Functional Area - Operations Management

Title	Perform Keyframe 3D animations
Code	107957L3
Description	This unit of competency applies to all Digital Media Technology (DMT) practitioners who use keyframing for 3D animation in workplace. The practitioners specify a set of keyframes and use computing interpolation (tweening) to assist the animation process. Interpolation should be based on some type of parameterised spline (Hermite, Bezier, B-spline, ...) and adjusting different parameters to produce character/model with the desired effects
Level	3
Credit	3

Competency	Performance Requirements
	1. Knowledge for Performing keyframe 3D animations
	
	• Possess literacy skills that can read and interpret relevant sources of information such as: the script, animatic characters and colour model, soundtrack, etc.
	• Possess good knowledge of 3D animation principles
	• Understand animation keyframe principles, differences between hand drawn keyframe vs computer keyframe techniques in addition to their advantages and disadvantages
	• Knowledge of 3D animation software tools and applications, such as: Maya, 3Ds Max, Blender, Lightwave, etc.
	• Updated with computer 3D animation technology and trends
	
	2. Perform keyframe 3D animations
	
	• Comprehend and clarify the 3D animation work requirement, from:
	    o Project/Production briefs
	    o Storyboards and visual references
	    o Design specification
	• Plan animation approach including keyframes for character's actions and identify whether any and what drawings will be needed to be drawn in order to animate the scene or action
	• Select and use appropriate 3D animation software for keyframing of each 3D model/character/scene
	• Create movements by specifying set of keyframes parameter, including but not limited by the following:
	    o Position and orientation
	    o Body deformation
	    o Facial features
	    o Hair and clothing
	    o Lighting
	• Specify type of interpolation, such as: linear, cubic, parametric curve, etc.
	• Specify speed profile of interpolation such as: constant velocity, ease-in ease-out, etc.
	• Adjust interpolation settings to generate in between frames
	• Review output with relevant people. Respond positively to feedbacks and make adjustment or refinements as required
	• Save and store the output to required format for use at next stage of production
	
	3. Exhibit professionalism
	
	• Apply industry best current 3D animation techniques to produce the animation production that complied with the industry and the organisation standards

Specification of Competency Standards
for the Information & Communications Technology Industry
Unit of Competency

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Assessment Criteria	The integrated outcome requirements of this UoC are the abilities to: • fully comprehend the design brief and production requirements as well as taking initiatives to clarify requirement ambiguities • select the most suitable 3D animation software/tools that enable keyframe production • specify appropriate set of keyframe parameters for the 3D animation production and use adjusting interpolation setting to generate in between frames • review output with appropriate people and package output for next stage of production as specified by the production requirement
Remark	