



Australian Government

Department of Education, Employment and Workplace Relations

ICAA4142C Design a website to meet technical requirements

Release: 1

ICAA4142C Design a website to meet technical requirements

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit defines the competency required to design a website to specifications within a particular technical and human interface environment. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
------------------------	---

Application of the Unit

Application of the unit	
--------------------------------	--

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units		
	ICAB4135B	Create a simple mark-up language document to specification
	ICAB4137B	Produce basic client side script for dynamic web pages
	CUFMEM07B	Apply principles of visual design and communication to the development of a multimedia product

Employability Skills Information

Employability skills	This unit contains employability skills.
-----------------------------	--

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	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.
---	--

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Define the technical environment	1.1. Identify business requirements , hardware and software requirements 1.2. Define software and hardware types to ensure that site is designed to meet business requirements 1.3. Identify appropriate standards , software and hardware required to develop the site
2. Define the human computer interface	2.1. Conduct user analysis to determine a user profile and user needs 2.2. Determine user content and requirements 2.3. Determine appropriate design principles for the site 2.4. Identify appropriate operating system
3. Determine site hierarchy	3.1. Identify the hierarchy of pages 3.2. Ensure content is logical and accessible to user 3.3. Ensure that navigation between pages is consistent and clear
4. Integrate design components	4.1. Apply appropriate information hierarchy to site design 4.2. Ensure design principles are appropriate to business and user 4.3. Ensure process flow is developed in a logical and simple manner 4.4. Test site search engine , site map, frequently asked questions and news sections against user needs 4.5. Complete and document the design

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- Website analysis
- Use of site design software
- User analysis

Required knowledge

REQUIRED SKILLS AND KNOWLEDGE

- Website architecture
- Business process design
- Customer and business liaison
- E-business sites and corporate strategy
- Implications of technology connectivity
- Documenting technical specifications
- Copyright and intellectual property
- Basic information architecture

Evidence Guide

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 following is essential:

- Assessment must confirm the ability to identify and select appropriate tools and procedures in order to develop an effective website for a business.

To demonstrate competency in this unit the learner will need access to:

- Web servers
- E-business website
- Site server
- Site servers software
- Analysis software
- Requirements documentation
- Customer relationship model

Context of and specific resources for assessment

Breadth, depth and complexity involving analysis, documentation and design across a broad range of technical and managerial functions, including identifying the technical and human computer interface requirements that drive design.

The breadth, depth and complexity of knowledge and skills in this competency would cover a broad range of varied activities or application in a wider variety of contexts most of which are complex and non-routine. Leadership and guidance would be involved when organising activities of self and others as well as contributing to technical solutions of a non-routine or contingency nature.

Assessment must ensure:

- Performance of a broad range of skilled applications including the requirement to evaluate and analyse current practices, develop new criteria and

EVIDENCE GUIDE	
	procedures for performing current practices and provision of some leadership and guidance to others in the application and planning of the skills would be characteristic. • Applications may involve responsibility for, and limited organisation of, others.
Method of assessment	The purpose of this unit is to define the standard of performance to be achieved in the workplace. In undertaking training and assessment activities related to this unit, consideration should be given to the implementation of appropriate diversity and accessibility practices in order to accommodate people who may have special needs. Additional guidance on these and related matters is provided in ICA05 Section 1. • Competency in this unit should to be assessed using summative assessment to ensure consistency of performance in a range of contexts. This unit can be assessed either in the workplace or in a simulated environment. However, simulated activities must closely reflect the workplace to enable full demonstration of competency. • Assessment will usually include observation of real or simulated work processes and procedures and/or performance in a project context as well as questioning on underpinning knowledge and skills. The questioning of team members, supervisors, subordinates, peers and clients where appropriate may provide valuable input to the assessment process. The interdependence of units for assessment purposes may vary with the particular project or scenario.
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example: An individual demonstrating this competency would be able to: • Demonstrate understanding of a broad knowledge base incorporating some theoretical concepts • Apply solutions to a defined range of unpredictable problems

EVIDENCE GUIDE

	• Identify and apply skill and knowledge areas to a wide variety of contexts, with depth in some areas • Identify, analyse and evaluate information from a variety of sources • Take responsibility for own outputs in relation to specified quality standards • Take limited responsibility for the quantity and quality of the output of others • Maintain knowledge of industry products and services
--	--

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.

Business requirements may include:

- meeting customer needs
- organisational goals
- remote access
- external interfacing to the organisation

Hardware may include but is not limited to:

- workstations
- personal computers
- modems and other connectivity devices
- networks
- DSL modems
- remote sites
- servers

Operating system may include:

- Win 98/NT/2000/XP
- Sun Solaris/SunOS
- HP-UX
- AIX
- Digital Unix
- Silicon Graphics IRIX
- DEC

RANGE STATEMENT	
	• VMS • Mac OSX • Linux • Netware
Standards may include XML standards:	• Organisation for the Advancement of Structured Information Standards, • ISO and IEEE to web-oriented groups like IETF and W3C • IEEE Std
Information hierarchy may include:	• page layout • technical specifications • content structure • secure access provisions • locations and links to other internet resources where appropriate
Design principles may include but is not limited to:	• user compatibility • product compatibility • task compatibility • workflow compatibility • consistency • familiarity • simplicity • WYSIWYG • flexibility • responsiveness • invisible technology • robustness • protection • ease of learning
User may include:	• a person within a department • a department within the organisation • a third party
Search engine	• A website that allows the entry of a search parameter and based on the request, searches through its list of websites for the best match. It then displays the results for selection • A wide variety of search tools may be used, including Snap, Questfinder, Ask Jeeves, Google, metacrawler, Alta Vista, Excite, infoseek, Findlink, Northern Light, AOL Netfind, Hotbot, LookSmart, Yahoo, Netscape,

RANGE STATEMENT	
	Lycos, Open Text, WebCrawler, Go To Dot Com, Beaucoup, Meta Search, Search.com, Go2Network, Savvy Search, Profusion, Dogpile and Metagopher

Unit Sector(s)

Unit sector	Analyse and Design
-------------	--------------------

Co-requisite units

Co-requisite units		

Competency field

Competency field	
------------------	--