



Australian Government

ICTICT519 Develop detailed component specifications from project specifications

Release: 1

ICTICT519 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 6.0.

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.

The unit 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. Prepare components	1.1 Document behaviour scenarios according to documentation standards 1.2 Identify and develop components according to project specifications 1.3 Prepare diagrams according to required 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 required standards
3. Prepare component model	3.1 Review and update functional requirements 3.2 Specify interface components and component relationships

ELEMENT	PERFORMANCE CRITERIA
	3.3 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 and confirm 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 those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION
Reading	Interprets and analyses text with complex terminology, diagrams, code, syntax, icons and symbols to evaluate current system functionality and technical requirements
Writing	- Uses task related terminology and a formal document structure, choosing format and style according to document audience and organisational requirements - Uses required vocabulary, terminology, labelling and naming conventions to develop diagrams using industry specific design tools
Numeracy	Interprets numerical information and applies basic mathematical calculations relating to time durations and budgetary information
Self-management	Identifies and follows explicit and implicit protocols and meets expectations associated with own role
Planning and organising	Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for efficiency
Problem solving	Responds intuitively to problems in familiar contexts requiring immediate attention
Technology	Recognises and identifies purpose, needs and limitations when selecting devices and applications for different tasks

Unit Mapping Information

Supersedes and is equivalent to ICTICT502 Develop detailed component specifications from project specifications and ICTPMG504 Prepare project specifications.

Links

Companion Volume Implementation Guide is found on VETNet -

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

Assessment Requirements for ICTICT519 Develop detailed component specifications from project specifications

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- develop component specifications for a project on at least two occasions, including:
 - identifying and document high level component specifications relevant to the project specifications
 - analysing and document component connectivity and relationships
 - documenting and review component modelling.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- component design tools, including features and capabilities
- processes for configuration management
- key features of a cost-benefit analysis
- industry accepted design methodologies and hardware and software products, including features and capabilities
- data modelling techniques
- program development methodologies
- quality assurance practices for preparing component models
- standards and organisational policies relating to component specification development
- current system functionality for analysing components.

Assessment Conditions

Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in a working environment in this industry.

This includes access to:

- technical specifications
- organisational and process goals
- standards for model development
- computer aided software engineering (CASE) tools
- project deliverables
- test plan
- project budget
- software and hardware required for performance evidence.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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