



Australian Government

ICTGAM524 Integrate multiple data sources into interactive 3-D environments

Release: 1

ICTGAM524 Integrate multiple data sources into interactive 3-D environments

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 integrate multiple data sources into interactive 3-D environments.

It applies to individuals with high-level technical and communication skills and may be applicable to concept artists, game designers, games programmers, animators and other personnel working in the game development industry.

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

Unit Sector

Game 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. Catalogue elements to integrate into the interactive 3-D environment	1.1 Research and identify data sources that can be integrated into interactive 3-D environments 1.2 Identify data sources that will be integrated to suit the environment, game design, game genre, game mechanics, game-play elements, and level specifications 1.3 Obtain or create data sources for the interactive 3-D environment
2. Identify tools that can be used to integrate assets	2.1 Identify tools and libraries for integration of identified elements into the 3-D environment

ELEMENT	PERFORMANCE CRITERIA
	2.2 Review and document how the tools work
3. Integrate sources into the interactive 3-D environment	3.1 Create prototypes and integrate the elements into the interactive 3-D environment using the identified tools 3.2 Test integration of the elements 3.3 Ensure that the elements' integrity during the implementation is maintained
4. Present and evaluate completed 3-D environment with all data sources included	4.1 Present the interactive 3-D environment to the appropriate personnel 4.2 Review the feedback from the presentation 4.3 Evaluate and justify the implementation, using tools for the data sources

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	Interprets analyses and comprehends briefs, instructions and conceptual information to inform job requirements
Writing	2.2, 4.1, 4.2, 4.3	- Develops clear and detailed catalogue documentation - Documents the decision-making process for specific audiences using clear and detailed language
Oral Communication	4.1, 4.2, 4.3	- Speaks clearly and concisely, converting highly technical language and terminology to plain English, when providing information - Elicits information using effective listening and open questioning techniques - Provides practical advice, support and feedback to colleagues and management
Get the work done	1.1-1.3, 2.1, 2.2, 3.1-3.3, 4.1-4.3	- Plans, organises and completes work according to defined requirements and schedules taking responsibility for decision, and sequencing tasks to achieve efficient outcomes - Actively sources, analyses and evaluates data sources with the potential to meet 3D design requirements

		• Uses creativity and initiative in 3D design • Uses a systematic process to evaluate work and to implement improvements • Uses key features of specific digital systems and tools to effectively complete design tasks
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Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTGAM524 Integrate multiple data sources into interactive 3-D environments	ICAGAM524A Integrate multiple data sources into interactive 3-D environments	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=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTGAM524 Integrate multiple data sources into interactive 3-D environments

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Performance Evidence

Evidence of the ability to:

- research and obtain data sources, tools and libraries needed to integrate elements into an interactive 3-D environment
- create and test prototypes that integrate multiple data sources into a working interactive 3-D environment
- deliver a 3-D environment with working interactions that includes all data sources, with documented reasons for its implementation.

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 range of data sources for the 3-D environment
- discuss how game design, genre and mechanics, game-play elements and level specifications affect the choice of data source
- summarise current game-play hardware and software products used for interactive 3-D environments, including any technical constraints imposed on design and development
- describe the technology requirements and human resources required in the process of creating a game, including team members' respective skills.

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 game development field of work, and include access to:

- computer hardware and software
- games engines

- file storage.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

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