



Australian Government

ICTGAM429 Develop 3-D components for interactive 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.

Application

This unit describes the skills and knowledge required to design and to create, 3-D components within a game environment.

It applies to individuals who support the design, development and programming of basic digital games as part of a larger development team.

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. Identify and confirm 3-D component requirements within game context	1.1 Obtain game design document and identify definition and purpose of 3-D components, with examples 1.2 Identify context of 3-D component design according to game design document 1.3 Create a list of required 3-D components 1.4 Establish methods of 3-D component loading and usage 1.5 Identify quality assurance standards, evaluation methods and organisational procedures applicable in developing 3-D components

ELEMENT	PERFORMANCE CRITERIA
2. Establish content creation pipeline and integration methods within game architecture	2.1 Finalise required 3-D component list 2.2 Discuss 3-D component formats, file extensions and ramifications of choice with required personnel 2.3 Discuss and select hardware and software required in creating 3-D components and assets 2.4 Discuss methods of naming 3-D components and assets and file archiving 2.5 Establish schedule and deadlines in 3-D component creation process
3. Create, integrate and test required 3-D components	3.1 Create required 3-D components and assets according to organisational procedures and client requirements 3.2 Name 3-D components and assets according to methodology discussed 3.3 Confirm 3-D components and assets are in required format and file extensions 3.4 Test and confirm produced 3-D components meet established quality and client requirements 3.5 Seek feedback from required personnel and make changes to 3-D components and assets as required 3.6 Submit finalised assets with required archiving format outlined in the assignment brief and obtain sign-off

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

Skill	Description
Numeracy	<ul style="list-style-type: none"> • Uses whole numbers, decimals and percentages applicable to file size, software and hardware specifications, measurement, font size, scale, ratio, coordinates, colour, shading and other attributes and variables in developing 3-D components and timelines • Defines timeframes in accordance with schedule requirements
Oral communication	<ul style="list-style-type: none"> • Obtains information and expresses ideas and solutions by employing listening and open questioning techniques using plain English and games development terminology
Reading	<ul style="list-style-type: none"> • Identifies and interprets briefs and applicable technical documentation

Skill	Description
	containing complex task-specific terminology <ul style="list-style-type: none"> • Interprets and comprehends computer generated text, diagrams, icons, symbols, numbers and letters required in using 3-D application software
Self-management	<ul style="list-style-type: none"> • Makes routine decisions and implements standard procedures in routine tasks • Uses formal decision-making processes in more complex and non-routine situations • Evaluates work and implements improvements using a systematic process • Identifies importance of file format and takes responsibility in data integrity and management
Technology	<ul style="list-style-type: none"> • Completes routine tasks using specific digital systems and tools

Unit Mapping Information

Supersedes and is equivalent to ICTGAM410 Develop 3-D components for interactive games.

Links

Companion Volume Implementation Guide is found on VETNet -

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