



Australian Government

ICTGAM554 Create games for mobile devices

Release: 1

ICTGAM554 Create games for mobile devices

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 use innovative game development strategies to create games for mobile devices.

The unit applies to those 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 and document mobile devices suitable for games 1.2 Identity required mobile device according to project requirements 1.3 Identify technical limitations and constraints of the mobile gaming device 1.4 Research and identify tools and technology for creating applications for the mobile device 1.5 Identify a suitable tool for the mobile gaming device
2. Plan project	2.1 Determine requirements from organisational project brief and documents 2.2 Identify game production assets according to creative

ELEMENT	PERFORMANCE CRITERIA
	and production requirements and technical specifications 2.3 Define and document developer roles and skills according to project requirements 2.4 Create and document schedule for production and testing 2.5 Determine and document strategies for monitoring production progress against schedule
3. Develop a game prototype	3.1 Create graphics, music and sound assets 3.2 Develop game prototype according to technical specifications 3.3 Create and check game-play elements, according to creative and technical requirements 3.4 Test and run game play on mobile devices and determine alignment to plans 3.4 Identify whether game meets creative, production and technical requirements
4. Evaluate game prototype	4.1 Demonstrate initial prototype to required personnel 4.2 Evaluate prototype performance against criteria 4.3 Seek and respond to user feedback 4.4 Confirm endorsement from required personnel to develop the prototype into complete product
5. Transform prototype into a final proof-of-concept prototype	5.1 Make finalised changes to prototype according to evaluation and feedback 5.2 Integrate all game elements as required by specifications 5.3 Polish the game according to project requirements

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
Oral communication	Uses listening and questioning techniques and effective mode of communication to articulate complex ideas using industry language for intended audience
Reading	Interprets and analyses briefs, instructions, and conceptual information to inform design specifications

SKILL	DESCRIPTION
	• Interprets large range of diagrams, icons, symbols, text, numbers, and letters necessary to use complex programming software
Writing	• Uses plain English and industry terminologies when documenting plans and schedules • Develops an interactive product using complex programming language
Teamwork	• Collaborates with others as part of familiar routine activities to achieve requirements
Planning and organising	• Plans work schedules and organises and completes tasks required to achieve outcomes
Problem solving	• 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
Self-management	• Sources information, applications and tools with the potential to meet the development requirements
Technology	• Demonstrates a sophisticated understanding of principles, concepts, language and practices associated with the digital world

Unit Mapping Information

Supersedes and is equivalent to ICTGAM528 Create games for mobile devices.

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 ICTGAM554 Create games for mobile devices

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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:

- produce and demonstrate an original working game on a mobile device.

In the course of the above, the candidate must:

- document plans and schedules applicable 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.

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:

- leading industry standard mobile game devices
- leading tools and technologies needed for creating applications on mobile devices products
- technical constraints that mobile devices place on design and development of games
- suitable programming languages for mobile devices
- budgeting and scheduling considerations for game design
- importance of risk assessment and critical path planning applicable to creating games for mobile devices
- human resources required in the process of creating a game for a mobile device and outline the team members' respective skills.
- techniques for concept visualisation and development.

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:

- computer hardware and software
- games engine
- file storage
- integrated development environments
- mobile devices.

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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