



Australian Government

ICTGAM511 Manage testing of games and interactive media

Release: 1

ICTGAM511 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 1.0.

Application

This unit describes the skills and knowledge required to define requirements and manage the testing of games, and interactive media, to enable timely product release.

It applies to individuals 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 the quality requirements statement that will enable product release	1.1 Review the picture of the product in the market place to determine high-level requirements provided by the product, for expected clients, considering all types of requirements 1.2 Define a releasable product in terms of outstanding bugs, to enable a limited release and a complete product release 1.3 Summarise findings into a product release, enabling quality requirements statement 1.4 Confirm that the client requirements and development specifications are in agreement for product release, to enable the preparation of a quality requirements statement
2. Define test plan that	2.1 Determine expected test cycles during the software

ELEMENT	PERFORMANCE CRITERIA
enables testing of required quality as defined by quality requirements statement	development life cycle, considering the development methodology in use and the quality requirements for the product's release 2.2 Determine the types of testing to be performed during the test cycles, to enable the efficiency of processes, and the confirmation of the quality requirements statement 2.3 Determine the testing methods to be used to implement the testing types defined for the identified test cycles 2.4 Determine the testing technique to be used to determine test cases, and analyse results 2.5 Perform the test cycle until a combination is found that provides an acceptable balance of cost, quality and risk, and on which upper management and development team can agree 2.6 Select test-support software to enable efficiency in testing and testing management 2.7 Define implementation details for agreed testing and the team responsible for testing management 2.8 Define reporting details for testing throughout the product life cycle to enable ongoing management of the testing process 2.9 Confirm test plan completeness using available completeness techniques 2.10 Confirm the test plan with development team and management
3. Install and configure test plan defined test support software	3.1 Install and configure the bug tracking process, and define bug description fields to maximise efficiency, and minimise possibilities of bouncing bugs 3.2 Install and configure test case management software 3.3 Install and configure test cycle management and reporting software 3.4 Install and configure automated test tools
4. Manage testing process to enable defined quality requirements	4.1 Manage and report on the development of test cases 4.2 Manage and report on test cycle status 4.3 Manage and report on outstanding bug status 4.4 Manage and report on the status of product testing related to product release, enabling a quality requirements statement 4.5 Update the test plan and schedule to deal with changing development conditions, and to ensure that management is informed

ELEMENT	PERFORMANCE CRITERIA
	4.6 Manage bugs to ensure efficient bug handling and resolution 4.7 Manage the test environment, including setup, receipt of test builds and clean-up
5. Finalise testing for release	5.1 Produce testing results for management review prior to release 5.2 Manage test product freeze for final release and final test run 5.3 Confirm the product, release enabling, and ensure that quality requirements have been met

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	2.2, 2.4	Interprets analyses and comprehends product expectations, and conceptual information to inform job requirements
Writing	1.3, 2.7, 2.8, 2.9, 2.10, 3.1, 4.1, 4.2, 4.3, 4.4, 4.5, 5.1	Prepares technical documentation and reports for specific audiences, using clear and detailed language, and numerical data, in order to convey explicit information and requirements
Oral Communication	1.4, 2.7, 2.8, 2.9, 2.10, 4.1, 4.2, 4.3, 4.4, 4.5, 5.3	- Elicits information using effective listening and open questioning techniques - Speaks clearly and concisely, converting highly technical language and terminology to plain English, when providing information
Numeracy	2.5	Interprets budgetary information to enable decision-making during the product test-cycle
Get the work done	1.1-1.4, 2.1-2.10, 3.1-3.4, 4.1, 4.2, 4.3, 4.4, 4.6, 4.7, 5.2, 5.3	- Plans, organises and completes work according to defined requirements and schedules, sequencing tasks to achieve efficient outcomes - Makes critical decisions systematically in complex situations, taking into consideration a range of variables, including the outcomes of previous decisions - Evaluates effectiveness of products to inform strategic decisions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTGAM511 Manage testing of games and interactive media	ICAGAM511A Manage testing of games and interactive media	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 ICTGAM511 Manage testing of games and interactive media

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Performance Evidence

Evidence of the ability to:

- define quality requirements and an associated test plan for software
- install and configure testing support software
- manage the testing process
- identify bugs or issues, accurately and concisely
- finalise the software testing process to enable the product release.

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:

- provide a detailed summary of client requirements for platforms, hardware and software
- provide a detailed explanation of client system requirements, both functional and non-functional
- outline the procedures for bug or issue management and identification
- summarise test reporting requirements
- explain testing techniques, methods, test types and system dissection.

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:

- a system undergoing development with the associated specifications
- client requirements (verbal or written) for system quality requirements
- testing support software

- a test environment.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

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