



Australian Government

ICTGAM543 Produce digital animation sequences

Release: 1

ICTGAM543 Produce digital animation sequences

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 produce a digital animation sequence for the 3-D and digital effects environment and complete a digital editing project.

It applies to those 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
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Develop and source story and concept	1.1 Establish digital animation sequence requirements and applicable documentation for 3-D and digital effects requirements according to organisational procedures 1.2 Research and gather ideas for animation sequence according to organisational procedures 1.3 Produce treatment of an animation sequence according to established requirements
2. Develop plan and determine components required for animation sequence	2.1 Discuss and create production plan with required personnel according to digital animation sequence requirements 2.2 Develop storyboard detailing 3-D animation according to animation sequence requirements

ELEMENT	PERFORMANCE CRITERIA
	2.3 Create concept drawings and sketches for 3-D models 2.4 Gather and present evidence of reference material used for storyboard and concept drawings to required personnel and seek feedback 2.5 Adjust storyboard and concept drawings as required
3. Produce animation sequence using 3-D software	3.1 Research and select 3-D modelling and animation software according to digital animation sequence requirements 3.2 Create 3-D animation according to production plan 3.3 Select frames per second to use for animation according to animation sequence requirements 3.4 Create assets using references 3.5 Animate components of 3-D environment according to planned animation sequence 3.6 Using 3-D modelling and animation software, produce high-end lighting techniques
4. Render and finalise 3-D animation sequence	4.1 Select required resolution and aspect ratio according to animation sequence requirements 4.2 Render animated sequence using 3-D modelling software 4.3 Review rendered frames against initial storyboard concept and animation sequence requirements 4.4 Present rendered frames to required personnel and seek feedback 4.5 Apply changes as required and obtain final 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
Reading	Interprets, analyses and comprehends workplace documentation and images to inform job requirements
Writing	Creates required documents incorporating complex design information and ideas according to industry standards and required formats
Numeracy	Applies numerical skills to develop sequences using whole numbers, decimals and percentages when manipulating measurement, scale, ratio, coordinates, colour, shading, and other 3-D elements
Problem solving	Makes a range of critical and non-critical decisions in relatively complex situations, analysing information and taking a range of factors

SKILL	DESCRIPTION
	- into account - Identifies and applies some basic principles of analytical and lateral thinking
Self-management	- Takes responsibility for planning, organising and implementing tasks required to achieve outcomes - Implements actions as per plan, making slight adjustments if necessary, and addressing some unexpected issues
Technology	- Improves personal productivity and optimises software functions for specific purposes using a broad range of 3-D software application features - Manages and maintains files in a variety of storage media and formats

Unit Mapping Information

Supersedes and is equivalent to ICTGAM517 Produce a digital animation sequence.

Links

Companion Volume Implementation Guide is found on VETNet -

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

Assessment Requirements for ICTGAM543 Produce digital animation sequences

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- create 3-D animation sequence with at least 720 frames using 3-D modelling and animation software.

In the course of the above, the candidate must:

- develop storyboards and concept drawings for 3-D animation and models according to production plans
- apply a variety of strategies to create an animation sequence using a 3-D environment
- develop finalised frame of animation in required resolution
- render animation sequence on at least one small device and one large device and confirm pixels are optimised.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- digital editing processes and techniques relating to animation sequence production
- rendering processes and techniques applicable to animation sequence production
- capabilities of digital editing and rendering software
- features and functions of different industry standard 3-D modelling and animation software
- technology requirements and human resources required to create games, including team member's skills
- technical constraints that hardware imposes on:
 - graphics requirements
 - code development
 - creative visual design

- storyboard development processes
- organisational procedures applicable to producing digital animation sequences.

Assessment Conditions

Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in a working environment in this industry.

This includes access to:

- hardware and software applicable to producing digital animation sequences
- animation sequence requirements brief
- games engine
- digital devices
- file storage
- the internet
- organisational procedures applicable to producing digital animation sequences.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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