



Australian Government

ICTPRG447 Use extensible markup language

Release: 1

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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 create extensible markup language (XML) documents, web-service applications, and client applications to consume web services.

It applies to those who are web developers, web programmers or application programmers, who build Windows or web-based applications that access data in XML format, or who develop and consume web services.

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

Unit Sector

Programming and software development

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. Represent structured data with XML	1.1 Identify task and information requirements and applicable organisational policies and procedures in creating XML document 1.2 Gather information by analysing data, documents, problem domains and discussions with required personnel 1.3 Write XML document and incorporate required structure and syntax according to task requirements 1.4 Validate XML document using validation tools 1.5 Format XML document using styling tools

ELEMENT	PERFORMANCE CRITERIA
2. Access and manipulate XML document using XML parser application programming interface (API)	2.1 Create new XML document according to task requirements 2.2 Access and traverse elements and attributes 2.3 Modify and delete elements and attributes according to task requirements 2.4 Transform XML document into a data object 2.5 Transform data object into an XML document
3. Create a service-oriented application using XML	3.1 Define web-services architecture and platform elements 3.2 Develop and deploy web-service applications using a language 3.3 Develop a client application and consume web service using a language

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
Numeracy	- Selects from, and applies mathematical and problem-solving techniques in a range of contexts - Identifies order and position of elements in a sequence using XML
Oral communication	Uses listening and questioning techniques to confirm requirements and articulate ideas
Reading	- Interprets, critically analyses and applies required strategies - Constructs meaning when gathering information by analysing data, documents and problem domains
Writing	- Prepares documentation expressing ideas, explores complex issues, and is constructed logically, succinctly and accurately - Writes and edits code and technical data, and confirms correct syntax and accuracy
Planning and organising	Uses systematic, analytical processes in predictable and unpredictable situations, setting goals and gathering required information
Problem solving	- Applies formal problem-solving processes when tackling unfamiliar problems - Breaks complex issues into manageable parts and identifies and

SKILL	DESCRIPTION
	evaluates several options for action
Technology	Utilises broad range of features within applications and improves personal productivity and optimises software functions

Unit Mapping Information

Supersedes and is equivalent to ICTPRG427 Use XML effectively.

Links

Companion Volume Implementation Guide is found on VETNet -

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