Functional Area - Operations Management

Title	Perform technical feasibility study
Code	107918L5
Description	This unit of competency applies to all Digital Media Technology (DMT) practitioners who are involved in game graphics designing. The technical feasibility study is a logistical or tactical plan of how the organisation will produce, store, deliver, and track its products or services and game applications are of no exception. It is an excellent tool for trouble-shooting and long-term planning. This UoC is concerned with the considerations and details involved in the performance of such study in the capacity of a lead programmer or technical director.
Level	5
Credit	3

Competency	Performance Requirements
	1. Knowledge for technical feasibility study
	
	• Realize the philosophy and guidelines of the organisation towards game development
	• Get hold of the resources and support for development of the game application in concern
	• Understand the state-of-the-art technology used in the game industry
	• Well-versed in the following programming techniques:
	    o Multi-threading programming
	    o Network programming
	    o Computer graphics programming, etc.
	• Understand database concept and design
	• Understand the functions and limitations provided by different cloud platforms
	
	2. Perform technical feasibility study
	
	• Evaluate whether the prescribed game design is feasible in terms of technical ability of the development team
	• Estimate the resources and time required to develop the software to ensure it can meet the targeted delivery date
	• Identify experimental features for the game application in concern
	• Explore the basic elements to be included in the technical feasibility study, which may include:
	    o Materials resources
	    o Human resources
	    o Hardware and software available
	    o Technologies employed, etc.
	• Evaluate whether the organisation is technically and operationally feasible for the game application in concern, with considerations such as:
	    o The necessary expertise
	    o The infrastructure and capital to develop, install, operate and maintain the proposed system
	    o Whether the organisation is able to deliver the game product at a profit, etc.
	• Estimate the size of the project and production schedules, including:
	    o Minimum and maximum rated capacity
	    o Fixed costs involved
	    o Actual capacity utilization
	    o The number of operating days required, etc.
	• Work out alternate plans or work around if the required game features are at risk, and the way they compared with the chosen plan

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	• Communicate and liaise with the game designer and development team to exchange ideas towards the results of the technical feasibility study, and provide guidance for their respective tasks 3. Exhibit professionalism • Always perform the technical feasibility study in an objective and open manner, with minimal subjective elements or interferences by un-related issues • Always strike a proper balance among the interests of the organisation, staff members and potential players in the performance of the technical feasibility study
Assessment Criteria	The integrated outcome requirements of this UoC are the abilities to: • Complete the technical feasibility study and produce reasonable and sensible comments for the game application in concern; and • Complete the technical feasibility study that can provide proper guidance for other members of the game application development team
Remark	