



Australian Government

ICTPRG542 Review developed software

Release: 1

ICTPRG542 Review developed software

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 review developed software and quality standards. This involves reviewing quality standards, determining development quality issues and reviewing specific quality areas.

It applies to senior software developers who check the quality of software produced by other programmers.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Programming and software 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. Review quality standard requirements	1.1 Obtain and review organisation's quality standards and software development requirements 1.2 Determine and document quality review and validation processes
2. Determine and address development quality issues	2.1 Determine and document significant impact that processes could have on quality of product under development 2.2 Conduct consultation with required personnel and determine required actions 2.3 Plan and document resource allocation across required personnel
3. Review quality areas	3.1 Review development and validation processes and confirm alignment with defect-free software

ELEMENT	PERFORMANCE CRITERIA
	3.2 Examine documentation and methods for development and align supportable software requirements 3.3 Determine and document recommendations to improve defect-free software and supportable software

Foundation Skills

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

SKILL	DESCRIPTION
Oral communication	Articulates requirements and responsibilities distinctively, using effective communication techniques and industry standard technical language intended for audience and environment
Reading	Interprets, and critically analyses, complex texts and applies required strategies, to construct meaning from the organisation's quality standards and the standards related to software development
Writing	Prepares technical workplace documents detailing quality standards and procedures that fulfil the expectations of different stakeholders
Teamwork	Collaborates with others to achieve joint outcomes, playing an active role in facilitating effective group interaction, influencing direction, and taking a leadership role on occasion
Planning and organising	Operates from a broad conceptual plan, developing the operational detail in stages, regularly reviewing priorities and performance during implementation, and identifying and addressing issues
Problem solving	- Uses active listening, observational and questioning techniques in order to identify different perspectives, and confirm, clarify or revise knowledge - Sequences and schedules complex activities, monitors implementation, and manages relevant communication - Uses systematic, analytical processes in complex, non-routine situations, setting goals, gathering relevant information, and identifying, and evaluating options against the agreed criteria - Uses analytical processes to decide on a course of action, establishing the criteria for deciding between options, and seeking input and advice from others and taking necessary action
Self-management	Responds to both, explicit and implicit, protocols within familiar work contexts and demonstrates knowledge of the importance of identifying, and responding to, protocols in new situations, in the context of gaining agreement on procedures

SKILL	DESCRIPTION
Technology	• Demonstrates sophisticated knowledge of principles, concepts, language and practices associated with the digital world

Unit Mapping Information

Supersedes and is equivalent ICTPRG515 Review developed software.

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 ICTPRG542 Review developed software

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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:

- review existing developed software and organisation's quality standards relevant to software development on at least one occasion.

In the course of the above, the candidate must:

- determine quality issues against quality standards and procedures that support development of defect-free products to meet client requirements
- provide feedback on the software.

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:

- industry standard hardware and software products and quality standards that relate to reviewing developed software
- input and output drivers and operating systems used in the reviewing developed software
- procedural and object-oriented languages that relate to the reviewing and developing software
- real-time programming techniques
- testing strategies and processes
- software application measuring and estimating methodologies
- software development and configuration management processes
- software metrics development relevant to reviewing developed software.

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:

- data dictionaries
- design specifications
- a data stream management system (DSMS)
- a simulated scenario
- Australian and international software quality standards.

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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