



Australian Government

ICTWEB514 Create dynamic web pages

Release: 1

ICTWEB514 Create dynamic web pages

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 produce both server and client-side content for web pages.

It applies to individuals working as web developers, who are responsible for creating dynamic pages to provide interaction between the user and the website. They use highly developed technical and analytical skills when developing the user-website interface.

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 dynamic web pages	1.1 Obtain and review technical requirements for creating dynamic web pages 1.2 Confirm applicable legislative and organisational standards and procedures applicable to technical requirements 1.3 Identify sections of website requiring client-side dynamic content 1.4 Identify sections of website requiring server-side dynamic content 1.5 Select applicable languages and technology according to technical requirements
2. Create dynamic content	2.1 Identify and create boilerplate templates according to technical requirements

ELEMENT	PERFORMANCE CRITERIA
	2.2 Design and create a database and organise data and content according to data storage requirements 2.3 Create page using selected languages
3. Test and finalise dynamic web pages	3.1 Debug code and confirm security of web page using cyber security protocols and procedures 3.2 Test web page functionality and content across a variety of browsers and devices 3.3 Evaluate web page functionality results and amend as required 3.4 Confirm required dynamic content functions according to task requirements 3.5 Present dynamic web page to required personnel and seek feedback 3.6 Finalise web page and obtain sign-off from required personnel, according to organisational procedures

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	Analyses documentation from a variety of sources and records and consolidates information when determining requirements
Writing	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
Self-management	Takes responsibility for following policies, procedures and standards
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 ICTWEB502 Create dynamic web pages.

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 ICTWEB514 Create dynamic web pages

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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:

- produce at least three dynamic web pages according to technical requirements.

In the course of the above, the candidate must:

- include client and server-side dynamic content in each web page
- create and debug code
- test web page and code on at least two different web browsers and at least two different devices
- comply with organisational and legislative standards and procedures.

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:

- web programming concepts, including:
 - authentication and web security
 - hypertext transfer protocol (HTTP)
 - session management
 - stateless programming
- types of technologies, including:
 - programming control structures
 - hypertext markup language (HTML) and markup languages
 - cascading style sheets (CSS)
 - syntax and uses of programming languages
- client and server-side scripting and its application to dynamic web page design
- data storage requirements

- debugging methods
- coding techniques
- cyber security protocols and procedures
- legislative and organisational procedures and standards applicable to creating dynamic web pages.

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:

- technical requirements
- a development environment
- a server
- a database server
- web browsers and devices
- web page testing and debugging tools required for creating dynamic web pages
- hardware, software and its components required for creating dynamic web pages.

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

Links

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