



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **ICAWEB416A Customise content management system**

**Release: 1**

## ICAWEB416A Customise content management system

### Modification History

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

### Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to create a website powered by a content management system using an open-source solution.

### Application of the Unit

This unit applies to web developers who are responsible for integrating a website into an open-source content management system.

### 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 required functionality of the website 1.2 Determine appropriate <b><i>server-side language</i></b> that will be used to produce website 1.3 Determine content structure and navigation of the website 1.4 Determine pre-existing restraints that need to be considered when developing website solution
2. Research requirements	2.1 Research appropriate solutions, based on the website requirements, including programming language, <b><i>content management system, licensing structure and hosting structure</i></b> 2.2 Research techniques, plug-ins and additions to the existing content management system to allow solution to fulfil the needs determined while analysing website requirements
3. Create content-management system powered website	3.1 Install and configure chosen content management system 3.2 Insert and manage website content 3.3 Install and implement appropriate techniques and plug-ins
4. Validate and evaluate final website	4.1 Validate final website markup against current website standards 4.2 Validate content management system performance in different <b><i>browsers</i></b> , checking compatibility and core content management system functionality

## 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 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 a server-side programming language.

### Required knowledge

- markup language and associated standards
- 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.*

<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Evidence of the ability to:</p> <ul style="list-style-type: none"> <li>create a content management system powered website using an open-source solution that allows an end user without training in a markup language to make modifications to the website's content.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>Assessment must ensure access to:</p> <ul style="list-style-type: none"> <li>client requirements and content</li> <li>text editor</li> <li>range of browsers</li> <li>internet for research and code validation</li> <li>appropriate learning and assessment support when required.</li> </ul> <p>Where applicable, physical resources should include equipment modified for people with special needs.</p>
<b>Method of assessment</b>	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> <li>evaluation of content management system (front and backend) in commonly used browsers to perform basic content manipulation tasks</li> <li>evaluation of candidate's ability to fulfil client requirements using techniques, plug-ins and additional resources</li> <li>validation of front-end code markup correctness against standards set by the World Wide Web Consortium (W3C).</li> </ul>
<b>Guidance information for assessment</b>	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, where appropriate.</p> <p>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.</p> <p>Indigenous people and other people from a non-English speaking background may need additional support.</p> <p>In cases where practical assessment is used it should be combined with targeted questioning to assess required knowledge.</p>

## 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.*

<b><i>Server-side language</i></b> may include:	<ul style="list-style-type: none"> <li>• ASP.NET</li> <li>• Java</li> <li>• Perl hypertext preprocessor (PHP)</li> <li>• Ruby on Rails.</li> </ul>
<b><i>Content management system</i></b> may include:	<ul style="list-style-type: none"> <li>• Drupal</li> <li>• Expression Engine</li> <li>• Joomla</li> <li>• Mambo</li> <li>• Open CMS</li> <li>• PHP Nuke</li> <li>• Radiant CMS</li> <li>• Silverstripe</li> <li>• Typo</li> <li>• Wordpress.</li> </ul>
<b><i>Licensing structure</i></b> may include:	<ul style="list-style-type: none"> <li>• commercial</li> <li>• open source.</li> </ul>
<b><i>Hosting structure</i></b> may include:	<ul style="list-style-type: none"> <li>• downloads or self-installed</li> <li>• hosted solution.</li> </ul>
<b><i>Browsers</i></b> may include:	<ul style="list-style-type: none"> <li>• Firefox</li> <li>• Google chrome</li> <li>• Internet Explorer</li> <li>• Konqueror</li> <li>• Lynx</li> <li>• Mozilla</li> <li>• Opera</li> <li>• Safari.</li> </ul>

## **Unit Sector(s)**

Web