



Australian Government

Department of Education, Employment and Workplace Relations

ICAT4185B Create a website testing procedure

Release: 1

ICAT4185B Create a website testing procedure

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	<p>This unit defines the competency required to design and implement procedures that measure the performance of a website and compare them to the initial design specifications.</p> <p>The following units are linked and form an appropriate cluster:</p> <ul style="list-style-type: none"> • ICAA4142C Design a website to meet technical requirements • ICAB4135B Create a simple mark up language document to specification • ICAB4171B Develop cascading style sheets • ICAD4209B Write content for web pages • ICAI4189B Ensure website content meets technical protocols and standards • ICAT4183B Confirm accessibility of website for people with special needs • ICAT4184B Ensure site usability for full range of users • ICAT4186B Conduct operational acceptance tests of websites <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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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. Document and define performance criteria	1.1. Review performance specifications and determine benchmark criteria 1.2. Validate and document performance functions 1.3. Select measurement methodology and test on website 1.4. Validate each performance function separately 1.5. Record and document metric tools using appropriate methodology 1.6. Prepare performance benchmarks and seek agreement on criteria with the <i>client</i>
2. Validate performance measures	2.1. Develop inspection and test plans to validate performance measures throughout the performance cycle 2.2. Test performance functions and record results according to <i>technical documentation standards</i> 2.3. Compare results of performance function testing to benchmark 2.4. Redesign functions that do not meet appropriate performance benchmarks 2.5. Re-implement functions that have been redesigned in performance testing 2.6. Document benchmarks and obtain sign-off
3. Obtain signoff	3.1. Validate and document performance standards and benchmarks 3.2. Submit methodology and function testing document and results to <i>client</i> for approval 3.3. Review <i>client</i> comments and make changes as appropriate 3.4. Obtain sign-off for website testing procedure

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

REQUIRED SKILLS AND KNOWLEDGE

- Procedures writing
- Results recording
- Statistical measuring
- Technical test design
- Test implementation
- Test evaluation

Required knowledge

- Website architecture
- Technical environment characteristics and how to read and interpret design specifications
- Benchmark selection and development
- Queuing systems, workload metrics and user request classes
- Standard generalised mark-up language (SGML) and associated standards
- Basic copyright and intellectual property
- Australian Computer Society Code of Ethics

Evidence Guide

EVIDENCE GUIDE	
<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>	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> • Assessment must confirm the ability to identify the critical functions to be tested, develop appropriate metrics for each function and assign benchmarked performance standards. Each performance function must be tested and compared against the appropriate benchmarks in order to validate site performance against technical requirements. Results should be clearly documented to establish the performance benchmarks for subsequent site development. <p>To demonstrate competency in this unit the person will require access to:</p> <ul style="list-style-type: none"> • E-business website • Analysis software • Site design and technical requirements documentation • Site development software and tools
Context of and specific resources for assessment	<p>Testing applications involves significant judgement in planning, design, evaluation, technical or leadership/guidance and communications functions related to services, operations and processes. Testing procedures for contemporary websites can be complex and expensive and a thorough analysis and documentation process should be undertaken across all aspects of such testing. 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.</p>

EVIDENCE GUIDE	
	<p>Assessment must ensure:</p> <ul style="list-style-type: none"> • Performance of a broad range of skilled applications including the requirement to evaluate and analyse current practices, develop new criteria and 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	<p>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.</p> <ul style="list-style-type: none"> • 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 interdependence of units for assessment purposes may vary with the particular project or scenario.
Guidance information for assessment	<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"> • ICAA4142C Design a website to meet technical requirements • ICAB4135B Create a simple mark-up language document to specification

EVIDENCE GUIDE

- ICAB4171B Develop cascading style sheets
- ICAD4209B Write content for web pages
- ICAI4189B Ensure website content meets technical protocols and standards
- ICAT4183B Confirm accessibility of website for people with special needs
- ICAT4184B Ensure site usability for full range of users
- ICAT4186B Conduct operational acceptance tests of websites

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
- 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

Additionally, an individual demonstrating this competency would be able to:

- Demonstrate understanding and technical knowledge of designing a website, with depth in some areas
- Use judgements and analysis across a broad range of technical or functions related to website technical needs
- Demonstrate a command of wide-ranging, highly specialised technical, creative and conceptual skills
- Generate ideas through the analysis of information and concepts at an abstract level
- Demonstrate accountability for personal outputs
- Maintain knowledge of industry products and services

Range Statement

RANGE STATEMENT	
<p>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>	
<p><i>Technical documentation standards</i></p>	<ul style="list-style-type: none"> • May include but are not limited to policy relating to sign-off, storage, distribution, revision. • May include ISO/IEC/AS standards, organisational standards, audit trails, naming standards, version control, project management templates and report writing principles (for further information refer to the Standards Australia website at: www.standards.com.au)
<p><i>Client</i> may include but is not limited to:</p>	<ul style="list-style-type: none"> • internal departments • external organisations • individual people • internal employees

Unit Sector(s)

Unit sector	Test
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Co-requisite units

Co-requisite units	

Competency field

Competency field	
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