

Domain

WEB DEVELOPMENT

UNIT ID: 2318

Title:

Perform server-side web development

Level:5

Credits: 12

Purpose

This unit standard is intended for those who perform server-side web development. People credited with this unit standard are able to demonstrate an understanding of server – side processed languages, demonstrate an understanding of variables and data types, demonstrate an understanding of basic Hypertext Pre-processor (PHP) commands, demonstrate an understanding of conditional operations, demonstrate an understanding of loop operations, demonstrate an understanding of classes and object orientated programming, demonstrate an understanding of global variables and demonstrate an understanding of Structured Query Language (SQL) connectivity.

This unit standard is intended for those who work as web developers.

Special Notes

1. Entry information:

Prerequisite:

- None

2. This unit standard is to be delivered and assessed in the context of information and communication technology.

3. Assessment evidence may be collected from a real or a simulated workplace in which ICT operations are carried out.

4. Tools and equipment may include but are not limited to computer, external devices, storage devices and basic computer applications.

5. Performance of all elements in this unit standard must comply with industry standards.

6. Regulations and legislation relevant to this unit standard include the following:

- Labour Act 2007(Act No 11, 2007).
- Regulations relating to the health and safety of employees at work under schedule 1 (2) of the Labour Act No.11 of 2007 and all subsequent amendments.

Quality Assurance Requirements

This unit standard and others within this sub-field may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority on www.namqa.org and the Namibia Training Authority on www.nta.com.na

Elements and Performance Criteria

Element 1: Demonstrate an understanding of Server – Side Processed Languages

Range

Server – side processed languages may include but not limited to Personal Home Page (PHP), Active Server Page (ASP) and Practical Extraction and Report Language (PERL).

Performance Criteria

- 1.1 Server – side processed languages are identified.
- 1.2 Programming language syntax is demonstrated.
- 1.3 Languages are used according to instruction.
- 1.4 Scripting language code types are explained.

Element 2: Demonstrate an understanding of variables and data types

Performance Criteria

- 2.1 Use of variables are explained and demonstrated.
- 2.2 Data types are defined and explained.
- 2.3 Data manipulation is demonstrated.

Element 3: Demonstrate an understanding of basic Hypertext Preprocessor (PHP) commands

Range

Built in functions may include but not limited to echo, print and include.

Performance Criteria

- 3.1 Hypertext Preprocessor (PHP) tags is demonstrated.
- 3.2 Program code structures are demonstrated.
- 3.3 Built in functions are explained and performed.
- 3.4 Arrays are explained and demonstrated.
- 3.5 Server-side scripts are saved and run according to instruction.

Element 4: Demonstrate an understanding of conditional operations

Performance Criteria

- 4.1 IF statement is explained and demonstrated.
- 4.2 IF-ELSE statement is explained and demonstrated.
- 4.3 Nested IF statements are explained and demonstrated.
- 4.4 Switch statement is explained and demonstrated.

Element 5: Demonstrate an understanding of loop operations

Performance Criteria

- 5.1 FOR statement is explained and demonstrated.
- 5.2 WHILE statement is explained and demonstrated.
- 5.3 DO-WHILE statement is explained and demonstrated.
- 5.4 FOREACH statement are explained and demonstrated.

Element 6: Demonstrate an understanding of classes and object orientated programming

Performance Criteria

- 6.1 Initialization of variables is demonstrated.
- 6.2 Functions are explained and demonstrated.
- 6.3 Encapsulation is explained and demonstrated.
- 6.4 Inheritance is explained and demonstrated.

- 6.5 Abstract is explained and demonstrated.
- 6.6 Parent concept is explained and demonstrated.
- 6.7 Constructors are explained and demonstrated.

Element 7: Demonstrate an understanding of global variables

Performance Criteria

- 7.1 \$GLOBALS variable is explained and demonstrated.
- 7.2 \$_SERVER variable is explained and demonstrated.
- 7.3 \$_POST variable is explained and demonstrated.
- 7.4 \$_GET variable is explained and demonstrated.
- 7.5 \$_FILES variable is explained and demonstrated.
- 7.6 \$_SESSION variable is explained and demonstrated.

Element 8: Demonstrate an understanding of Structured Query Language (SQL) connectivity

Performance Criteria

- 8.1 Structured Query Language (SQL) connection is explained and demonstrated.
- 8.2 Structured Query Language (SQL) authentication is explained and demonstrated.
- 8.3 Structured Query Language (SQL) query is executed according to instructions.
- 8.4 Exception handling is explained and demonstrated.
- 8.5 Query results are produced according to instructions.
- 8.6 Structured Query Language (SQL) connection is closed.

Registration Data

Subfield:	Information and Communication Technology
Date first registered:	30 July 2020
Date this version registered:	30 July 2020
Anticipated review:	2025
Body responsible for review:	Namibia Training Authority