 6.4: Manage waste PEX 6.5: Apply Ergonomics</p>
<p>Occupational health and safety</p>	<p>Precautions, rules and regulations on occupational health, safety and environmental protection included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs.</p>
<p>Pre-requisite modules</p>	<p>None</p>

Related knowledge/ theory	<p><i>For occupational theory suggested for instruction/ demonstration, the trainer is not limited to the outline below. In any case, related knowledge/ theory may be obtained from various recognised reference materials as appropriate:</i></p> <ul style="list-style-type: none"> • Basic Computer Application • Programming • Use of graphics software • Photo editing • Video editing • Audio Management • Text processing • Occupational Health and safety knowledge
Average duration of learning	<p>120 hours (15 days) of nominal learning suggested to include</p> <ul style="list-style-type: none"> • 2 days of occupational theory and • 13days of occupational practice
Suggestions on organization of learning	<p>The acquisition of competencies (skills. Knowledge, attitudes) described in this module may take place at a training centre/ farm or its equivalent provided all equipment and materials required for training are in place.</p>
Assessment	<p>Assessment to be conducted according to established regulations by recognised assessment body using related practical and written test items from Item bank</p>
Minimum required tools/ equipment/ implements or equivalent	<p>Laptop / desktop Computer, Printer, scanners Storage Medium, Internet Device,</p>
Minimum required materials and consumables or equivalent	<p>Multimedia Software, Text Editing Software, books, Pen, occupation health safety and environment protection practice document, Furniture .</p>
Special notes	

Code	UE/ WSD /M1.4
Module title	M1.4: DEVELOP WEBSITE
Related Qualification	<u>Part of:</u> Uganda Vocational Qualification (WEBSITE DEVELOPER UVQ1)
Qualification Level	1
Module purpose	On completion of this module, the trainee will be able to develop a website.
Learning-Working Assignments (LWAs)	<p>LWA 4/1: Set Up development environment LWA 4/2: Develop webpages LWA 4/3: Style web pages LWA 4/4: Generate Hyperlinks LWA 4/5: Perform Occupational Health, Safety, and Environmental Protection.</p> <p>Note:</p> <ol style="list-style-type: none"> 3 <i>The learning exercises may be repeated till the trainee acquires a targeted competence.</i> 4 <i>The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.</i>
Related Practical Exercises (PEXs)	<p>LWA 4/1: Set up development environment PEX 1.1: Install development tools PEX1.2: Configure development tools</p> <p>LAW4/2: Develop webpages PEX 2.1: Build web page elements PEX 2.2: Insert content PEX 2.3: Perform search engine optimization PEX 2.4: Save webpages PEX 2.5: Prepare website documentation</p> <p>LWA 4/3: Style web pages PEX 3.1: Apply color scheme PEX 3.2: Apply fonts PEX 3.3: Make pages responsive</p>

	<p>LWA 4/ 4: Generate Hyperlinks PEX 4.1: Build website menu PEX 4.2: Implement sitemap PEX 4.3: Link content</p>
	<p>LWA 4/5 Occupational Health Safety and Environmental Protection Practices PEX 5.1: Use PPEs PEX 5.2: Display safety signs PEX 5.3: Administer first aid PEX 5.4: Manage waste PEX 5.5: Apply Ergonomics</p>
<p>Occupational health and safety</p>	<p>Precautions, rules and regulations on occupational health, safety and environmental protection included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs.</p>
<p>Pre-requisite modules</p>	<p>None</p>
<p>Related knowledge/ theory</p>	<p><i>For occupational theory suggested for instruction/ demonstration, the trainer is not limited to the outline below. In any case, related knowledge/ theory may be obtained from various recognised reference materials as appropriate:</i></p> <ul style="list-style-type: none"> • Basic computer skills • Graphic designing • Computer hardware and software specifications • Client and Server Architecture • Domains and Hosting • Web Standards • Scripting Languages • Responsive Web Design • Web technologies • Backing up data • Formatting data • Updating data • Computer networking • Software installations

Average duration of learning	320 hours (50 days) of nominal learning suggested to include <ul style="list-style-type: none"> • 20 days of occupational theory and • 30 days of occupational practice
Suggestions on organization of learning	The acquisition of competencies (skills, Knowledge, attitudes) described in this module may take place at a training centre/ farm or its equivalent provided all equipment and materials required for training are in place.
Assessment	Assessment to be conducted according to established regulations by recognised assessment body using related practical and written test items from Item bank
Minimum required tools/ equipment/ implements or equivalent	Laptop / desktop Computer, Storage Medium, Printer, scanners, Internet Device, Furniture
Minimum required materials and consumables or equivalent	Paper, Cartridges, masking tape, Pencils, Software program, Masks, Gloves, Note books, Rubbers, Software Programs, Sketch book, Tracing paper, Bond paper, Flip Chart, Ink --, Multimedia Software, Content Management Systems, Text Editing Software, Coding Software, books, Pen, occupation health safety and environment protection practice document, Web browsing software, cards.
Special notes	

Code	UE/ WSD /M1.5
Module title	M1.5: : UPLOAD WEBSITE
Related Qualification	<u>Part of:</u> Uganda Vocational Qualification (WEBSITE DEVELOPER UVQ1)
Qualification Level	1
Module purpose	On completion of this module, the trainee will be able to upload a website
Learning-Working Assignments (LWAs)	<p>LWA 5/1: Prepare File Upload Tools LWA 5/2: Setup Website Hosting Environment LWA 5/3: Upload Website Content LWA 5/4: Perform Website Testing LWA 5/5: Perform occupational health, safety, and environmental protection</p> <p>Note:</p> <p>5 <i>The learning exercises may be repeated till the trainee acquires a targeted competence.</i></p> <p>6 <i>The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.</i></p>
	<p>LWA 5/1: Prepare file upload tools PXE1: Download tools PXE2: Setup tools</p>
Related Practical Exercises (PEXs)	<p>LWA2: Setup website hosting environment PXE1.1: Login into hosting server PXE1.2: Select website directory PXE1.3: Install SSL certificates PXE1.4: Manage email accounts</p> <p>LWA3: Upload website content PXE 3.1: Prepare website content PXE 3.2: Transfer files PXE 3.3: Install website</p>

	<p>LAW 5/4: Perform website testing PEX 4.1: Test navigation PEX 4.2: Test functional modules PEX 4.3: Fix bugs</p> <hr/> <p>LWA 5/6: Perform occupational health, safety, and environmental protection PEX 6.1: Use PPEs PEX 6.2: Display safety signs PEX 6.3: Administer first aid PEX 6.4: Manage waste PEX 6.5: Apply Ergonomics</p>
<p>Occupational health and safety</p>	<p>Precautions, rules and regulations on occupational health, safety and environmental protection included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs.</p>
<p>Pre-requisite modules</p>	<p>None</p>
<p>Related knowledge/ theory</p>	<p><i>For occupational theory suggested for instruction/ demonstration, the trainer is not limited to the outline below. In any case, related knowledge/ theory may be obtained from various recognised reference materials as appropriate:</i></p> <ul style="list-style-type: none"> • Programming • Computer hardware and software specifications • Web technologies • Computer networking • Software installations • Types of viruses • Encryption methods • Communication and interpersonal skills • Safety and health precautions • Operating a computer • ICT literacy • Basic calculus

	<ul style="list-style-type: none"> • Intellectual property rights • ICT policies and regulations
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Average duration of learning	40 hours (5 days) of nominal learning suggested to include <ul style="list-style-type: none"> • 1 days of occupational theory and • 4 days of occupational practice
Suggestions on organization of learning	The acquisition of competencies (skills, Knowledge, attitudes) described in this module may take place at a training centre/ farm or its equivalent provided all equipment and materials required for training are in place.
Assessment	Assessment to be conducted according to established regulations by recognised assessment body using related practical and written test items from Item bank
Minimum required tools/ equipment/ implements or equivalent	Laptop / desktop Computer, Web Hosting server, File transfer Software, Content Management Systems, DNS Server, s Furniture, Internet Device, Storage Medium.
Minimum required materials and consumables or equivalent	Colour mixer, Pallets, Brushes, Improvised tins, Apron, Rags, Rulers, Rollers, Sticks, Tape, Spray gun, Oil paint, Acrylic paint, Pencil, Colour pencils, Crayons, Sketch pads, Eraser, Water, Licenced oil, Thinner, Paraffin, Filler, Powder paint, Markers, Ink colours and Spray paint.- Web browsing software, Coding software. occupation health safety and environment protection practice document --.
Special notes	

Code	UE/ WSD /M1.6
Module title	M1.6: MAINTAIN WEBSITE
Related Qualification	<u>Part of:</u> Uganda Vocational Qualification (WEBSITE DEVELOPER UVQ1)
Qualification Level	1
Module purpose	After completion of this module, a trainee should be able to maintain a website
Learning-Working Assignments (LWAs)	<p>LWA 6/1 - Update Content LWA 6/2 - Manage Website Backups LWA 6/3 - Monitor Website Performance LWA 6/4 - Provide User Support LWA 6/5: Perform Occupational Health, Safety And Environment Protection Practices</p> <p><u>Note:</u></p> <p><i>1 The learning exercises may be repeated till the trainee acquires a targeted competence.</i></p> <p><i>2 The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.</i></p>
Related Practical Exercises (PEXs)	<p>LWA 6/1 Update Content PEX 1.1 Prepare content PEX 1.2 Upload content PEX 1.3 Publish content</p> <hr/> <p>LWA 6/2 Manage website backups PEX 2.1 Schedule backups PEX 2.2 Execute backups PEX 2.3 Delete backups PEX 2.4 Restore backups</p>

	<p>LWA 6/3 Monitor Website Performance PEX 3.1 Observe uptime PEX 3.2 Check website speed PEX 3.3 Check bandwidth usage PEX 3.4 Check hosting space PEX 3.5 Check search engine rankings</p>
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	<p>LWA 6/4 Provide user support PEX 4.1 Prepare user manuals PEX 4.2 Manage user accounts PEX 4.2 Conduct trainings PEX 4.3 Perform aftersales support</p>
	<p>LWA 6/4: Perform occupational health, safety, and environmental protection PEX 4.1: Use PPEs PEX 4.2: Display safety signs PEX 4.3: Administer first aid PEX 4.4: Manage waste PEX 4.5: Apply Ergonomics</p>
Occupational health and safety	Precautions, rules and regulations on occupational health, safety and environmental protection included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs.
Pre-requisite modules	None
Related knowledge/ theory	<p><i>For occupational theory suggested for instruction/ demonstration, the trainer is not limited to the outline below. In any case, related knowledge/ theory may be obtained from various recognised reference materials as appropriate:</i></p> <ul style="list-style-type: none"> • Computer hardware and software specifications • Client and Server Architecture • Domains and Hosting • Web Standards • Scripting Languages • Content Management Systems

	<ul style="list-style-type: none"> • Responsive Web Design • Web technologies • Backing up data • Formatting data • Updating data • Computer networking
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Average duration of learning	6 hours (8 days) of nominal learning suggested to include <ul style="list-style-type: none"> • <i>4days of occupational theory and</i> • <i>4 days of occupational practice</i>
Assessment	Assessment to be conducted according to established regulations by recognised assessment body using related practical and written test items from Item bank
Minimum required tools/ equipment/ implements or equivalent	Computer, Wall standing, Stapling machine, Punching machine, Shelf and table, Safe, Printer, Inventory book--- Backup Storage Medium, Printer, scanners, Furniture, Web Hosting server, DNS Server, File transfer Software Internet Device.
Minimum required materials and consumables or equivalent	Accounting software Website Monitoring Software, Multimedia Software, Content Management Systems, Text Editing Software, Coding Software, books, Pen, occupation health safety and environment protection practice guide, Storage Media, , Web browsing software, Training Manual, User. Manual, Furniture occupation health safety and environment protection practice document, Log book, Visitor’s book, Internet, Banners, Invoices, Brochures, Stitches, Business cards, Inventory book,
Special notes	

Code	UE/ WSD /M1.7
Module title	M1.7: ESTABLISH WEBSITE DEVELOPMENT ENTERPRISE
Related Qualification	<u>Part of:</u> Uganda Vocational Qualification (WEBSITE DEVELOPER UVQ1)
Qualification Level	1
Module purpose	After completion of this module, the trainee should be able to set up and maintain a website development business
Learning-Working Assignments (LWAs)	<p>LWA 7/1 Perform Marketing Services LWA 7/2 Perform Administrative Tasks LWA7/3: Observe Occupational Health, Safety and Environmental Protection Practices practices</p> <p><u>Note:</u></p> <p><i>1 The learning exercises may be repeated till the trainee acquires a targeted competence.</i> <i>2 The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.</i></p>
Related Practical Exercises (PEXs)	<p>LWA 7/1 Perform Marketing Services PEX 1.1 - Develop Brand Identity PEX 1.2 – Identify customers PEX1.3 – Design/ prepare Marketing Materials PEX1.4 - Distribute Marketing Materials</p>

	<p>LWA 7/2 -Perform Administrative Tasks PEX 2.1 –Legalise Business PEX 2.2 -Keep Records PEX:2.3- Make Budget PEX:2.4 Issue Invoice and Receipt PEX:2.5 Pursue Continuous Professional Development</p>
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	<p>LWA7/3: Observe Occupational Health, Safety And Environmental Protection Practices PEX 3.1: Maintain Personal Hygiene PEX 3.2: Manage Waste PEX 3.3: Setup Workspace PEX 3.4: Interpret Device Manuals PEX 3.5: Wear Protective Gears PEX 3.6: Display Safety Signs PEX 3.7: Perform Fire fighting PEX 3.8: Comply with Regulations and Policies</p>
Occupational health and safety	<p>Precautions, rules and regulations on occupational health, safety and environmental protection included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs.</p>
Pre-requisite modules	<p>None</p>
Related knowledge/ theory	<p><i>For occupational theory suggested for instruction/ demonstration, the trainer is not limited to the outline below. In any case, related knowledge/ theory may be obtained from various recognised reference materials as appropriate:</i></p> <ul style="list-style-type: none"> • Marketing skills • Communication skills • Partnerships and Collaboration skills • Financial literacy] • Writing and reading skills • Customer care • Green computing

	<ul style="list-style-type: none"> • Waste management • Risk management • Crisis Management tools
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Average duration of learning	40hours (5 days) of nominal learning suggested to include <ul style="list-style-type: none"> • 3days of occupational theory and • 2days of occupational practice
Suggestions on organization of learning	The acquisition of competencies (skills, Knowledge, attitudes) described in this module may take place at a training centre/ farm or its equivalent provided all equipment and materials required for training are in place.
Assessment	Assessment to be conducted according to established regulations by recognised assessment body using related practical and written test items from Item bank
Minimum required tools/ equipment/ implements or equivalent	Laptop / desktop Computer Printer, scanners, Furniture, Smart
Minimum required materials and consumables or equivalent	Multimedia Software, Text Editing Software, books, Pen, occupation health safety and environment protection practice guide, Storage Medium, Business cards.
Special notes	

ATP- PART III

Assessment Instruments for WEBSITE DEVELOPER

- 3.1 Assessment of occupational competence is the procedure by which evidence is gathered and judged to decide if an individual (candidate) has met the stipulated assessment standards.
- 3.2 Assessment of occupational competence should comprise of both practical (Performance) testing and written (theory/knowledge) testing.
- 3.3 Based on the Occupational Profile and Training Modules, a combined panel of job practitioners and Instructors developed a substantial number of test items for assessing (practical) performance as well as items for assessing occupational knowledge (theory) all stored in an electronic Test Item Bank (TIB) at the Directorate of Industrial Training.
- 3.4 Performance (Practical) Test Items (PTI) are closely related to typical work situations in Ugandan business enterprises. They comprise of a test assignment for candidates and assessment criteria and/or scoring guides for assessors' use.
- 3.5 Written Test items (WTI) for written testing of occupational theory, (knowledge) are presented in different forms which include:
- short answer test items
 - Multiple choice test items
 - Matching test items.
- These WTIs herein focus on functional understanding as well as trouble-shooting typically synonymous with the world of work.
- 3.6 Composition of assessment/test papers will always require good choices of different types of WTI in order to ensure the assessment of relevant occupational knowledge required of candidates to exhibit competence.
- 3.7 The test items contained in the Test Item Bank may be used for continuous/formative assessment during the process of training as well as for summative assessment of candidates who have acquired their competences non-formally or informally.
- 3.8 In this document, samples of test items for assessing both performance (practical) and occupational knowledge (theory) of a **WEBSITE DEVELOPER** are included. A larger selection of test items can be obtained as electronic or printed copies from designated outlets.

3.9

3.10 Overview of test item samples included:

No.	Type of Test Item	Numbers included
1	Written (Theory)- Short Answer	2
2.	Written (Theory)- Multiple Choice	2
3.	Written (Theory)- Matching item- Generic	1
4.	Written (Theory)- Matching item- Cause-Effect	2
5.	Written (Theory)- Matching item (Work sequence)	1
6.	Performance (Practical) Test Items	1
	Total	09

WRITTEN TEST ITEMS (SAMPLES)

DIT/ QS	Test Item Database Written (Theory) Test Item- No. 1			
Occupational Title:	WEBSITE DEVELOPER			
Competence level:	Level 1			
Code no.	WSD			
Test Item type:	Short answer	√		
	Multiple choice			
	Matching item	Generic	Cause-Effect	Work-sequence
Complexity level:	C1			
Date of OP:	January, 2022			
Related module:	M1.1			
Time allocation:	3 minutes			

Test Item	<i>List the steps followed in gathering client data</i>
Answer spaces	a..... b..... c..... d..... e..... f.....
Expected key (answers)	a) Schedule meeting b) Assemble tools c) Attend meetings d) Capture clients' needs e) Collect user data f) Store data

DIT/ QS	Test Item Database Written (Theory) Test Item- No. 2			
Occupational Title:	WEBSITE DEVELOPER			
Competence level:	Level 1			
Code no.	WSD			
Test Item type:	Short answer	√		
	Multiple choice			
	Matching item	Generic	Cause- Effect	Work-sequence
Complexity level:	C2			
Date of OP:	January, 2022			
Related module:	M1.2			
Time allocation:	6 minutes			

Test Item	What do the following domain name extensions stand; a) .com b) .org c) .ac.ug
Answer spaces	a..... b..... c.....
Key (answer)	a) com used for profit making (commercial) businesses i.e. a company b) org used for not for profit (charity) organizations c) ac.ug used for academic institutions based in Uganda

DIT/ QS		Test Item Database Written (Theory) Test Item- No. 3			
Occupational Title:	WEBSITE DEVELOPER				
Competence level:	1				
Code no.	WSD				
Test Item type:	Short answer				
	Multiple choice	√			
	Matching item	Generic	Cause-Effect	Work-sequence	
Complexity level:	C1				
Date of OP:	January, 2022				
Related module:	M1.4				
Time allocation:	2 minutes				

Test Item	<i>Web page editors work on a _____ principle.</i>
Answer spaces	a) WWW b) HTML c) WYSIWYG d) CSS

Key (answer)	C
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DIT/ QS	Test Item Database Written (Theory) Test Item- No. 4			
Occupational Title:	WEBSITE DEVELOPER			
Competence level:	Level 1			
Code no.	WSD			
Test Item type:	Short answer			
	Multiple choice	√		
	Matching item	Generic	Cause-Effect	Work-sequence
Complexity level:	C2			
Date of OP:	January, 2022			
Related module:	M1.4			
Time allocation:	2 minutes			

Test Item	<i>A Website can be designed to be mobile friendly by making a website</i>
Answer spaces	A. Responsive B. Reactive C. Fast Loading D .Light

Key (answer)	A
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DIT/ QS	Test Item Database			
	Written (Theory) Test Item- No. 6			
Occupational Title:	WEBSITE DEVELOPER			
Competence level:	Level 1			
Code no.	WSD			
Test Item type:	Short answer			
	Multiple choice			
	Matching item	Generic	Cause effect	Work sequence
		✓		
Complexity level:	C 2			
Date of OP:	January 2022			
Related modules:	M1.4			
Time allocation:	10minutes			

Test item	Match each stage of website design in column A with an appropriate description in column B:
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Column A	
1	Plan Website Development
2	Design website Layout
3	Develop website

Column B	
A	Develop webpages with the expected Content.
B	Insert, format, edit and retouch images and video clips
C	Hold both formal and Informal meetings with client and collect necessary data.

4	Prepare multi-media Content		D	Choose color schemes and font family to use.
5	Upload Website		E	Pick new Content from client and add it onto the website
	Maintain Website		F	Contacting the host of your website and transfer the website files to host
			H	Select documents to be used and optimize all content
			G	Ensure that you put all your business documentation together

Key (answer)	
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DIT/ QS	Test Item Database Written (Theory) Test Item- no. 7			
Occupational Title:	WEBSITE DEVELOPER			
Competence level:	1			
Code no.	WSD			
Test Item type:	Short answer			
	Multiple choice			
	Matching item	Generic	Cause- Effect √	Work-sequence
Complexity level:	C2			
Date of OP:	January, 2022			
Related module:	M1.4			
Time allocation:	2mins			

Test item	Match the following html tags with their correct functions.
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Column A (diseases)	
1.
2.	 . . .
3.	 . . .
4.	. <! -- . . . -->

Column B (remedies)	
A.	Link the current HTML file to another file
B.	Making Text Bold
C.	Write a comment
D.	Creating a list.
E.	Creating an Underlined text
F.	To strength a paragraph

Key (answer)	1-B 2-A, 3-D,4-C
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DIT/ QS	Test Item Database Written (Theory) Test Item- No. 8		
Occupational Title:	WEBSITE DEVELOPER		
Competence level:	1		
Code no.	WSD		
Test Item type:	Short answer		
	Multiple choice		
	Matching item	Generic	Cause- Effect
			√

Complexity level:	C2
Date of OP:	January, 2022
Related modules:	M1.4
Time allocation:	5 minutes

Test Item	Re-arrange the following steps in designing a website layout in their chronological order.
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Column A (chronology)	Column B (work steps) in wrong chronology order	
1.	A	Design a mock-up in adobe illustrator
2.	B	Install Adobe illustrator
3.	C	Create a wireframe of the website pages
4.	D	Create mockup flows.
5.	E	Download Adobe illustrator
6.	F	Create a logo for the website
7.	G	Generate a color theme for the website.

Key (answer)	E,B,F,G,C,D,A
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DIT/ QS	Test Item Database Written (Theory) Test Item- No. 9			
Occupational Title:	WEBSITE DEVELOPER			
Competence level:	Level 1			
Code no.	WSD			
Test Item type:	Short answer			
	Multiple choice			
	Matching item	Generic	Cause- Effect	Work-sequence
				√
Complexity level:	C2			
Date of OP:	January, 2022			
Related modules:	M1.6			
Time allocation:	10 minutes			

Test Item	Match the following faults to their causes.
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Column A (diseases)		Column B (remedies)	
1	Set rgba (255,0,0,10) to a division	A	Sentence will be Bold.
2	Set rgba(0,0,255,7) to a section	B	Whole division will be yellow
3	 Sentence 	C	Section or division will be red.
4.	<p style="color: yellow;">Paragraph.</p>	D	Color of Paragraph will be yellow.
5	10_{th}	E.	Section will be blue.

		F	Sentence will strong
		G	10 th
		H	10 th

Key (answer)	1-C, 2-E,3-A,4-D,5-H
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PERFORMANCE TEST ITEMS (SAMPLES)

DIT/ QS	Test Item Database Performance Test Item- no.2
Occupational Title:	WEBSITE DEVELOPER
Competence level:	1
Code no.	WSD
Test Item:	<p>Jinja Restaurant is an eating joint that has been operating for two years in Jinja Town. They provide meals for Breakfast, Lunch and Dinner. You realize that they don't have a website and have only been relying on making radio announcements and printing flyers to market their services.</p> <p>(a)Draft a website proposal to be shared with the Director of Jinja Restaurant. (b)Design website for Jinja Restaurant. (c)Publish website on a demo link.</p>
Performance level:	P2
Date of OP:	JANUARY2022
Related Module:	M 1.4

: Related skills and knowledge	<ul style="list-style-type: none"> • Programming, Computer hardware and software specifications • Web technologies Computer networking • Software installations • Types of viruses • Encryption methods • Communication and interpersonal skills • Safety and health precautions • Operating a computer • ICT literacy • Basic calculus • Intellectual property rights • ICT policies and regulations • ICT Laws and ethic • Planning • Budgeting • Computer maintenance • Designing systems • Testing systems • Capturing data • Managing fraud • Editing data • Baking up data • Formatting data • Updating data • Creating files
Required tools, materials and equipment:	Internet Connectivity, Computers, Web Authoring Software, Graphics Software, Live Web Hosting Server (Logins) note book, pens..
Time allocation:	6 hours
Preferred venue:	The training centre laboratory
Remarks for candidates	Observe health, safety and environmental precautions
Remarks for assessors	Install required updated software setup a web hosting server in advance

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#	Assessment criteria	Scoring guide	Max. Score	
			Process	Result
1.	Preparation Before Task	Cleaned Work Area		3
		Internet Research Performed	2	
		System Check-ups Observed	4	
2	Presented a Compiled Website Proposal	<ul style="list-style-type: none"> Rationale 		4
		<ul style="list-style-type: none"> Proposed domain name 		2
		<ul style="list-style-type: none"> Website Structure 		2
		<ul style="list-style-type: none"> Technical Specifications 		4
		<ul style="list-style-type: none"> Development Schedule 		3
		<ul style="list-style-type: none"> Quotation 		4
3	Designed Website	<ul style="list-style-type: none"> Sketched wire frame 	4	
		A detailed wire frame observed		3
		Designed logo	3	
		Designed logo observed		2
		Created content	2	
		Restaurant content observed		3
		Optimized content observed		3
		Launched web authoring tool	1	
4	Tested the Website	<ul style="list-style-type: none"> Built website layout 	3	
		<ul style="list-style-type: none"> Standard header size observed 		2 2

#	Assessment criteria	Scoring guide	Max. Score	
			Process	Result
		<ul style="list-style-type: none"> Populated footer observed 		2
		<ul style="list-style-type: none"> Menu bars observed 		2
		<ul style="list-style-type: none"> Styled content 	4	
		Blended colors observed		2
		Consistent font observed		2
		Web page content added	3	
		Relevant page content uploaded		4
		Working functional modules observed		4
		Linked web pages	4	
		Navigable links observed		4
		Searched optimized website		2
		Meta tags observed		2
		Alternate image attributes observed		2
		Tested website	3	
		A running Website observed		4
		Published website	3	
		Logged into hosting server observed		2
		Website files uploaded and installed	4	
		Live website observed		2
		– XYX 100		

4.0 ATP- PART IV

INFORMATION ON REVIEWED PROCESS

4.1 Occupational Profile Development (January 2022)

The assessment and Training Package was exclusively developed by job practitioners who were working in the occupation of **WEBSITE DEVELOPER**.

The job expert panel, guided by UVQF facilitators developed the Occupational Profile that mirrors duties and tasks performed in the world of work and also provided additional generic information regarding the occupation.

4.2 Training Modules Development (January 2022)

Based on the Occupational Profile for WEBSITE DEVELOPER of **January 2022**, Training Modules were developed by job practitioners, guided by UVQF Facilitators.

4.3 Test Item Development (January 2022)

Based on the Occupational Profile for WEBSITE DEVELOPER of **January 2022**, and Training Modules, Test Items were developed by combined panels of instructors and job practitioners, guided by UVQF Facilitators.

4.4 Methodology

The rationale for the Assessment and Training Package review was to link Vocational Education and Training to the real world of work by bridging Occupational Standards to Training Standards through industry-led Standards-Based Assessment.

Active participation of both instructors and job practitioners' panels consolidated the development philosophy.

The panelists worked as teams in workshop settings complemented by off-workshop field research and literature review activities including international benchmarking.

4.5 Development Panel

The following is the panel of Job Practitioners that participated in the different stages of the assessment training package development i.e. occupational profile, training modules, assessment

#	Name	Organization
1.	Ddungu Abdu	MoES
2.	Nsubuga Hood	NCDC
3.	Mutonyi Josephine	UNEB
4.	Banda Eva Lucy	Senior Examiner(Mengo SS)
5.	Masanja Moses	Teacher Agha Khan School
6.	Mukalele Rodgers	Ezone Web Services
7.	Kiwanuka Isaac Kaweesa	Teacher Luwero SSS
8.	Exavier Rukera	Central Inn Entebbe
9.	Jonathan Kayemba	Logos Skills Training Centre limited
10.	Murungi Leslie	Infinity computer and communication company
11.	Owen Mwesigye	Red Wall Insights

4.6 Facilitator team

This Assessment and Training Package was developed by a Facilitator team listed below:

1. **Team Leader** – Ms. Mukyala Ruth, Ag Deputy Director, DIT
2. **Facilitators** (Occupational Profile Development) – Ms. Asimwe Maureen, QS, DIT, Mr. Nyanja John Fisher QS.
3. **Compiled** by Mrs. Aryatuha Ronnet, Mr. Kule Asasio, as Data Entrants DIT and edited by Ms. Mukyala Ruth Ag. DD, DIT, Qualification Standards Dept. DIT
4. Coordinated by – Mr Byakatonda Patrick, Ag. Director, DIT;

4.7 Reference time:

The Assessment and Training Package was compiled in January, 2022 and may be periodically revised to match the dynamic trends in the occupation and hence issued in different versions

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