



Australian Government

Assessment Requirements for ICTGAM553 Integrate database with online games

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 6.0.

Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- integrate, test and modify two sets of database data provided by game-play input and document all errors and solutions on at least two occasions.

In the course of the above, the candidate must:

- determine and install application programming interfaces (API) for games development
- define and add database functionality to an online game.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- relational database methodologies, including;
 - creating and testing stored procedures
 - 'embedded' structured query language (SQL) and assigning parameters in code for filtering
 - implementing relationships between tables
 - retrieving data from multiple tables using SQL
 - how inserts to tables in parent/child relationships can be implemented using artificial (auto-generated) primary key values
 - implementing cascading updates and deletes
- principles of game development applicable to integrating databases with online games
- principles of integrated development environments, including:
 - data access APIs and associated classes, required for the integration of a database with an online game
 - online help and documentation required for research and debugging code

- user authentication and authorisation management
- methodologies and techniques required for effective and well-factored object-oriented program (OOP) code, including:
 - class implementation
 - control of logic flow
 - use of collections and lists
 - use of OOP concepts, including inheritance, encapsulation and overloading
- implications of web development on games integration.

Assessment Conditions

Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in a working environment in this industry.

This includes access to:

- the game design specification and requirements documentation
- a game server
- a database server
- integrated development environment software and hardware
- browsers for game engine for console-based games.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume Implementation Guide is found on VETNet -

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