

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

Functional Area - Operations Management

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| Title | Create game development environment |
| Code | 107919L5 |
| Description | This unit of competency applies to all Digital Media Technology (DMT) practitioners who are involved in game development. The game development environment is a software suite of tools that enable a game programmer to develop anything from start to finish, and usually includes elements such as source code editor, compiler, debugger, etc. This UoC is concerned with the knowledge and activities to create such an environment to facilitate games development. |
| Level | 5 |
| Credit | 3 |
| Competency | <p>Performance Requirements</p> <p>1. Knowledge for game development environment</p> <ul style="list-style-type: none"> • Understand game engine as a software framework designed for the creation and development of game applications, such as Unity • Understand common integrated development environment for games, for examples: <ul style="list-style-type: none"> ○ Microsoft visual studio ○ XNA game studio ○ Unity, etc. • Understand different roles in the game development team for work flow design • Understand the technical requirements for accommodating and operating the game application • Possess proficient knowledge in common programming languages, development plugin or customised game editor • Get hold of the organisation's resources and supports for game development <p>2. Create game development environment</p> <ul style="list-style-type: none"> • Exercise good knowledge in common game engines to analyse the requirements of the game products to be developed • Setup the game development environment by selecting the available and appropriate hardware platform, system and application software, and with considerations for the planned design tools and work flow • Implement the required tools and plugins • Ensure the established platform and tools can cater for the planned work flow and meet requirements of the different development team members, including: <ul style="list-style-type: none"> ○ Designers ○ Illustrators ○ Modelers ○ Texturers ○ Riggers ○ Animators ○ Developers / programmers, etc. • Test run and refine the development environment until its satisfactory operation • Formally release the game development environment after seeking approval from management or the game development team <p>3. Exhibit professionalism</p> <ul style="list-style-type: none"> • Always establish the game development environment with full dedication and effort, and in an efficient and effective manner |

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| | <ul style="list-style-type: none">• Always maintain an optimal balance between performance of the established development environment and related budget and resources |
| Assessment Criteria | The integrated outcome requirements of this UoC are the abilities to: <ul style="list-style-type: none">• Create a suitable development environment for the game products to be explored; and• Create a game development environment that can facilitate the tasks of most game development team members |
| Remark | |