



Australian Government

ICTGAM428 Create 3-D characters for interactive games

Release: 1

ICTGAM428 Create 3-D characters for interactive games

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 design and build 3-D characters for commercial interactive 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 and gaming environment.

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. Identify and discuss character requirements and designs	1.1 Identify client and character requirements and environment and context of interactive game 1.2 Discuss and determine style of characters with required personnel according to client requirements 1.3 Determine and agree on character type, role, name and profile 1.4 Discuss and determine character animations required in game systems implementation 1.5 Compare animations with analysis criteria, game and client requirements
2. Design characters	2.1 Design and develop a concept character illustration according to organisational procedures and client requirements

	2.2 Conduct focus testing of concept illustration with required personnel and representatives of target market audience 2.3 Develop character schematics with feedback incorporated and submit to required personnel for approval
3. Develop character models	3.1 Construct a 3-D character model according to character schematics and task requirements 3.2 Construct 3-D costumes, tools and accessories as required by character model 3.3 Shade, texture and light the completed character model 3.4 Implement joints, vertex weighting and character rig to 3-D character model 3.5 Develop animation blocking and in-betweens in consultation with animation personnel and seek their approval 3.6 Compare 3-D models and animations with original concept illustration and confirm quality and conformity to brief 3.7 Submit to required personnel and obtain approval

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
Numeracy	Uses whole numbers, decimals and percentages applicable to measurement, font size, scale, ratio, coordinates, colour, shading and other attributes and variables, in developing animations
Oral communication	Uses listening and questioning techniques to obtain information and present ideas and solutions using industry language for intended audience
Reading	- 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 required in using 3-D animation software
Writing	Uses simple and cohesive English when developing focus testing documentation
Teamwork	Cooperates with others as part of familiar routine activities and

Skill	Description
	confirms agreement
Initiative and enterprise	Uses creativity and initiative in character design
Planning and organising	Plans, organises and completes work according to defined requirements and schedules
Self-management	Makes decisions and implements procedures in both routine and non-routine tasks, using formal decision-making processes
Technology	Completes required tasks using digital systems and tools

Unit Mapping Information

Supersedes and is equivalent to ICTGAM409 Create 3-D characters for interactive games.

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 ICTGAM428 Create 3-D characters for interactive games

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 6.0.

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:

- design and develop at least three game characters using 2-D and 3-D software applications.

In the course of the above, the candidate must:

- comply with games design brief and client requirements
- follow organisational procedures
- test and seek feedback to character designs with intended audiences and act accordingly.

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:

- features of 3-D software packages used to create 3-D character models in games
- industry standard game design briefs
- different character styles and animations
- 3-D character modelling methods, within the technical parameters and constraints of game development
- technical limitations of creating 3-D character models in games
- organisational procedures that maybe used to create 3-D character for interactive games.

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:

- required hardware and software

- games engine
- file storage
- character reference materials including models, illustrations, art and design books and character photographs
- a range of industry standard games, across all platforms and genres
- a range of industry standard consoles and hand-held game devices.

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

Links

Companion Volume Implementation Guide is found on VETNet -

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