



**Australian Government**

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

# **CUFDIG502A Design web environments**

**Revision Number: 1**

## CUFDIG502A Design web environments

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit describes the performance outcomes, skills and knowledge required to design web environments.</p> <p>A web environment may consist of one or many web applications and technologies integrated in various combinations.</p> <p>The design is focused on how these applications and technologies are combined and used, and the way in which interactive content is accessed by users.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.</p>
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## Application of the Unit

<b>Application of the unit</b>	<p>A person in this role works with clients to develop design specifications for web environments.</p> <p>Other specialised designers, graphic artists and programmers working as a team undertake the development of design specifications.</p> <p>Higher order skills associated with developing and documenting concepts that could be used as the basis for design specifications are covered in:</p> <ul style="list-style-type: none"> <li>• BSBCRT501A Originate and develop concepts.</li> </ul>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

<p>Elements describe the essential outcomes of a unit of competency.</p>	<p>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.</p>
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
Determine project requirements	<ol style="list-style-type: none"> <li>1. Analyse project brief to identify <i>purpose</i> of, and target audience for, web environments</li> <li>2. Consult with clients to clarify <i>project requirements</i></li> <li>3. Identify target <i>audience characteristics</i> and determine how these influence all aspects of design</li> <li>4. Identify content to be incorporated and generated and how this content is to be accessed, searched or delivered</li> </ol>
Research and select web environments	<ol style="list-style-type: none"> <li>5. Research <i>web environments</i> and analyse their potential</li> <li>6. Analyse how these web environments meet audience and content requirements</li> <li>7. Identify issues relating to <i>delivery platform</i> and <i>standards</i>, and determine how these may affect web environment options</li> <li>8. Consult <i>relevant personnel</i> to ensure that all possible web environment options are considered</li> <li>9. Select web environments that will meet creative, production and technical requirements</li> </ol>
Draft design specifications	<ol style="list-style-type: none"> <li>10. Design the architecture of web environments to show interrelationship between environment components</li> <li>11. Identify each web environment and specify its individual interactive features, functionality and navigation and its relationship to design as a whole</li> <li>12. Identify content components and specify how these will be logically structured and integrated into and/or generated by web environments</li> <li>13. Specify levels of access permissions to web environments as required</li> <li>14. Specify <i>media assets</i> as required</li> <li>15. Specify user interfaces of web environments</li> <li>16. Specify <i>production requirements</i>, including appropriate <i>testing strategies</i></li> <li>17. Write draft <i>design specifications</i> to include all relevant advice to design and development teams</li> <li>18. Discuss draft design specifications with client to ensure designs are consistent with project briefs</li> </ol>
Review and confirm design specifications	<ol style="list-style-type: none"> <li>19. Review designs against required project outcomes, as well as client and audience needs</li> <li>20. Review designs to ensure they meet creative and technical requirements</li> </ol>

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	21. Adjust designs as necessary after discussions with relevant personnel 22. Clarify <i>legislative or ownership issues</i> to comply with production and organisational requirements 23. Confirm with client acceptance of design specifications, including deliverables, milestones and timelines

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required skills

- communication, teamwork and literacy skills sufficient to:
  - interpret and clarify written proposals and creative briefs
  - work collaboratively in a team environment
  - present ideas for the design of web environments for discussion and feedback from team members
  - clearly and concisely document specifications for the design of web environments
- initiative, enterprise and creativity in the context of:
  - generating ideas for the design of web environments
  - thinking laterally when developing concepts
  - undertaking background research into web environments
  - maintaining design integrity
  - finding solutions to problems encountered when designing web environments
  - finding ways to minimise the effect of technical constraints
  - ensuring there is an intuitive and logical flow to the navigation of web environments
- technical skills sufficient to create storyboards, maps and other diagrams to specify the architecture and navigation of web environments
- self-management skills sufficient to:
  - meet deadlines
  - provide appropriate and timely documentation

#### Required knowledge

- industry knowledge, including:
  - roles and responsibilities of project team members, e.g. designers, content creators, information architects, programmers and coders
  - sequence and interrelationship of stages in the process of developing web environments
  - broad range of web applications and technologies
  - web design and its relationship to web optimisation strategies
  - web standards, including SCORM, usability, W3C Accessibility and interoperability
  - issues and challenges that arise in designing and developing web environments
- typical formats and techniques for documenting the design of web environments
- OHS standards as they relate to working for periods of time on computers

<b>REQUIRED SKILLS AND KNOWLEDGE</b>
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| <ul style="list-style-type: none"><li>• intellectual property rights and copyright clearance procedures</li></ul> |
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## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>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.</p>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> <li>• design specifications for web environments that: <ul style="list-style-type: none"> <li>• are well documented and clearly presented</li> <li>• meet client and audience requirements</li> <li>• are technically feasible</li> </ul> </li> <li>• ability to work effectively as a member of a production team.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>Assessment must ensure:</p> <ul style="list-style-type: none"> <li>• practical demonstration of skills through the design of web environments for at least two projects</li> <li>• access to project briefs on which designs can be based</li> <li>• access to appropriate learning and assessment support when required</li> <li>• use of culturally appropriate processes and techniques appropriate to the language and literacy capacity of learners and the work being performed.</li> </ul>
<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>• direct questioning combined with review of portfolios of evidence and third-party workplace reports of on-the-job performance</li> <li>• evaluation of designs for web environments documented by the candidate and of their effectiveness in terms of meeting project requirements</li> <li>• observation of a candidate presenting his/her design for web environments to team members and explaining how it meets requirements</li> <li>• written or oral questioning to test knowledge as listed in the required skills and knowledge section of this unit.</li> </ul>

<b>EVIDENCE GUIDE</b>	
<b>Guidance information for assessment</b>	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:</p> <ul style="list-style-type: none"><li>• CUFDIG505A Design information architecture</li><li>• CUFPPM404A Create storyboards.</li></ul>

## Range Statement

### 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.

<p><b><i>Purpose</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• business and corporate</li> <li>• community</li> <li>• education</li> <li>• entertainment</li> <li>• government</li> <li>• information and news</li> <li>• knowledge management</li> <li>• personal</li> <li>• promotion</li> <li>• training.</li> </ul>
<p><b><i>Project requirements</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• access to facilities and resources</li> <li>• budget</li> <li>• deliverables</li> <li>• milestones</li> <li>• personnel, including:             <ul style="list-style-type: none"> <li>• number</li> <li>• availability</li> <li>• expertise prototyping</li> </ul> </li> <li>• technical issues, including:             <ul style="list-style-type: none"> <li>• delivery platform</li> <li>• disk space</li> <li>• bandwidth</li> <li>• testing plan</li> </ul> </li> <li>• timelines.</li> </ul>
<p><b><i>Audience characteristics</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• computer literacy</li> <li>• demographics, such as:             <ul style="list-style-type: none"> <li>• age</li> <li>• gender</li> <li>• education</li> <li>• occupation</li> <li>• location</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• cultural background</li> <li>• hobbies</li> <li>• interests</li> <li>• internet literacy</li> <li>• language, literacy and numeracy</li> <li>• personas</li> <li>• specific needs - physical or psychological.</li> </ul>
<i>Web environments</i> may include one or combinations of:	<ul style="list-style-type: none"> <li>• audio streaming</li> <li>• blog</li> <li>• chat</li> <li>• conferencing tool</li> <li>• content learning management system (CLMS)</li> <li>• content management system (CMS)</li> <li>• database repository</li> <li>• discussion forum</li> <li>• dynamic website</li> <li>• electronic newsletter</li> <li>• interactive calendar</li> <li>• interactive form</li> <li>• learning management system (LMS)</li> <li>• podcast</li> <li>• RSS feed</li> <li>• static website</li> <li>• TiVo</li> <li>• video streaming</li> <li>• other online collaboration and social network tools.</li> </ul>
<i>Delivery platform</i> may include:	<ul style="list-style-type: none"> <li>• digital television set</li> <li>• internet</li> <li>• mobile phone</li> <li>• other wireless/mobile devices</li> <li>• personal digital assistant (PDA).</li> </ul>
<i>Standards</i> may include:	<ul style="list-style-type: none"> <li>• interoperability</li> <li>• SCORM</li> <li>• usability</li> <li>• W3C Accessibility.</li> </ul>
<i>Relevant personnel</i> may include:	<ul style="list-style-type: none"> <li>• art director</li> <li>• client</li> <li>• educator</li> <li>• graphic designer</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• head of department</li> <li>• information architect</li> <li>• instructional designer</li> <li>• programmer</li> <li>• technical director</li> <li>• technical staff</li> <li>• other specialist creative and administrative staff.</li> </ul>
<i>Media assets</i> may include:	<ul style="list-style-type: none"> <li>• animation</li> <li>• audio</li> <li>• audio/visual files, such as PowerPoint</li> <li>• graphics</li> <li>• images</li> <li>• text</li> <li>• text documents, such as PDF and Word</li> <li>• video.</li> </ul>
<i>Production requirements</i> may include:	<ul style="list-style-type: none"> <li>• levels of expertise</li> <li>• production deadlines</li> <li>• production schedules</li> <li>• production team</li> <li>• production values</li> <li>• testing strategies.</li> </ul>
<i>Testing strategies</i> may include:	<ul style="list-style-type: none"> <li>• alpha</li> <li>• beta</li> <li>• completion</li> <li>• continuous</li> <li>• milestone</li> <li>• prototype</li> <li>• staged.</li> </ul>
<i>Design specifications</i> may include:	<ul style="list-style-type: none"> <li>• content inventory</li> <li>• diagrams</li> <li>• flow charts</li> <li>• maps</li> <li>• navigation charts</li> <li>• plans</li> <li>• storyboards</li> <li>• technical specifications</li> <li>• user interface mock-ups</li> <li>• wire frames.</li> </ul>

**RANGE STATEMENT**

*Legislative or ownership issues*  
may be:

- access and equity
- clearances
- confidentiality
- copyright
- intellectual property rights
- non-disclosure agreements
- open source licensing
- ownership of assets
- product licensing.

**Unit Sector(s)**

<b>Unit sector</b>	
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**Competency field**

<b>Competency field</b>	Visual communication - digital content and imaging
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**Co-requisite units**

<b>Co-requisite units</b>		