



Australian Government

Department of Education, Employment and Workplace Relations

ICPMM491C Create an extensible document

Revision Number: 1

ICPMM491C Create an extensible document

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to create a well-formed syntax error-free extensible mark-up language document.
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Application of the Unit

Application of the unit	This unit requires the individual to create an extensible markup language (XML/PPML) document for content publishing that is well-formed, free of errors, meets the needs of the business and is extensible to meet future business needs. For this unit the extensible mark-up language document is the data-store and ICPMM492C Create an extensible style sheet transforms the XML/PPML into screen or print output.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units	ICAB4135B Create a simple mark-up language document to specification	

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. Define document structure	1.1. All details required for the job are checked and confirmed against the job specifications 1.2. The mark-up language version and the character encoding used in the document or declaration statement are defined and/or inserted in the document 1.3. An external or internal Document Type Definition (DTD) or mark-up language schema is chosen and correctly wrapped and referenced depending on project requirements 1.4. The root element is correctly defined and all elements are accurately nested 1.5. Attribute types and default values are declared, where necessary, to provide information about the data 1.6. Occurrences of elements are stated and elements of mixed content declared
2. Confirm validity	2.1. Start and end tags are included and closed to ensure no element errors 2.2. Namespaces are used to resolve name conflicts 2.3. The document is well-formed, error-free and conforms to the mark-up language syntax rules 2.4. The document conforms to the rules of a Document Type Definition (DTD) or the mark-up language schema
3. Finalise and test document	3.1. Character data (CDATA) sections are added to the document structure 3.2. The final document is viewed with a mark-up language parser 3.3. The mark-up language document is well-formed, free of errors and meets the needs of the business 3.4. The document is linked to an extensible style sheet and template and tested 3.5. The document is extensible to meet future business needs

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- communication of ideas and information applied by detailing attribute types and default values
- collecting, analysing and organising information by forming an error-free document that conforms to the mark-up language syntax rules
- planning and organising activities by defining the document structure prior to confirming validity
- teamwork when maintaining the production process in association with others
- mathematical ideas and techniques by detailing attribute types and default values
- problem-solving skills by developing a mark-up language document free of errors
- use of technology by using industry software to create a mark-up language document

Required knowledge

- SGML
- standard Generalised Mark-up Language and why it is important
- how SGML relates to XML and PPML
- difference between SGML, PPML and XML and when you use SGML over XML
- XSL
- how Cascading Style Sheets (CSS) and XSL differ
- purpose of XSL is
- HTML
- when to use an extensible mark-up language over HTML and why
- ways to use both with the one set of data
- metadata
- purpose metadata serves within a mark-up language document
- importance of PRISM for content publishing
- PPML
- how Personalised Print Mark-up Language relates to XML

Evidence Guide

EVIDENCE GUIDE	
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.	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of the following is essential: • create content that is well-formed, free of errors, meets the needs of the business and is extensible to meet future business needs. The XML/PPML file can be parsed and validates • two different extensible mark-up language documents are created and are well-formed, free of errors, meet the needs of the business and are extensible to meet future business needs. Both the XML/PPML files can be parsed and validate • evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity.
Context of and specific resources for assessment	Assessment must ensure: • assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment • a standalone computer and mark-up language parser.
Method of assessment	The following assessment method is appropriate for this unit: • direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate.
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example: • ICPMM492C Create an extensible style sheet • ICPPP494C Develop document content and structure • ICPPP485C Create a digital data template.

Range Statement

RANGE STATEMENT	
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.	
Markup language may include	- new languages mark-up languages include: - XML - PPML.
Document may include:	contains elements, entity references, comments, processing instructions, marked sections and document type definition or mark-up language schema.
Data may include:	includes mixed data.
PPML may include:	personalised Print Mark-up Language.
Document purpose may include:	electronic publishing, e-commerce, web services, interchange of data amongst different applications, software configuration files.
Electronic Publishing may include:	electronic publishing in this context does not mean the use of page layout applications but rather the development of content to meet the needs of different audiences and different output devices.

Unit Sector(s)

Unit sector	
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Competency field

Competency field	Multimedia
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Co-requisite units

Co-requisite units		