



Australian Government

ICTWEB517 Create web-based programs

Release: 1

ICTWEB517 Create web-based programs

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 6.0.

Application

This unit describes the skills and knowledge required to develop web applications.

It applies to individuals who work as web developers and have highly developed technical skills to take responsibility for implementing code required to create web applications.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to create web application	1.1 Identify and confirm requirements and functionality of web application with required personnel 1.2 Confirm applicable legislative and organisational standards and procedures applicable to web applications 1.3 Determine hypertext transfer protocol (HTTP) required 1.4 Analyse advantages and limitations of HTTP when developing web applications
2. Implement session management	2.1 Create code and handle session management 2.2 Create code and retains user interaction with website 2.3 Review and debug created code
3. Develop and finalise	3.1 Develop web applications that keep track of data

ELEMENT	PERFORMANCE CRITERIA
applications in a stateless environment	between browser requests 3.2 Document work performed in web application with reference to its management of statelessness 3.3 Seek feedback on web application with required personnel and amend as required

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION
Reading	Identifies and analyses code for syntax and accuracy
Writing	- Prepares documentation detailing testing and work performed on web application succinctly - Writes and edits code and technical data in a logical manner using required syntax
Planning and organising	- Accepts responsibility for planning and sequencing complex tasks and workload - Negotiates key aspects with others, including required capabilities, efficiencies and effectiveness
Problem solving	Applies systematic and analytical decision-making processes for complex situations and issues
Technology	- Uses and investigates new digital technologies and applications - Manages and manipulates data and communicates with others in a secure and stable digital environment

Unit Mapping Information

Supersedes and is equivalent to ICTWEB503 Create web-based programs.

Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB517 Create web-based programs

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 6.0.

Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- develop a web application in a stateless environment according to technical requirements.

In the course of the above, the candidate must:

- confirm user data is tracked in web application
- document testing and work performed on web application
- confirm web application is functional on at least two browsers and at least two devices.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- principles of web analysis and design
- features and functionalities of different web applications
- programming control structures and applicable languages
- code debugging techniques
- web application development process
- legislative and organisational requirements applicable to creating web applications
- web programming concepts including:
 - authentication and web security
 - hypertext transfer protocol (HTTP)
 - session management
 - stateless programming
- web front end and backend languages, including:
 - hypertext markup language (HTML)
 - cascading style sheets (CSS)

- JavaScript
- organisational procedures applicable to creating web applications.

Assessment Conditions

Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in a working environment in this industry.

This includes access to:

- a website development environment
- a server
- a database server
- web browsers and digital devices
- hardware required to create web applications.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>