



Australian Government

ICTGAM538 Manage testing of games and interactive media

Release: 1

ICTGAM538 Manage testing of games and 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 define requirements and procedures and manage testing of games and interactive media to enable timely product release.

It applies to those who ensure the delivery of well-tested, quality software products in the marketplace.

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. Determine quality requirements statement that will enable product release	1.1 Review product in market and determine high-level requirements provided by product for expected clients 1.2 Define releasable product enable limited release and complete product release according to industry requirements 1.3 Summarise findings into quality requirements statement, according to industry and organisational requirements 1.4 Confirm client requirements and development specifications align with product release requirements
2. Define product test plan according to quality requirements statement	2.1 Identify expected test cycles during software development life cycle according to development methodology in use and product release quality requirements

ELEMENT	PERFORMANCE CRITERIA
	2.2 Determine types of testing to be performed during test cycles according to quality requirements 2.3 Determine testing methods to be used to implement testing types defined for identified test cycles 2.4 Define testing technique to be used and determine test cases and analyse results 2.5 Perform test cycle and determine acceptable balances of cost, quality and risk, and confirm with upper management and development team 2.6 Select test-support software according to testing requirements 2.7 Define implementation details for agreed testing and team responsible for testing management 2.8 Define reporting details for testing throughout product life cycle 2.9 Confirm test plan completeness using available completeness techniques 2.10 Document defined testing procedures and plan according to industry and organisational standards 2.11 Confirm test plan with development team and management
3. Manage testing processes	3.1 Install and configure selected test-support software according to vendor requirements 3.2 Perform product testing according to defined test plan and organisational procedures 3.3 Manage and report on development of test cases, test cycle status and outstanding bug status 3.4 Report on status of product testing 3.5 Update test plan and schedule according to changing development conditions and notify management as required 3.6 Evaluate results and handle and resolve bugs as required 3.7 Manage test environment, including setup, receipt of test builds and clean-up according to organisational procedures
4. Finalise testing for release	4.1 Document and produce testing results for management review prior to release 4.2 Manage test product freeze for final release and final test run 4.3 Confirm product quality and product release requirements have been met

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
Reading	• Interprets, analyses and comprehends product expectations and conceptual information to inform job requirements
Writing	• Produces documentation detailing testing plan and procedures as required using specific technical language in order to convey explicit information
Oral Communication	• Uses listening and questioning techniques to obtain required information using appropriate industry language for intended audience
Numeracy	• Interprets budgetary information to enable decision-making during product test-cycle
Planning and organising	• Plans, organises and completes work according to defined requirements and schedules, sequencing tasks to achieve efficient outcomes
Problem solving	• Makes critical decisions systematically in complex situations, taking into consideration a range of variables, including outcomes of previous decisions
Self-management	• Evaluates effectiveness of products to inform strategic decisions

Unit Mapping Information

Supersedes and is equivalent to ICTGAM511 Manage testing of games and 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 ICTGAM538 Manage testing of games and interactive media

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:

- manage testing of a game or interactive media product according to quality requirements on at least one occasion.

In the course of the above, the candidate must:

- develop a quality requirements statement according to industry and organisational requirements
- define quality requirements and test plan
- identify bugs and issues and amend accordingly
- maintain ongoing management of testing process
- report on process to required personnel
- document work performed according to 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:

- client requirements for platforms, hardware and software
- client system requirements, both functional and non-functional
- procedures for bug or issue management and identification
- legislative and organisational requirements, standards and procedures applicable to games and interactive media testing
- industry and organisational criteria for limited product release and complete product release
- phases of software development life cycles
- different development methodologies applicable to creating games and interactive media
- elements of a quality requirements statement and processes of development

- test reporting requirements applicable to game and interactive media testing
- test plan creation procedures applicable to game and interactive media development
- testing techniques, methods, test types, test cases, test cycles and system dissection applicable to game and interactive media development
- features and functions of industry standard test-support software
- completeness testing techniques
- installation and configuration processes for test-support software, including:
 - bug tracking processes and defining bug description fields
 - test case management software
 - test cycle management and reporting software
 - automated test tools
- bug resolution methods in game and interactive media products
- documentation techniques and processes used in product testing management.

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:

- product undergoing development with specifications
- client requirements for product quality requirements
- testing support software
- test environment
- hardware required in product testing processes
- organisational procedures applicable to games and interactive media testing.

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>