Australian Government

ICTGAM526 Create complex 3-D characters for 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 plan, and implement, a design for complex 3-D characters for games.

It applies to individuals with high-level technical, interpretive 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
Elements describe the essential outcomes.	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
1. Clarify work requirements	1.1 Identify the design requirements based on the project brief and documents
	1.2 Using the design requirements, conceptualise the appropriate characters for the game environments, design, level specifications and genre
	1.3 Gather and analyse the reference materials to help with the design, and visualisation, of 3-D character models
	1.4 Ensure that any missing requirements are considered and included in the design
2. Conceptualise 3-D	2.1 Document the design decisions that are made before, and

ELEMENT	PERFORMANCE CRITERIA
character design	during, the design conceptualisation 2.2 Outline the key attributes of the character 2.3 Examine the design considerations and generate the concept art for the 3-D characters
3. Identify software tools that can be used to create 3-D characters	3.1 Identify texturing tools, including painting, shading and texturing software and 3-D modelling tools
4. Create complex 3-D characters	4.1 Create base 3-D character models 4.2 Refine and polish the character models to a near finalised state 4.3 Create and map, the textures to apply to the 3-D character models 4.4 Refine the textures and apply shaders 4.5 Check the integrity and modify the 3-D characters until they meet the design requirements 4.6 Present the 3-D model to the relevant personnel
5. Present the finished 3-D characters to relevant personnel	5.1 Present the finished 3-D characters to the relevant personnel 5.2 Report on how the design decisions have met the 3-D character's design requirements

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, 1.3, 1.4, 4.5	• Interprets analyses and comprehends briefs, instructions and conceptual information, to inform the design of environment specifications • Interprets and comprehends a large range of diagrams, icons, symbols, text, numbers and letters necessary to use complex design software
Writing	1.4, 2.1, 2.2	• Communicates software and graphics requirements and code development to others, using correct spelling and grammar, plain English, and industry terminology

Oral Communication	2.2, 2.3, 4.6, 5.1, 5.2	• 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
Numeracy	4.1, 4.2, 4.3, 4.4, 4.5	• Uses whole numbers, decimals and percentages relevant to measurement, resolution aspect ratio, pixel ratio, scale, coordinates, colour, shading, and other attributes/variables in the application of digital effects
Get the work done	1.1-1.4, 2.1-2.3, 3.1, 4.1-4.6, 5.1, 5.2	• Plans, organises and completes work according to project brief and schedules, sequencing tasks to achieve efficient outcomes • Actively sources and analyses reference materials to support 3-D character design • Uses creativity and initiative in 3D character design and creation • Uses systematic, analytical processes in routine and non-routine situations to identify potential quality issues or problems, evaluate options and choose solutions • Uses the key features of specific digital systems and software to complete design and creation tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTGAM526 Create complex 3-D characters for games	ICAGAM526A Create complex 3-D characters for games	Updated to meet Standards for Training Packages	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