

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

Functional Area - Operations Management

Title	Create pixel art
Code	107928L4
Description	This unit of competency applies to all Digital Media Technology (DMT) practitioners who are involved in game graphics designing. Pixel art is one form of digital art which is generally thought of as a computer graphic where the image is literally drawn pixel-by-pixel in tiny detail, using limited color palette and primitive computer graphics tools. This UoC is concerned with the activities and steps in creating pixel art as part of the game applications development.
Level	4
Credit	3
Competency	<p>Performance Requirements</p> <p>1. Knowledge for pixel art</p> <ul style="list-style-type: none"> <li>• Get hold of the organisation's resources for pixel art creation work</li> <li>• Understand different graphics style typically used in game applications</li> <li>• Understand frame based animation techniques</li> <li>• Understand the details about sprites, the stand-alone two-dimensional characters or objects in games</li> <li>• Understand the details about anti-aliasing, which is adding intermediary colours to the kinks of the line to smooth them out</li> <li>• Possess proficient knowledge about the usage of gradient</li> <li>• Master the technique in using different drawing software, for examples: <ul style="list-style-type: none"> <li>○ Computer's built-in paint program</li> <li>○ Photoshop</li> <li>○ Pro Motion</li> <li>○ Pixen, etc.</li> </ul> </li> </ul> <p>2. Create pixel art</p> <ul style="list-style-type: none"> <li>• Gather requirements towards pixel art creation as part of the graphics designing tasks</li> <li>• Follow prescribed steps to handle the creation of pixel art, which may include: <ul style="list-style-type: none"> <li>○ Decide upon the software tools to be used</li> <li>○ Consider the kinds of lines to be drawn, such as straight and curve lines</li> <li>○ Visualize the objects to pixel in mind or on paper and determine the kind of sprites to appear in the game</li> <li>○ Perform outlining by sketch out a crude outline for the sprites</li> <li>○ Choose and apply colors</li> <li>○ Work with shading tasks such as choosing light source, shading, soft shadow, highlights, etc.</li> <li>○ Use anti-aliasing to make the lines look smooth</li> <li>○ Do dithering to get more shades without using more colors, as appropriate</li> <li>○ Do anti-aliasing as appropriate</li> <li>○ Finish up with the pixel arts</li> </ul> </li> <li>• Create graphics contents by drawing in pixel levels, for examples: <ul style="list-style-type: none"> <li>○ Icon / button in game</li> <li>○ Pixel based human characters</li> <li>○ Texture, etc.</li> </ul> </li> <li>• Make appropriate adjustments to the pixel arts created until the desired results are achieved</li> <li>• Present the completed pixel arts to the game development team for comment and seek agreement for adoption</li> </ul>

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	<p>3. Exhibit professionalism</p> <ul style="list-style-type: none"><li>• Always create the pixel arts with full dedications and exercise professional rather than any alternate judgements</li><li>• Always carry out the pixel arts creation tasks strictly according to necessity and requirements, without avoiding difficulties or problems</li></ul>
Assessment Criteria	<p>The integrated outcome requirements of this UoC are the abilities to:</p> <ul style="list-style-type: none"><li>• Complete the pixel arts creation on time and within budget constraints; and</li><li>• Deploy fully designated hardware and software resources to complete the pixel art creation tasks</li></ul>
Remark	