



Australian Government

ICTGAM430 Design interactive media

Release: 1

ICTGAM430 Design interactive media

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 implement technologies relating to human-computer interaction.

It applies to individuals who support the design, development and programming of basic 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 research human-computer hardware interface devices, event-handling systems and graphical user interface (GUI) widget sets	1.1 Identify standard and game-specific human-computer interaction devices and controls used in their implementation 1.2 Identify and review industry-standard event-handling systems used in application libraries 1.3 Identify human-computer interaction device selection 1.4 Identify widgets and their usage within an application environment 1.5 Identify and review industry-standard graphical user interface libraries and their

ELEMENT	PERFORMANCE CRITERIA
	use within game engine 1.6 Analyse selection of widgets within a game heads-up display (HUD)
2. Design a simple media software device	2.1 Identify task requirements and design a prototype required in developing a custom user interface widget according to organisational procedures 2.2 Confirm custom user interface widget can be used within a game heads up display environment 2.3 Select GUI software required in implementation and discuss ramifications of selection with required personnel
3. Build and implement a simple media software device	3.1 Create and develop a custom user interface widget according to organisational procedures and task requirements 3.2 Integrate all custom widget elements as required by prototype specifications 3.3 Test and confirm interactive media is functional on multiple browsers and digital devices 3.4 Perform final checks and confirm functionality conforms to original design 3.5 Seek feedback from required personnel and incorporate changes as required 3.6 Save into specified storage systems and locations according to organisational procedures

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
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Skill	Description
Numeracy	Uses whole numbers, decimals and percentages applicable to file size, software and hardware specifications, measurement, font size, scale, ratio, colour, shading and other attributes and variables in developing interactive media
Oral communication	Obtains information and expresses ideas and solutions by employing listening and open questioning techniques using plain English and interactive media terminology
Reading	- Identifies and evaluates online documentation containing complex technical terminology when conducting research into hardware, existing interactive media and industry standards - Interprets and comprehends computer-generated text, code, diagrams, icons, symbols, numbers and letters required in using applicable software
Writing	Identifies and uses technical terminology, code, syntax and labelling when conducting research and developing interactive media
Problem solving	- Uses systematic processes in complex, non-routine situations, setting goals, gathering required information and identifies and evaluates options against agreed criteria - Uses analytical processes in deciding on a course of action, establishing criteria for deciding between options and seeking input and advice from others before taking action, when required
Self-management	Identifies importance of file integrity and management
Technology	Completes routine tasks using specific digital systems and tools

Unit Mapping Information

Supersedes and is equivalent to ICTGAM412 Design interactive media.

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 ICTGAM430 Design interactive media

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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 an application, accessing and using technologies and showcasing captured events from hardware devices
- create an application using a human-computer interface devices and event-handling call-backs showcasing the captured events with GUI widgets
- design a simple application, using required hardware event handling methods, within the context of game environment
- produce a custom control.

In the course of the above, the candidate must:

- present completed project to required deadline
- comply with organisational procedures.

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:

- programming techniques applicable to interactive media
- specific terminology used by game developers
- hardware and software requirements in a human-computer interaction environment
- a range of human-computer interaction devices and their application
- widgets and their usage
- operations in 'heads-up' display environments
- technical constraints imposed by hardware and software on design and development
- file storage and organisational procedures that may be used in designing interactive media.

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 and peripheral devices
- human-computer hardware interface devices
- a range of event-handling systems
- the internet
- application libraries
- widgets
- graphical user interface software and libraries
- games engine
- a range of browsers and digital devices
- client requirements documentation
- file storage.

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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