



Australian Government

Department of Education, Employment and Workplace Relations

ICAWEB507A Customise a complex IT content management system

Release: 1

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Modification History

Release	Comments
Release 1	This Unit first released with <i>ICA11 Information and Communications Technology Training Package version 1.0</i>

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to customise an IT content management system (CMS).

Application of the Unit

This unit applies to web developers responsible for integrating and customising a content management system into a website.

Licensing/Regulatory Information

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement but users should confirm requirements with the relevant federal, state or territory authority.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Element	Performance Criteria
<i>Elements describe the essential outcomes of a unit of competency.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.</i>

Elements and Performance Criteria

1. Analyse specifications and requirements	1.1 Determine the required functionality of the website as per client requirements 1.2 Determine the appropriate server-side language and hosting environment 1.3 Determine additional functionality that the CMS will not be able to handle 'out of the box' 1.4 Determine how client's additional functionality is required to function 1.5 Determine any pre-existing restraints that need to be considered when developing the website solution
2. Develop customisation	2.1 Plan and outline requirements of the additional functionality 2.2 Create and develop plug-in, extension or new functionality to the CMS to meet client requirements
3. Create CMS powered website	3.1 Install and configure chosen content management system 3.2 Install and integrate new CMS functionality
4. Validate and evaluate	4.1 Validate final website markup against current website standards 4.2 Validate CMS performance in different browsers, checking compatibility and core CMS functionality 4.3 Validate the developed additional functionality against client requirements

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

- analytical skills to determine uses, audience and document structure and requirements
- communication skills to liaise with end users
- initiative and enterprise skills to recommend design features
- literacy skills to:
 - follow documented instruction from a supplied guide and online documentation
 - interpret workplace instructions and other technical documents
 - keep up-to-date with latest industry guidelines
- problem-solving skills to:
 - plan and develop new functionality to a core CMS package
 - use server-side and markup languages to troubleshoot problems and client requirements
- technical skills to:
 - configure or manipulate a website hosting environment
 - use a markup language to create the required web page
 - use server-side programming language to code functionality.

Required knowledge

- content management systems
- markup language and associated standards
- server functionality
- server-side language and security techniques
- web accessibility.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of the ability to: create a CMS-powered website using an open source with additional custom functionality that is not available 'out of the box' that meets client requirements.
Context of and specific resources for assessment	Assessment must ensure access to: - client requirements and content - text editor - range of browsers - internet for research, validation of code and programming documentation - appropriate learning and assessment support when required - modified equipment for people with special needs.
Method of assessment	A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit: - evaluation of: - developed CMS (front and backend) in commonly used browsers to perform basic content manipulation tasks - content management additional functionality against current programming and security standards - ability to fulfil client requirements by programming custom functionality into the pre-existing core CMS - validation of front-end code markup correctness against standards set by the World Wide Web Consortium (W3C).
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, where appropriate. Assessment processes and techniques must be culturally appropriate, and suitable to the communication skill level, language, literacy and numeracy capacity of the candidate and the work being performed. Indigenous people and other people from a non-English speaking background may need additional support. In cases where practical assessment is used it should be combined

	with targeted questioning to assess required knowledge.
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Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<i>Server side language</i> may include:	• ASP.NET • Java • PHP • Ruby on Rails.
<i>Hosting environment</i> may include:	• Linux • Windows.
<i>Content management system</i> may include:	• Drupal • Expression Engine • Joomla • Mambo • Open CMS • PHP Nuke • Radiant CMS • Silverstripe • Typo • Wordpress.
<i>Browsers</i> may include:	• Firefox • Google Chrome • Internet Explorer • Konqueror • Lynx • Mozilla • Opera • Safari.

Unit Sector(s)

Web