Australian Government

Assessment Requirements for UEECS0019 Develop, implement and test object-oriented code

Release: 1

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Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions on at least two separate occasions and include:

- applying correct syntax to developing code
- applying features of object-oriented programming language
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including:
  - using risk control measures
- creating new classes
- determining code development work from job performance specifications and in consultation with relevant person/s
- developing code
- developing and testing workplace procedures
- documenting outcomes in accordance with relevant industry standards
- identifying issues/problems and bugs in code to provide solutions
- implementing strategies to ensure programming is carried out efficiently
- monitoring quality of work
- planning activities to meet scheduled timelines
- preparing to develop object-oriented code
- rectifying problems in code
- selecting development kit and software
- defining and using arrays
- creating graphical user interfaces (GUI) applications using library classes
- using GUI components and event-driven programming.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include knowledge of:

- file input/output (I/O)

- multi-threading
- object-oriented programming language elements
- object-oriented programming language operators and control structures
- relevant code written features, including:
  - data encapsulation
  - inheritance
  - system libraries
- relevant collections and collection framework
- relevant development kit and software
- relevant exception handling
- relevant features of object-oriented programming
- relevant programming
- job safety assessments or risk mitigation processes
- relevant syntax to developing code
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace instructions, quality policies and procedures.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in suitable workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated suitable workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, facilities and equipment currently used in industry
- resources that reflect current industry practices in relation to developing object-oriented code
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

Companion Volume implementation guides are found in VETNet - - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6