



Australian Government

Department of Education, Employment and Workplace Relations

ICAICT210A Operate database applications

Release: 1

ICAICT210A Operate database applications

Modification History

Release	Comments
Release 1	This Unit first released with <i>ICAI1 Information and Communications Technology Training Package version 1.0</i>

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to operate database applications and perform basic operations.

Application of the Unit

This unit applies to individuals who create and design databases using pre-existing data (e.g. documents, spreadsheet data, and data from database tables) or create new data when creating and manipulating databases and tables.

They may provide administrative support working under direct supervision or with limited responsibility.

Licensing/Regulatory Information

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement but users should confirm requirements with the relevant federal, state or territory authority.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Element	Performance Criteria
<i>Elements describe the essential outcomes of a unit of competency.</i>	<i>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.</i>

Elements and Performance Criteria

1. Create database	<p>1.1 Open a database application and design a two-table simple relational database incorporating basic <i>design principles</i></p> <p>1.2 Develop a table with fields and <i>attributes</i> according to database usage, as well as user requirements</p> <p>1.3 Create a primary key and establish an index for each table</p> <p>1.4 Modify table layout and field <i>attributes</i> as required</p> <p>1.5 Create a <i>relationship</i> between the two tables</p> <p>1.6 Add and modify data in a table according to information requirements</p> <p>1.7 Add and delete records as required</p> <p>1.8 Save and close down database to <i>storage area</i></p>
2. Customise basic settings	<p>2.1 Adjust <i>page layout</i> to meet user requirements</p> <p>2.2 Open and view different <i>toolbars</i></p> <p>2.3 Format <i>font</i> as appropriate for the purpose of the database entries</p>
3. Create reports	<p>3.1 Design reports to present data in a logical sequence</p> <p>3.2 Modify reports to include or exclude additional requirements</p> <p>3.3 Distribute reports to <i>appropriate person</i> in a suitable format</p>
4. Create forms	<p>4.1 Use a wizard to create a simple form</p> <p>4.2 Open existing database and modify records through a simple form</p> <p>4.3 Rearrange <i>objects</i> within the form to accommodate information requirements</p>
5. Retrieve information	<p>5.1 Access existing database and locate required records</p> <p>5.2 Create simple query and retrieve required information</p> <p>5.3 Develop query with multiple criteria and retrieve required information</p> <p>5.4 Select data and display appropriately</p>

Required Skills and Knowledge

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

Required skills

- communication skills to:
 - communicate with peers and supervisors
 - seek assistance and expert advice
- literacy skills to:
 - interpret user manuals and help functions
 - read and write basic workplace documents
- numeracy skills to create simple queries
- problem-solving skills to address inconsistencies in data and issues in database
- technical skills to create a simple database.

Required knowledge

- basic database design
- forms, reports and queries for retrieving and displaying information
- relationships between tables (cardinality)
- purpose, use and function of database software.

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	<p>Evidence of the ability to:</p> <ul style="list-style-type: none"> • design and develop a simple database using a standard database package • add data • use queries • create forms and reports.
Context of and specific resources for assessment	<p>Assessment must ensure access to:</p> <ul style="list-style-type: none"> • use of PC and printer • use of database software currently used in industry • documents detailing organisational style guide and policy • documents or information containing data suitable for creating a database • appropriate learning and assessment support when required. <p>Where applicable, physical resources should include equipment modified for people with special needs.</p>
Method of assessment	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> • verbal or written questioning to assess candidate's knowledge of database operations • direct observation of candidate creating and manipulating databases and retrieving information • review of forms and reports prepared that demonstrate database application skills.
Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, where appropriate.</p> <p>Assessment processes and techniques must be culturally appropriate, and suitable to the communication skill level, language, literacy and numeracy capacity of the candidate and the work being performed.</p> <p>Indigenous people and other people from a non-English speaking background may need additional support.</p>

	In cases where practical assessment is used it should be combined with targeted questioning to assess required knowledge.
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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.

<i>Design principles</i> may include:	<ul style="list-style-type: none"> • data layout • formatting • naming conventions.
<i>Attributes</i> may include:	<ul style="list-style-type: none"> • data type • name • size.
<i>Relationship</i> may be:	<ul style="list-style-type: none"> • one-to-one • one-to-many • many-to-many.
<i>Storage area</i> may include:	<ul style="list-style-type: none"> • CD • DVD • external hard drive, such as universal serial bus (USB) flash drive • internal hard drive • web area.
<i>Page layout</i> may include:	<ul style="list-style-type: none"> • landscape • portrait.
<i>Toolbars</i> may contain:	<ul style="list-style-type: none"> • buttons • menus • a combination of both.
<i>Font</i> may include:	<ul style="list-style-type: none"> • combination of typeface and other attributes: <ul style="list-style-type: none"> • pitch • size • spacing character • symbol.
<i>Appropriate person</i> may include:	<ul style="list-style-type: none"> • authorised business representative • client • supervisor.
<i>Objects</i> may include:	<ul style="list-style-type: none"> • buttons • checkboxes • drop down lists • option buttons

	<ul style="list-style-type: none">• text boxes.
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Unit Sector(s)

General ICT