



Australian Government

BSBITA401 Design databases

Release: 1

BSBITA401 Design databases

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to design and develop a database (including queries, forms and reports) to meet a defined need using existing data.

It applies to individuals who may work independently or within an administrative support role, with the responsibility to use databases to store and retrieve data using commercially available database software.

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

Unit Sector

Information and Communications Technology – IT Analysis and Design

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. Design database	1.1 Review organisational and task requirements to confirm scope and functionality of database design, including data redundancy 1.2 Develop a logical data model to identify and classify data into types 1.3 Select appropriate software according to organisational and task requirements and required scope and functionality of database 1.4 Confirm database design with appropriate person
2. Develop database	2.1 Set field attributes according to data type and link databases by a common field in accordance with software procedures 2.2 Identify primary key to uniquely identify data

ELEMENT	PERFORMANCE CRITERIA
	2.3 Identify foreign keys to establish associations between data 2.4 Use software functions and formulae to meet organisational and task requirements 2.5 Create password and access system according to organisational and task requirements
3. Develop queries, forms and reports	3.1 Develop queries as required by organisational and task requirements 3.2 Develop input screens or forms to access required data 3.3 Develop reports according to organisational and task requirements
4. Test and finalise database	4.1 Populate database with sample dataset for testing 4.2 Assess and document effectiveness of data relationships, query forms and reports 4.3 Address any errors in database design 4.4 Name and store database in accordance with organisational requirements and exit the application without data loss or damage 4.5 Confirm database readiness with appropriate person

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, 1.3, 2.1-2.5, 3.1-3.3, 4.1-4.4	Comprehends the main messages in texts of varying complexity
Writing	1.2, 2.4, 2.5, 3.1-3.3, 4.1-4.5	- Uses basic models to produce a range of text types with formatting and font chosen appropriate to database design - Uses technical information and structure appropriate to the requirements of the audience and purpose
Oral Communication	1.4, 4.5	Confirms requirements using industry-specific language

Numeracy	1.2, 2.1-2.4, 3.1-3.3, 4.1-4.3	Extracts, interprets and comprehends routine formulae and software functions to establish data relationships
Navigate the world of work	4.4	Adheres to organisational policies and procedures relevant to own role
Get the work done	1.1-1.4, 2.1-2.5, 3.1-3.3, 4.1-4.4	- Develops plans to manage relatively complex, non-routine tasks according to organisational requirements - Takes responsibility for the outcomes of routine decisions related directly to own role - Understands the purposes, specific functions and key features of common digital systems and tools and operates them effectively to design, develop and test database functions - Recognises and takes responsibility for addressing predictable database problems in familiar work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBITA401 Design databases	BSBITA401A Design databases	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBITA401 Design databases

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Performance Evidence

Evidence of the ability to:

- produce a database, containing a minimum of THREE tables, which uses queries, reports and forms
- communicate with relevant personnel to check database design against requirements.

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 how the advanced functions of database software applications are to be applied
- describe the impact of formatting and design on the presentation and readability of data.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the information and communications technology – IT analysis and design field of work and include access to:

- office equipment and resources
- sample data.

Assessors must satisfy NVR/AQTF assessor requirements.

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