



Australian Government

ICTGAM528 Create games for mobile devices

Release: 1

ICTGAM528 Create games for mobile devices

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 demonstrate innovative game development strategies, to create games for mobile devices.

It applies to individuals with high-level technical, creative and communication skills working as concept artists, games 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. Research and document mobile gaming device technologies	1.1 Research, identify and describe the current mobile devices suitable for games 1.2 Identify a suitable mobile device 1.3 Identify the technical limitations and constraints of the mobile gaming device 1.4 Research and identify the tools and technology for creating applications for the mobile device 1.5 Identify a suitable tool for the mobile gaming device 1.6 Research, identify, and describe market-successful mobile game devices

ELEMENT	PERFORMANCE CRITERIA
2. Plan the project	2.1 Create or obtain the project brief and documents 2.2 Identify the game production assets required to meet creative and production requirements, and the technical specifications 2.3 Define developer roles and skills 2.4 Create a schedule for production and testing 2.5 Determine the strategies for monitoring the production progress against the schedule
3. Create game assets	3.1 Create graphics assets 3.2 Create music and sound assets
4. Develop a game prototype	4.1 Develop a game prototype using a programming language 4.2 Create and check game-play elements, according to creative and technical requirements 4.3 Test and run game-play on mobile devices 4.4 Identify whether or not the game meets creative, production and technical requirements
5. Evaluate the game prototype	5.1 Demonstrate the initial prototype to relevant personnel 5.2 Evaluate against criteria, including achievement of a creative and user-friendly product 5.3 Discuss, and agree, on required changes to the prototype 5.4 Assist, if required, in tests and user trials 5.5 Evaluate the feedback from user trials 5.6 Confirm the endorsement from relevant personnel to develop the prototype into a complete product
6. Transform the prototype into a final proof-of-concept prototype	6.1 Make the necessary changes, as indicated by user trials 6.2 Integrate all the game elements, as required by specifications 6.3 Polish the game

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance	Description
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	Criteria	
Reading	1.1, 2.2, 4.2, 4.4, 5.5, 6.2	- Interprets, analyses and comprehends briefs, instructions, and conceptual information to inform design specifications - Interprets and comprehends a large range of diagrams, icons, symbols, text, numbers, and letters necessary to use complex programming software
Writing	1.1, 1.6, 2.1, 2.3, 2.4, 2.5, 4.1, 4.2, 5.6	- Uses plain English and industry terminologies to develop plans and schedules - Develops an interactive product using complex programming language
Oral Communication	5.1, 5.3, 5.6	- Speaks clearly and concisely, converting highly technical language and terminology to plain English, when providing information - Elicits information using effective listening and questioning techniques
Interact with others	5.3, 5.6	Collaborates with others as part of familiar routine activities to achieve requirements
Get the work done	1.1, 1.2, 2.1-2.6, 3.1	- Actively sources information, applications and tools with the potential to meet the development requirements - Plans work schedules and organises and completes tasks required to achieve outcomes - Uses creativity and initiative in game design - Uses systematic, analytical processes in routine and non-routine situations, conducting evaluations, gathering information and assessing potential solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTGAM528 Create games for mobile devices	ICAGAM528A Create games for mobile devices	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for ICTGAM528 Create games for mobile devices

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Performance Evidence

Evidence of the ability to:

- document plans and schedules relevant to game development
- implement game development and production strategies
- apply strategies for trialling and testing game prototypes
- evaluate whether games meet design brief, creative and technical requirements
- produce and demonstrate an original working game on a mobile device.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe current successful mobile game devices
- summarise the current tools and technologies needed for creating applications on mobile devices products
- summarise the technical constraints that mobile devices place on design and development of games
- outline suitable programming languages for mobile devices
- provide a detailed summary of budgeting and scheduling considerations for game design
- explain the importance of risk assessment and critical path planning
- explain the human resources required in the process of creating a game for a mobile device, and outline the team members' respective skills.
- outline the techniques for concept visualisation and development.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the game development field of work, and include access to:

- computer hardware and software
- games engines
- file storage.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

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