



Australian Government

ICTPRG402 Apply query language

Release: 1

ICTPRG402 Apply query language

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 retrieve and manipulate information stored in information systems, using a query language.

It applies to individuals in a range of work environments, who are required to extract information from a source such as a database, a text file, or an extensible markup language (XML), by creating and running queries.

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. Determine the requirements of developing queries	1.1 Recognise various query-related terminologies 1.2 Identify the type of data source for a chosen query language 1.3 Identify and use the necessary tools, and environment, in building queries
2. Write queries to retrieve and sort values	2.1 Use an expression to retrieve values from a single unit 2.2 Use an expression to combine values from more than one unit 2.3 Use an expression to sort values into a certain order
3. Write queries to	3.1 Use an expression to filter a sequence, based on a predicate or

ELEMENT	PERFORMANCE CRITERIA
selectively retrieve values	a condition 3.2 Use an expression to filter the subset of a sequence, based on a predicate or a condition 3.3 Use an expression to extract a specific value by position
4. Perform a calculation in queries	4.1 Use an expression to perform a calculation on numeric values 4.2 Use an expression to perform an operation on text values 4.3 Use an expression to perform an operation on date and time values

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, 1.3	Analyses and interprets technical data to determine requirements
Writing	2.1-4.3	Writes and edits, computer code and technical data, ensuring the correct syntax and accuracy
Numeracy	2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3	- Makes basic calculations involving arithmetical operations - Makes estimates and comparisons involving date and time data
Get the work done	1.3, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3	Uses digitally-based technologies and systems to enter, store and manage data

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTPRG402 Apply query	ICAPRG402A Apply query	Updated to meet	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
language	language	Standards for Training Packages	

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 ICTPRG402 Apply query language

Modification History

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

Performance Evidence

Evidence of the ability to:

- select and use tools in developing, storing, and executing queries to extract the appropriate data required for ad hoc reports, or to support developers
- incorporate calculations using control statements, operators and functions.

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 the information gathering methods
- outline the data analysis techniques
- define data mining
- outline the characteristics of the data source
- explain the features of the information system
- explain typical systems and procedures.

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 programming and software development industry, and include access to:

- a data source
- resources in the chosen query language
- documentation regarding client and functionality requirements
- resources to aid calculation.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

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