



Australian Government

Department of Education, Employment and Workplace Relations

ICAGAM417A Apply digital effects to interactive products

Release: 1

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Modification History

Release	Comments
Release 1	This Unit first released with <i>ICA11 Information and Communications Technology Training Package version 1.0</i>

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to apply digital effects to an interactive product.

Application of the Unit

This unit applies to concept artists, game designers, games programmers, animators and other relevant personnel working in the game development industry.

Licensing/Regulatory Information

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement but users should confirm requirements with the relevant federal, state or territory authority.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Element	Performance Criteria
<i>Elements describe the essential outcomes of a unit of competency.</i>	<i>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.</i>

Elements and Performance Criteria

1. Identify and apply an interactive concept map of the production	1.1 Catalogue individual components to be applied to the presentation 1.2 Identify and apply an interactive concept map showing components in a logical layout and structure 1.3 Prepare an interactive storyboard for the production
2. Identify and apply digital effect components for the production	2.1 Identify method for applying digital effect framework into presentation 2.2 Apply framework for the digital effects using industry standard methods 2.3 Refine digital effects framework 2.4 Ensure framework conforms to project specifications
3. Identify and apply digital effect components for inclusion in the presentation	3.1 Identify digital effect components for inclusion 3.2 Confirm that digital effect components are in an appropriate format for the framework 3.3 Apply digital effect components to framework for inclusion in product presentation
4. Apply all the above components into a functioning and well-designed interactive product	4.1 Apply all media components in authoring environment 4.2 Identify necessary digital effects programming to ensure satisfactory results 4.3 Identify inconsistencies within digital effects 4.4 Review and test the design to ensure it meets the creative and technical requirements of the brief 4.5 Apply runtime version of presentation for inclusion in product 4.6 Ensure that presentation runs satisfactorily on all target platforms

Required Skills and Knowledge

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

Required skills

- communication skills to:
 - check and confirm design requirements
 - collect, interpret and communicate in visual and written forms effectively for various audiences, including engineers and artists
 - communicate complex designs in a structured format drawn from industry standards, styles and techniques
 - communicate technical requirements related to software development, graphics requirements and code development to supervisors and other team members
 - provide practical advice, support and feedback to colleagues and management
 - translate design requirements into specifications
- literacy and numeracy skills to read and analyse briefs, work instructions, and technical and conceptual information
- problem-solving skills to recognise and address potential quality issues and problems at design development stage
- research skills to undertake practical, technical and desktop research into integrating digital effects components
- technical skills to:
 - apply digital effect components to a presentation
 - integrate a framework to incorporate digital effect components into a presentation.

Required knowledge

- component-based programming skills
- OHS requirements for ergonomics
- risk and critical path management
- technical constraints that hardware imposes on software development, graphics requirements, code development and creative visual design
- techniques for applying concept development skills
- techniques for applying concept visualisation skills
- techniques for applying framework integration skills.

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 ability to: • apply the principles of effective and creative design and visual communication in order to produce a functioning and well-designed interactive product.
Context of and specific resources for assessment	Assessment must ensure access to: • computer hardware, software, games engines and file storage • copyright and intellectual property legislation • OHS legislation and enterprise policy • appropriate learning and assessment support when required • modified equipment for people with special needs.
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: • review of sample workplace activities • evaluation of written or interactive computer-based fault-finding exercises • evaluation of reports and logbooks.
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, where appropriate. Assessment processes and techniques must be culturally appropriate, and suitable to the communication skill level, language, literacy and numeracy capacity of the candidate and the work being performed. Indigenous people and other people from a non-English speaking background may need additional support. In cases where practical assessment is used it should be combined with targeted questioning to assess required knowledge.

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>Project specifications</i> may include:	• access to facilities and resources • budget • deliverables • delivery platform • disc space • milestones • prototyping • technical issues, such as: • testing plan • timeframe.
<i>Media components</i> may include:	• authoring software • computer workstation • ergonomic furniture.
<i>Brief</i> may include:	• animation • budget • graphics • images • photographs • sound • technical issues • text • timeframe • video.

Unit Sector(s)

Game development