



Australian Government

Department of Education, Employment and Workplace Relations

ICAB5165B Create dynamic web pages

Release: 1

ICAB5165B Create dynamic web pages

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit defines the competency required to build active or dynamic web pages. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
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Application of the Unit

Application of the unit	
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Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare the technical environment	1.1. Check that development environment and server software is available and accessible 1.2. Take action to ensure access to organisational or networked server 1.3. Set up access to the server and establish connection to the correct directory for server access 1.4. Determine users who can upload dynamic content to server
2. Create dynamic pages	2.1. Create pages using appropriate language and save with the correct extension 2.2. Store pages in the appropriate location on the server 2.3. Take action to ensure comments are executed as part of the code 2.4. Take action to ensure that code follows correct formatting procedures for ease of reading, maintenance and troubleshooting 2.5. Format pages using appropriate web-suitable language and add business content as required 2.6. Test access file/page through http://localhost/, the local IP address or the full URL
3. Add functions to dynamic pages	3.1. Declare and use variables and arrays according to requirements and if necessary variable types 3.2. Assign variable values, strings and constants 3.3. Call and use functions and formulas 3.4. Set arguments and parameters 3.5. Correctly call randomised statements, integers and round functions 3.6. Format string functions correctly 3.7. Incorporate conditionals ('if/then' statements) as required
4. Test and sign off dynamic pages	4.1. Save pages to correct location on server with required extension 4.2. Open pages through browser and test 4.3. Check formatting and dynamic function all perform as required by the business and client 4.4. Document results of tests and obtain client sign-off on the pages

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- Scripting
- Server accessing and uploading
- HTML language
- Basic design skills

Required knowledge

- Programming theory
- Built-in objects/functions
- Internet technology
- Stateless programming
- Website models and technologies
- Copyright and intellectual property
- Copyleft and Free Software Foundation
- Federal and State privacy legislation
- Electronic commerce modelling language
- Australian Computer Society Code of Ethics

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 produce dynamic web pages with a large range of functions that meet business needs.

To demonstrate competency in this unit the person will require access to:

- Server access
- Development environment

Context of and specific resources for assessment

Dynamic pages provide for an interactive process between customers and clients. Competent individuals operating in the workplace will engage in a varied range of activities that are complex and non-routine using skilled applications related to dynamic content of web pages.

The breadth, depth and complexity covering planning and initiation of alternative approaches to skills or knowledge applications across a broad range of technical and/or management requirements, evaluation and coordination would be characteristic.

Assessment must ensure:

- The demonstration of competency may also require self-directed application of knowledge and skills, with substantial depth in some areas where judgement is required in planning and selecting appropriate equipment, services and techniques for self and others.
- Applications involve participation in development of strategic initiatives as well as personal responsibility and autonomy in performing complex technical

EVIDENCE GUIDE	
	operations or organising others. It may include participation in teams including teams concerned with planning and evaluation functions. Group or team coordination may also be involved.
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 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. An individual demonstrating this competency would be able to: - Demonstrate understanding of a broad knowledge base incorporating theoretical concepts, with substantial depth in some areas - Analyse and plan approaches to technical problems or management requirements - Transfer and apply theoretical concepts and/or

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	technical or creative skills to a range of situations • Evaluate information, using it to forecast for planning or research purposes • Take responsibility for own outputs in relation to broad quantity and quality parameters • Take some responsibility for the achievement of group outcomes • Maintain knowledge of industry products and services Additionally, an individual demonstrating this competency would be able to: • Demonstrate understanding of dynamic content incorporating theoretical concepts • Apply solutions to a range of web-based page creation issues • Identify and apply skill and knowledge to a wide variety of related dynamic page creations problems • Identify and evaluate breakdowns in dynamic content
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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.

Development environment may include but is not limited to:

- Text file editors
- HTML editors
- Dreamweaver
- Eclipse
- Microsoft Visual InterDev
- BlueFISH for Linux

Software may include but is not limited to:

- commercial software applications; organisation-specific software, packaged software, in-house or customised software

RANGE STATEMENT	
Users may include:	• a person within a department • a department within the organisation • a third party
Server may include:	• Application/web servers • BEA Weblogic servers • IBM VisualAge and WebSphere • Novell NDS servers • Email servers • File and print servers • FTP servers • Firewall servers • Proxy/cache servers
Language may include:	• PHP • VBScript • ASP • ASP.NET • Javascript • Coldfusion • Perlscript • XML
Browser may include but is not limited to:	• Netscape Navigator • Internet Explorer • Mozilla • Opera • Galleon • Phoenix • Konqueror • Lynx
Client may include but is not limited to:	• internal departments • external organisations • individual people • internal employees

Unit Sector(s)

Unit sector	Build
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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