



Australian Government

ICTDBS504 Integrate database with a website

Release: 1

ICTDBS504 Integrate database with a website

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 ensure the database is integrated with a website.

It applies to individuals employed as web developers who are responsible for creating data-driven web applications.

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

Unit Sector

Database

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. Connect to the database	1.1 Identify site data needs from the technical requirements 1.2 Connect to the database from a web application using a web development language
2. Retrieve data from database and display on web pages	2.1 Retrieve data using structured query language (SQL) 2.2 Display the data in the most appropriate control 2.3 Format the data so that it is displayed in the most effective way
3. Update the database data from user input	3.1 Update the existing data stored in the database with user-supplied input 3.2 Insert the data in the database with user-supplied input

ELEMENT	PERFORMANCE CRITERIA
	3.3 Delete the data stored in the database 3.4 Validate the data and check for errors

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, 3.1, 3.3, 3.4	Interprets textual information from the sources in order to identify relevant and key information
Writing	1.2, 2.3, 3.1, 3.2	Writes and edits computer input data, code and technical data, ensuring correct syntax and accuracy
Get the work done	All	- Uses systematic, analytical processes in complex, non-routine situations, setting goals, gathering relevant information, and identifying, and evaluating options against agreed criteria - Uses analytical processes to decide on a course of action, and establishes the criteria for deciding between different options - Demonstrates a sophisticated understanding of principles, concepts, language and practices associated with the digital world, and uses these to connect to a database from a web application, retrieving, displaying and updating data

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalent status
ICTDBS504 Integrate database with a website	ICADBS504A Integrate database with a website	Updated to meet Standards for Training Packages. Minor edits to clarify intent of the	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalent status
		performance criteria	

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 ICTDBS504 Integrate database with a website

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Performance Evidence

Evidence of the ability to:

- access database using a web development language
- retrieve and display web-based data
- update web-based data.

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:

- describe a database structure
- outline internet technology as it relates to the use of databases
- identify and apply programming control structures, including object-oriented programming and structured query language (SQL)
- explain web programming concepts, including:
 - authentication and web security
 - hypertext transfer protocol (HTTP)
 - session management
 - defining the principles of stateless programming.

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 database field of work, and include access to:

- equipment
- industry software packages

- the requirements documentation
- a web server
- a database
- the web development environment
- browsers.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

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