



Australian Government

ICTICT430 Apply software development methodologies

Release: 1

ICTICT430 Apply software development methodologies

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 apply traditional and non-traditional systems development methodologies.

It applies to individuals in senior development roles who exercise discretion and judgement to create solutions using technical knowledge and analysis skills.

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. Determine methodology	1.1 Determine and define subject activity 1.2 Define selection criteria for development methodology 1.3 Review and evaluate a range of traditional and non-traditional system development methodologies 1.4 Select system development methodology for required activity
2. Apply selected development methodology	2.1 Create initial project plan according to organisational standards 2.2 Identify applicable task types according to development methodology 2.3 Describe and articulate task types 2.4 Define applicable control structures to be created according to task type execution requirements

ELEMENT	PERFORMANCE CRITERIA
	2.5 Associate each task type with a set of input and output parameters
3. Adjust project according to methodology	3.1 Identify resources to support methodology selection 3.2 Solve tasks using selected methodology 3.3 Monitor project flow and record effectiveness against project plan 3.4 Review and document opportunities for improvement, lessons learned and recommendations for future projects 3.5 Submit results to required personnel for approval

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	Identifies, analyses and evaluates a range of textual information containing complex systems development specific terminology, syntax and diagrams
Writing	Uses applicable spelling and grammar and technical terminology to document project plans, recommendations, processes and reports in required format
Planning and organising	Applies formal processes when planning more complex tasks, producing plans with logically sequenced steps, reflecting an awareness of time and resource constraints and the needs of others
Self-management	Analyses project methodologies and identifies some key principles that may be applicable in future situations
Technology	Uses digital systems and tools to access, organise, analyse and display information applicable to the role

Unit Mapping Information

Supersedes and is equivalent to ICTICT403 Apply software development methodologies.

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 ICTICT430 Apply software development methodologies

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 6.0.

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:

- select and apply a software development methodology for at least two different subject activities according to organisational standards.

In the course of the above, the candidate must:

- produce documentation as required by chosen methodology.

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:

- key project management skills, techniques and requirements required in applying software development methodologies, including those related to:
 - input and output parameters
 - project plan creation processes
 - task types and applicable control structures
- client business domains and organisational requirements required in applying software development methodologies
- stakeholder roles and degree of stakeholder involvement in development process
- traditional and non-traditional system development methodologies
- key organisational standards and documentation techniques required in applying software development methodologies.

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:

- hardware, software and its components required to apply software development methodology
- design specifications
- industry standard system development methodologies
- organisational standards
- detailed user requirements document, including model and scope for given activity.

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

Links

Companion Volume Implementation Guide is found on VETNet -

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