



Australian Government

ICTWEB521 Customise complex ICT content management systems

Release: 1

ICTWEB521 Customise complex ICT content management systems

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 create and customise an Information and Communications Technology (ICT) content management system (CMS) powered website using an open source to meet client requirements.

It applies to individuals working as web developers, who have a detailed knowledge of markup languages and their associated standards and are proficient in server-side language and security techniques. Individuals in this role also have high-level understanding of server functionality.

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. Identify and analyse client specifications and requirements	1.1 Gather and identify client and business requirements 1.2 Compare and analyse different CMS functionalities, restraints and requirements against client specifications 1.3 Select CMS according to client and business requirements 1.4 Identify, discuss and confirm additional areas and functions not covered by chosen CMS with required personnel

ELEMENT	PERFORMANCE CRITERIA
2. Develop customisation and create CMS powered website	2.1 Plan and outline requirements of additional functionality according to technical requirements 2.2 Create and develop plug-in, extension or new functionality to CMS according to identified task requirements 2.3 Seek feedback from required personnel on created developed plug-in, extension or new functionality to CMS and amend as required 2.4 Install and configure chosen content management system 2.5 Install and integrate new CMS functionality according to vendor requirements
3. Validate and evaluate website	3.1 Validate final website markup against organisational website and security standards 3.2 Evaluate and confirm required CMS performance, compatibility and core functionality in different browsers and devices 3.3 Confirm additional functionality developed meets client requirements 3.4 Obtain sign-off on final CMS powered website from required personnel

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
Oral communication	• Uses listening and questioning techniques to determine client requirements and articulate ideas using specific language applicable to audience
Reading	• Analyses complex specifications, program manuals and other documentation from a variety of sources, and consolidates information to determine requirements
Writing	• Creates a CMS powered website for specific audiences using required language
Planning and organising	• Accepts responsibility for planning and sequencing complex tasks and workload • Negotiates key aspects with others, including required capabilities, efficiencies and effectiveness

SKILL	DESCRIPTION
Problem solving	• Applies systematic and analytical decision-making processes for complex situations
Self-management	• Takes responsibility for following policies, procedures and industry 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 ICTWEB507 Customise a complex ICT content management system.

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 ICTWEB521 Customise complex ICT content management systems

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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:

- create a content management system (CMS) powered website, using an open source with at least two additional custom functionalities not available from CMS, according to technical requirements.

In the course of the above, the candidate must:

- perform basic content manipulation tasks on at least two different browsers and at least two different devices
- evaluate additional content management functionality required against programming and security standards
- customise functionalities into pre-existing core CMS using programming techniques
- validate front-end code markup against standards set by the World Wide Web Consortium (W3C)
- confirm final website is cyber secure and complies with cyber security procedures and protocols.

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:

- different content management systems and their respective functionalities, restraints and requirements
- different markup languages and their applicable standards
- customisation creation processes, including development of plug-in's and extensions and programming techniques
- CMS vendor requirements, installation and configuration processes
- client and business specifications and requirements, including:
 - server functionality

- required functionality of website
- required server-side language and application processes and hosting environment
- pre-existing restraints applicable to developing website solutions
- website, web accessibility, programming and security standards applicable to customising CMS
- website validation processes
- cyber security procedures and protocols.

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:

- client and business specifications, requirements and content
- content management system required to customise complex CMS
- hardware, software and its components applicable to developing and installing CMS customisations
- a text editor
- a range of browsers and digital devices
- the internet and its connectivity.

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

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