Australian Government

Department of Education, Employment and Workplace Relations

CUFDIG403A Create user interfaces

Revision Number: 1

ISC INDUSTRY SKILLS COUNCILS
Creating Australia's Future

CUFDIG403A Create user interfaces

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to create a user interface for an interactive media product.
	No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

Application of the Unit

Application of the unit	A person who applies the skills and knowledge outlined in this unit works to technical and creative specifications provided by a user interface designer or other designers.
	There is scope for individual creativity because a person in this role is expected to generate a range of design options that respond to concepts documented in design specifications. However, these ideas need to demonstrate a sound understanding of user-centred design principles, as well as comply with standards that apply to the specific platforms on which the user interface will be run.
	This work is undertaken with some supervision or guidance.
	Skills associated with designing user interfaces are covered in:
	• CUFDIG402A Design user interfaces.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

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.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
Clarify project requirements	1. Use **design specifications** in consultation with **relevant personnel** to clarify the target user, audience and **purpose** of **interactive media products** 2. Obtain samples of text content and **media assets** to be integrated into user interfaces 3. Determine file **output format** for **delivery platform** of interactive media products
Generate ideas	4. Research interactive media product user interfaces, designs, images, artwork and other creative sources that may inspire design ideas 5. Obtain other **relevant information** that may influence or be incorporated into design ideas 6. Determine need for copyright clearance and identify potential for fair use of copyright material 7. Obtain and record copyright clearance if required 8. Use sketches and concepts in specifications as the basis for generating range of design ideas that are technically feasible and provide creative solutions to all design issues 9. Present interface design ideas to relevant personnel for discussion and feedback
Plan approach	10. Select final design, incorporating feedback from relevant personnel as required 11. Identify range of appropriate industry-standard **graphics software** 12. Discuss and select graphics software with relevant personnel to ensure selection meets specified outcomes 13. Explore range of **typographical** and **visual design elements** that could be used in development of interface designs
Produce user interfaces	14. Use graphics software to develop structure for user interfaces based on final design concepts 15. Source or create and integrate all graphic **interactive components** 16. Apply **visual design** and **communication principles** to the development of user interfaces 17. Ensure that user interfaces meet the **principles of user-centred design** and relevant **standards** 18. Ensure that user interfaces enhance the display of digital content

ELEMENT	PERFORMANCE CRITERIA
	19. Document styles for text and presentation for use in style sheets and templates or themes
	20. Save user interfaces in an appropriate output format that satisfies technical parameters in consultation with relevant personnel
Evaluate user interfaces	21. Review user interfaces to assess effectiveness of creative solutions, appropriateness to the user and audience, and technical feasibility
	22. Discuss and confirm with relevant personnel additional requirements or modifications to the overall design and undertake any necessary amendments

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- communication, teamwork and literacy skills sufficient to:
    - interpret and clarify written or verbal instructions
    - interpret design specifications
    - work collaboratively in a team environment - both independently on assignment and under direction
    - present a range of user interface designs to team members for discussion and feedback
    - respond constructively to feedback received from other team members
    - complete workplace documentation
- creative skills sufficient to:
    - generate feasible ideas for user interface designs that meet specifications
    - apply visual design and communication principles to produce user interface designs
- technical skills sufficient to:
    - proficiently use graphics software to produce user interface designs
    - create user interface designs to meet standards and platform parameters
    - manage files and directories using standard naming conventions
- self-management and planning skills sufficient to:
    - prioritise work tasks
    - meet deadlines
    - seek expert assistance when problems arise

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
    - issues and challenges that arise in creating user interfaces
    - standards as they apply to user interfaces, including W3C Accessibility, interoperability, usability and readability
- visual design and communication principles, including user-centred design principles
- design elements
- typography

REQUIRED SKILLS AND KNOWLEDGE

- copyright clearance procedures
- OHS standards as they relate to working for periods of time on computers

Innovation and Business Skills Australia

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:
	• creation of user interfaces that:
	    • visually communicate to target user and audience
	    • meet required standards and technical parameters of the specified platform
	• ability to work effectively as a member of a production team.

Context of and specific resources for assessment	Assessment must ensure: • access to design specifications typically used in industry • access to current industry-standard software as listed in the range statement • 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 a range of user interfaces created by the candidate in response to design specifications • 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: • CUFDIG304A Create visual design components • CUFDIG402A Design user interfaces.

Innovation and Business Skills Australia

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.	

Design specifications may include:	• creative requirements
	• manufacturing specifications
	• navigation design
	• priority levels of W3C Accessibility standards
	• storyboards
	• technical specifications, including:
	   • disk space
	   • bandwidth
	   • delivery platform
	   • file format for final product
	• user interface design.

Relevant personnel may include:	• graphic designer • information architect • instructional designer • navigation designer • product designer • programmer • project manager • other specialist staff.
Purpose may include:	• business and corporate • community • education • entertainment • personal • promotion • training.
Interactive media products may include:	• e-commerce • educational product • game • information product • interactive application • promotional product

RANGE STATEMENT

	• social network • training product • website.
Media assets may include:	• animation • audio • graphics • images • text • video.

Output formats may include:	• bitmap image
	• digital formats, such as:
	   • GIF
	   • JPEG
	   • PDF
	   • TIFF
	   • PICT
	   • PNG
	   • HTML
	   • PSD
	• vector image.

Delivery platform may include:	• CD/DVD • games console • internet • kiosk • mobile phone • personal digital assistant (PDA) • other wireless/mobile devices.
Relevant information may include:	• brands • logos • previous versions of interfaces • printed materials • promotion materials • style guides • trademarks.
Graphics software may include:	• Fireworks • Illustrator • Photoshop • Photoshop Elements.

Innovation and Business Skills Australia

RANGE STATEMENT	
Typographical elements may include:	- alignment - fonts and typefaces - kerning - leading - point and size - serif or sans serif - tracking.
Visual design elements may include:	- colour - form - line - shape - texture - tone.
Interactive components may include:	- backgrounds - banners - icons - interactive buttons - interactive controls - logos - menus - search boxes.
Visual design principles may include:	- balance - emphasis - focal point - movement - perspective - proportion - scale - unity.
Communication principles may include:	- communicates message - conveys meaning - meets audience requirements - uses functional components.
Principles of user-centred design may include:	- clear feedback and instructions - consistent behaviour and design for: - common interface elements - menu systems - search boxes - layout

Innovation and Business Skills Australia

RANGE STATEMENT

	- iconography - typography - colour - easy exit if wrong path selected - plain English for text and instructions - simplicity - support for work tasks.
Standards may include:	- interoperability - readability - usability - W3C Accessibility.

Unit Sector(s)

Unit sector	

Competency field

Competency field	Visual communication - digital content and imaging

Co-requisite units

Co-requisite units		