



Australian Government

ICTICT502 Develop detailed component specifications from project specifications

Release: 1

ICTICT502 Develop detailed component specifications from project specifications

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to analyse requirements of the project specifications in order to produce a set of high-level component specifications.

It applies to systems designers who are required to produce component specifications for programmers.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

General ICT

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Develop components	1.1 Document behaviour scenarios according to documentation standards 1.2 Identify or develop components according to project specifications 1.3 Prepare diagrams according to standards
2. Prepare schema	2.1 Analyse and document component connectivity 2.2 Identify and incorporate data flow iteration 2.3 Prepare component action diagrams according to standards
3. Prepare component	3.1 Describe roles and responsibilities

ELEMENT	PERFORMANCE CRITERIA
model	3.2 Review and update functional requirements 3.3 Specify interface components and component relationships 3.4 Prepare interaction diagrams according to standards
4. Iterate and review model	4.1 Conduct walk-through of current model and review functionality 4.2 Identify relationships to ensure integration of model 4.3 Review class service requirements 4.4 Prepare initial test criteria 4.5 Implement process for incremental testing

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 2.2, 3.2, 4.1-4.3	Interprets and analyses text with complex terminology, diagrams, code, syntax, icons and symbols to evaluate current system functionality and technical requirements, and develop diagrams using industry specific software
Writing	1.1-1.3, 2.1-2.3, 3.1-3.4, 4.4, 4.5	- Uses the correct spelling and grammar, clear plain English, task related terminology, and a formal document structure, format and style appropriate to the audience and organisation - Selects suitable vocabulary, terminology, labelling and naming conventions to develop diagrams using industry specific design tools
Numeracy	1.2	Interprets numerical information and applies basic mathematical calculations relating to time durations and budgetary information
Navigate the world of work	1.1, 1.3, 2.3, 3.4	Recognises and follows explicit and implicit protocols, and meets expectations associated with own role
Get the work done	1.2, 2.1, 2.2, 3.2, 3.3, 4.1- 4.5	Takes responsibility for planning and organising own workload, identifying ways of sequencing and

		- combining elements for efficiency - In familiar contexts, responds intuitively to problems requiring immediate attention - Considers purpose, needs and limitations when selecting devices and applications for different tasks
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Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTICT502 Develop detailed component specifications from project specifications	ICAICT502A Develop detailed component specifications from project specifications	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTICT502 Develop detailed component specifications from project specifications

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Performance Evidence

Evidence of the ability to:

- identify and document high level component specifications relevant to the project specifications
- analyse and document component connectivity and relationships
- document and review component modelling.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline appropriate design tools and their use
- discuss and explain configuration management
- outline the key features of a cost-benefit analysis
- identify and apply current industry accepted design methodologies and hardware and software products, including broad knowledge of general features and capabilities
- explain data modelling techniques
- describe program development methodologies
- describe quality assurance practices for preparing component models
- outline relevant standards and organisational policies
- specify current system functionality for analysing components.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the general information and communications technology (ICT) industry, and include access to:

- technical specifications
- organisational and process goals
- standards for model development
- computer aided software engineering (CASE) tools
- project deliverables
- test plan
- project budget
- outcomes of the business analysis process
- appropriate software and hardware.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

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