



Australian Government

Assessment Requirements for ICTPRG443 Apply intermediate programming skills in different languages

Release: 1

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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:

- design and build an application in response to user requirements and specifications.

In the course of the above, the candidate must:

- code using user-defined data structures and standard algorithms
- develop a maintainable code
- design a test for code and record and document test results
- produce a technical documentation of activities and completed application.

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:

- dynamic variables
- modular programming approach to coding
- medium-size application development processes
- data structures including but not limited to:
 - lists
 - arrays
 - linked lists
 - stack
 - queues
 - trees
 - graphs
 - sets
 - hash tables

- random-access algorithms
- user-defined data structures
- project maintenance and required language-provided facilities
- development methodologies and their application
- organisational guidelines and coding standards applicable to applying intermediate programming skills
- programming methodologies
- documentation techniques and tools within target languages that may be used to apply intermediate programming skills in different languages
- debugging tools and methodologies
- code testing procedures.

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:

- an integrated development environment (IDE) for determined language and its tools and licenses
- coding standards
- user requirements and specifications
- technical requirements
- required hardware and its components.

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>