ICTGAM401 Produce an interactive game

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 produce an interactive game using an industry standard authoring tool.

It applies to individuals who work in the game development industry and 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. Identify the game component assets	1.1 Obtain the project brief and documents 1.2 Identify the technical specifications and game-production assets, required to meet creative and production requirements 1.3 Discuss formats of assets, and issues of asset integration, with appropriate personnel 1.4 Save all digital assets in the appropriate format for inclusion, and store for retrieval 1.5 Determine the sequence for the development of a beta version prototype for testing game play 1.6 Create a schedule for production and testing 1.7 Determine the strategies for monitoring production progress

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ELEMENT	PERFORMANCE CRITERIA
	against the schedule
2. Identify the capability of game-engine software and tools, and a make a selection	2.1 Identify and review the range of industry standard game-engine software and development tools available
	2.2 Assess the software and tools related to specified game concepts and play requirements
	2.3 Discuss considerations for the selection of game-engine software with relevant personnel, to ensure that the selection will meet specified outcomes
	2.4 Select the game-engine software
3. Use game-engine software	3.1 Load a game engine, including sound and game play
	3.2 Create a new file for the specified task, and name appropriately
	3.3 Display and use the tools and features of the software relevant to the game production process
	3.4 Create a custom code to achieve a unique function
4. Create a game-play sequence and prototype	4.1 Import and assemble game-play assets in the appropriate sequence, according to creative and technical requirements
	4.2 Create and check the game-play elements, according to creative and technical requirements
	4.3 Test and run the game-play sequence as a presentation, to ensure that the sequence meets creative, production and technical requirements
	4.4 Export to the game engine and create a prototype
	4.5 Save the file formats and identify for specified purpose
5. Evaluate the game prototype	5.1 Demonstrate the initial prototype to relevant personnel
	5.2 Evaluate against criteria, including the achievement of a creative and user-friendly product
	5.3 Discuss and agree on required changes
	5.4 Assist, if required, in tests and user trials
	5.5 Evaluate feedback from user trials
	5.6 Confirm the endorsement from the relevant personnel to develop the prototype into a complete product
6. Transform prototype into a final proof-of-concept prototype	6.1 Make necessary changes, as indicated by user trials
	6.2 Integrate all game elements, as required by specifications
	6.3 Make final checks to ensure that all sequences conform to the

ELEMENT	PERFORMANCE CRITERIA
	navigation design
	6.4 Save into specified storage systems

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, 2.1, 2.2, 2.4, 5.2, 5.5	• Interprets and comprehends information in diagrams, storyboards, objects and images to identify appropriate software, resources, assets and user requirements • Recognises and comprehends signs, symbols, pictures, jargon, abbreviations, computer generated text, numbers, letters and coding syntax necessary to operate complex game engines
Writing	1.6, 3.2, 3.4, 4.5, 6.1, 6.4	• Uses clear, concise and accurate spelling, grammar, technical terminology and organisational document structures/layout to develop and communicate schedules, strategies and monitoring processes • Uses coding syntax, gaming engine syntax and organisational, labelling and naming conventions when developing interactive games
Oral Communication	1.1, 1.2, 1.3, 2.1, 2.3, 5.1, 5.2, 5.3, 5.4, 5.6	• Uses effective listening and open questioning techniques to elicit the view and opinions of others, and to obtain information • Participates in a verbal exchange of ideas and solutions, using detailed and clear language, to clarify and present information and strategies according to requirements and the audience
Numeracy	1.2, 1.3, 1.6, 2.2, 2.3, 3.4, 4.1, 4.2, 4.3, 4.4, 5.2, 6.1	• Uses positive and negative whole numbers, decimals, degrees and percentages when setting measurement, scale, coordinates, colour, shading, timing and other parameters in the development of interactive games
Interact with others	2.3, 5.3	• Cooperates with others and contributes to work practices where joint outcomes are required
Get the work	1.1-1.7, 2.1-2.4,	• Makes decisions and implements procedures for

done	3.1-3.4, 4.1-4.5, 5.1-5.6, 6.1-6.4	routine tasks, using formal decision-making processes for more complex and non-routine situations
		• Uses creativity and initiative in design
		• Assesses, tests and modifies product to ensure that it meets client and technical requirements
		• Uses digital systems and tools to complete routine tasks
		• Understands the importance of secure information in relation to own work and takes responsibility for data integrity, storage and management

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTGAM401 Produce an interactive game	ICAGAM401A Produce an interactive game	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