Australian Government

ICTGAM409 Create 3-D characters 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 1.0.

Application

This unit describes the skills and knowledge required to design and build 3-D characters for commercial games.

It applies to individuals who support the design, development and implementation of the 3D characters of 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
Elements describe the essential outcomes.	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
1. Research and analyse the characters	1.1 Determine and agree on the style of characters, according to the client requirements 1.2 Determine and agree on, the character type and profile 1.3 Determine and agree on, the character role and name 1.4 Determine and agree on, the character animations required for implementation into game systems 1.5 Compare the animations with the analysis criteria
2. Design the characters	2.1 Develop a concept illustration for the character 2.2 Conduct focus testing of the concept illustration with the client, and with representatives of the target market audience 2.3 Develop character schematics based on feedback, and submit

ELEMENT	PERFORMANCE CRITERIA
	to the client for approval
3. Develop the character models	3.1 Construct a 3-D character model on a turntable, based on the character schematics
	3.2 Construct 3-D costumes, tools and accessories for the character model
	3.3 Shade, texture and light, the completed character model
	3.4 Implement joints, vertex weighting and character rig, to a 3-D character model
	3.5 Develop animation blocking and in-betweens, in consultation with animation personnel for their approval
	3.6 Compare the 3-D models and animations to the original concept illustration, for verification of quality and conformity to the brief
	3.7 Submit to the client for approval

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, 1.5, 2.3	• Identifies and interprets design briefs, and related technical documentation, containing complex animation-specific terminology and acronyms • Interprets and comprehends computer-generated text, diagrams, icons, symbols, numbers and letters necessary to use 3-D animation software
Writing	2.2	• Uses plain English and appropriate questioning strategies, avoiding loaded or leading questions, when developing documentation for focus testing
Oral Communication	1.1, 1.2, 2.2, 2.3, 3.6	• Employs effective listening and questioning techniques to obtain information • Participates in a verbal exchange of ideas and solutions, using plain English and 3-D animation terminology, summarising the main points to ensure understanding
Numeracy	1.4, 2.1, 2.3, 3.1,	• Uses whole numbers, decimals and percentages

	3.2, 3.3, 3.4, 3.5	relevant to measurement, font size, scale, ratio, coordinates, colour, shading and other attributes/variables, in the development of the animations
Interact with others	1.1-1.3, 2.2	• Cooperates with others as part of familiar routine activities, to confirm agreement
Get the work done	1.1-1.5, 2.1-2.3, 3.1-3.7	• Makes decisions and implements procedures for both routine and non-routine tasks, using formal decision-making processes • Plans, organises and completes work, according to the defined requirements and schedules • Uses creativity and initiative in character design • Uses digital systems and tools proficiently to complete required tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTGAM409 Create 3-D characters for interactive games	ICAGAM409A Create 3-D characters for interactive games	Updated to meet Standards for Training Packages. Edited Performance Criteria for clarity.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2