ICTGAM516 Animate a 3-D character for digital 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 apply animation principles to develop an animated character, and export the character model into a game.

It applies to individuals with high-level mathematical, technical and communication skills working as 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. Determine a 3-D character model for animation requirements	1.1 Study the production documentation animation requirements for 3-D character
	1.2 Determine the target environments for a 3-D digital character animation
	1.3 Establish the required level of detail for a 3-D character model animation
	1.4 Determine work-flow sequences, to ensure that production schedule deadlines are met
	1.5 Select the software tools that best suit the production pipeline and the target game engine, and platform, for the final export of a

ELEMENT	PERFORMANCE CRITERIA
	3-D digital character modelling, and animations
2. Create the required animations, using a variety of animated tools	2.1 Determine the most efficient animation methodology
	2.2 Animate first pass, applying animation principles and experimenting with techniques to produce the required movements
	2.3 Submit first pass for approval to the relevant personnel
	2.4 Make adjustments, as required, and refine animation in passes until storyboard requirements are achieved
	2.5 Animate facial features with lip-syncing to match the audio and design requirements of the approved storyboard
	2.6 Create primary animations, as required
3. Finalise the animations	3.1 Submit character animations for the final check to relevant personnel
	3.2 Finalise projects according to the production procedure
4. Export the animations	4.1 Export the animation and 3-D character model to the required game engine
	4.2 Test the character animations in the game engine
	4.3 Submit the final character animations to 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, 1.3, 2.5, 3.2	• Interprets, analyses and comprehends workplace documentation and images, to aid implementation of job requirements
Writing	1.3, 1.4	• Creates documents for specific personnel, incorporating complex design information according to industry standards and required formats
Oral Communication	1.3, 1.4, 4.3	• Elicits information using effective listening and open questioning techniques • Provides practical advice, support and feedback to colleagues and management, converting highly technical language and terminology to plain English

Numeracy	2.2, 2.4, 2.5, 2.6	• Applies numerical skills to develop applications using whole numbers, decimals and percentages when manipulating measurement, scale, ratio, coordinates, colour, shading, and other 3-D elements
Interact with others	2.3, 3.1, 4.3	• Selects, implements and seeks to improve protocols governing communications to clients and co-workers, in a range of work contexts • Implements strategies for a diverse range of colleagues and clients to build rapport and foster strong relationships • Elicits feedback and provides feedback to others to improve self or workgroup behaviours
Get the Work Done	1.2-1.5, 2.1-2.6, 3.2, 4.2	• Accepts responsibility for planning and sequencing complex tasks and workload, negotiating key aspects with others, taking into account capabilities, efficiencies and effectiveness • Monitors the progress of plans and schedules, and reviews, and changes these in order to meet new demands and priorities • Makes critical decisions quickly and intuitively in complex situations, taking into consideration a range of variables, including the outcomes of previous decisions • Applies systematic and analytical decision-making processes for complex and non-routine situations • Investigates new and innovative ideas as a means to continuously improve work practices and processes • Uses, and investigates, new digital technologies and applications to manage and manipulate data, and communicate effectively with others, in a secure and stable digital environment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTGAM516 Animate a 3-D character for digital games	ICAGAM516A Animate a 3-D character for digital 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