ICTGAM416 Prepare and complete image rendering processes

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 select suitable rendering applications and prepare and optimise rendering for 3-D modelling, animation and game development.

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
Elements describe the essential outcomes.	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
1. Analyse the rendering requirements	1.1 Identify the equipment and media required for the project 1.2 Identify the features of the rendering software packages used in the film and games industries 1.3 Analyse the design brief, or other reference sources, to plan and determine the rendering requirements
2. Select a suitable rendering application to achieve desired appearance	2.1 Select the rendering software with the capability to achieve the desired effects within the timeframe and budget 2.2 Confirm that the selection is according to the brief, system limitations and requirements
3. Prepare rendering	3.1 Select and apply the appropriate image resolutions, image

ELEMENT	PERFORMANCE CRITERIA
application for desired outcome	aspect ratio, and pixel ratio 3.2 Adjust the renderer attributes to obtain desired anti-aliasing 3.3 Adjust the renderer attributes to obtain other desired visual effects
4. Check the render integrity and quality	4.1 Refine the render integrity 4.2 Re-link any missing images and textures 4.3 Test the render times for optimising process 4.4 Test the alpha channels and opacity matts 4.5 Test the render layers and passes
5. Optimise the images for render processes	5.1 Complete pre-rendering optimisation tasks 5.2 Adjust and refine renderer attributes to optimise render times 5.3 Select the appropriate file format for output, according to the brief 5.4 Select the appropriate filenames and output destinations
6. Render the images and save files appropriately	6.1 Undertake the final rendering processes 6.2 Store or archive the files 6.3 Review the completed render to ensure compliance with the system and the brief 6.4 Confirm the rendering with the relevant personnel

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, 1.2, 1.3, 2.1, 2.2, 6.3	• Interprets a design brief containing complex games-design terminology • Interprets and comprehends a large range of diagrams, icons, symbols, text and letters necessary to use complex rendering software
Oral Communication	1.1, 1.2, 1.3, 2.2, 6.4	• Uses effective listening and questioning techniques to obtain information about the design brief, system limitations, software capabilities, and requirements

		• Presents rendering outcomes using industry-specific terminology
Numeracy	1.2, 1.3, 2.1, 2.2, 3.1-3.3, 4.1-4.5, 5.1-5.3, 6.3	• 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 rendering • Interprets numerical information and applies basic mathematical calculations relating to the timelines and budgetary information
Interact with others	6.4	• Collaborates with others as required to confirm rendering output is acceptable
Get the work done	All	• Applies formal processes when planning the rendering requirements, producing plans with logically sequenced steps that reflect awareness of time and resource constraints • Implements actions as per the plan, making slight adjustments if necessary • Recognises and takes responsibility for addressing predictable, and some less predictable problems in familiar work contexts • Understands the key principles and concepts underpinning the design and operation, of digital systems and tools • Manages and maintains files securely in a variety of storage media and formats

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTGAM416 Prepare and complete image rendering processes	ICAGAM416A Prepare and complete image rendering processes	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-b778-71c9e 9d6aff2