



Australian Government

Department of Education, Employment and Workplace Relations

CUFDIG404A Apply scripting language in authoring

Revision Number: 1

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Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to write and apply scripting language in authoring interactive media. An interactive media author is often required to integrate and develop basic scripting routines that are either external or internal to authoring software. This may be necessary to enhance levels of interaction or to remedy errors in the functionality of an interactive media product developed using authoring software. This unit outlines the skills and knowledge required by interactive media authors to write and customise their own code. These routines are relevant to client-side technology only. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.
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Application of the Unit

Application of the unit	In all interactive media development, authors are working with a team, including primarily a user interface designer, asset creators and programmers. Markup languages such as HTML and XML are covered in: • CUFDIG302A Author interactive sequences • CUFDIG401A Author interactive media.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units	

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
Investigate scripting options	1. Obtain design specifications 2. Identify areas where scripting languages may be required 3. Locate script libraries for pre-written scripts 4. Identify areas where customised or new scripts may be necessary 5. Present and discuss scripting options with relevant personnel to ensure compliance with design specifications
Write scripts	6. Scope control structures and algorithms using pseudo-code and flow charts 7. Ensure objects and assets are in place and identified by appropriate labels 8. Identify and recommend event handlers 9. Write code using correct syntax to meet functional requirements 10. Write comments to document coding where necessary 11. Use authoring environment where appropriate to check code and syntax 12. Save code
Integrate scripting language	13. Source and integrate scripts into authoring environment 14. Ensure scripted elements comply with all navigation and graphic design interface considerations 15. Eliminate or merge redundant code
Test scripting language	16. Test routines to verify script fulfils requirements 17. Conduct tests to ensure that scripted elements conform to required technical specifications 18. Test for faults and document findings 19. Use standard techniques to remove faults
Evaluate scripting language	20. Liaise with relevant personnel to evaluate process and record decisions 21. Archive suitable and relevant scripts for future use

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- communication and literacy skills sufficient to:
 - interpret and clarify written or verbal instructions and design specifications
 - interpret and apply information in user manuals for software applications
- ability to work as a member of a production team - both independently on assignment and under direction
- initiative and flexibility in troubleshooting and solving problems as they arise during the authoring process
- technical skills sufficient to:
 - write and apply scripting language in authoring a range of interactive media and behaviours
 - efficiently use a computer, including keyboard shortcuts
- self-management and planning skills sufficient to:
 - prioritise work tasks
 - meet deadlines
 - seek expert assistance as required

Required knowledge

- industry knowledge, including:
 - roles and responsibilities of project team members, e.g. designers, content creators, information architects, programmers and coders
 - sound understanding of the relationship between technical and creative aspects and requirements of interactive media projects
 - sound knowledge of the features of a range of delivery platforms
 - issues and challenges that arise in developing interactive media products
 - file formats of digital media assets and basic optimisation techniques
 - Document Object Model (DOM) and Object Oriented Programming (OOP)
- OHS standards as they relate to working for periods of time on computers

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the following is essential:

- ability to write code to meet functional requirements
- correct and appropriate integration of scripting language into the process of authoring interactive media products.

Context of and specific resources for assessment

Assessment must ensure:

- access to a range of resources, equipment and current industry-standard software as listed in the range statement
- appropriate authoring environments
- access to appropriate learning and assessment support when required
- use of culturally appropriate processes and techniques appropriate to the language and literacy capacity of learners and the work being performed.

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third-party workplace reports of on-the-job performance
- evaluation of at least two interactive products for which the candidate has written and integrated code
- written or oral questioning to test knowledge as listed in the required skills and knowledge section of this unit.

Guidance information for assessment

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- CUFDIG401A Author interactive media.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<i>Design specifications</i> may include:	• delivery platforms, such as: • internet • CD • mobile devices • interface design • navigation design • storyboards and flow charts. • technical specifications, such as: • memory/RAM • bandwidth • file formats • computer operating systems • browsers • user requirements.
<i>Scripting languages</i> may include:	• ActionScript • Javascript • Lingo • MEL • Perl • VBScript • other proprietary scripting languages.
<i>Relevant personnel</i> may include:	• designers • interactive authors • IT support • programmers • other specialist technical staff.
<i>Authoring environment</i> may include:	• authoring software, such as: • Flash • Director • browser • text editor.

RANGE STATEMENT***Scripted elements*** may include:

- calculations
- changes to browser windows, such as pop-up and colour
- cursor changes
- forms that include elements, such as:
 - radio buttons
 - text fields
 - check boxes
 - list menu
- hot spot interactions
- pop-up windows/messages
- preloaded images
- rollover buttons
- other behaviours.

Unit Sector(s)

Unit sector	
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Competency field

Competency field	Visual communication - digital content and imaging
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Co-requisite units

Co-requisite units		