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

Functional Area - Operations Management

Title	Develop apps
Code	107988L4
Description	This unit of competency applies to all Digital Media Technology (DMT) practitioners who are involved in interactive media apps development. Apps development is a board topic involving a wide range of programming languages, tools and techniques. This UoC is concerned with the development of apps based on its design documents and specifications, using specified programming tools and facilities, and following the organisation's related guidelines and standards.
Level	4
Credit	3

Competency	Performance Requirements
	1. Knowledge for apps development
	
	• Realise the philosophy and guidelines of the organisation towards interactive media apps development
	• Master basic programming knowhow, concepts and techniques
	• Possess good understanding about the requirements of game specifications prepared by the development team
	• Master languages engines and tools commonly used for apps development, for examples:
	   o Object Oriented (OO) concept for native apps development
	   o HTML5 + CSS3 for web apps development, etc.
	• Possess good understanding about the essential features of those programming engines and tools
	• Understand the framework of different platforms
	• Possess knowledge in layout management
	• Understand related copyright, ethics and privacy issues
	
	2. Develop apps:
	
	• Fully explore the advantages offered by those aforementioned apps development tools, such as their:
	   o Ease of understanding
	   o Ease of maintenance
	   o Ease of modifications
	   o Low resources consumption, etc.
	• Plan for the usage of those languages and facilities to develop the original ideation into a real, powerful and unique apps application
	• Devise program modules and decompose them into software components according to their design documentations
	• Create apps in different platforms such as Android and iOS
	• Perform the apps development tasks, which may include but not limited to the followings:
	   o Design and create models for 3-D and digital effects
	   o Make use of SDK features to create apps with suitable functions
	   o Perform basic vision and sound editing
	   o Incorporate and edit digital video
	   o Edit screen content for fast turnaround
	   o Design animation and digital visual effects
	   o Produce a digital animation sequence, etc.

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	• Carry out the following programming stages iteratively until completion of the specific apps application:
	   o Lay the outlines of what the actual procedure is going to be
	   o Create the wire frame of the specifications to achieve and identify what the end product will look like
	   o Ensure what have been made suits the end users in every possible way
	   o Determine all aspects of the apps including its workability and user friendliness
	   o Develop the app in a smooth fashion
	   o Adopt third party APIs to enrich the apps contents
	   o Test the apps against any bugs or malfunctioning
	   o Ensure the layouts can fit different resolution mobile devices
	   o Publication and sale of the apps, etc.
	
	3. Exhibit professionalism
	
	• Always perform apps development with full effort and in an efficient and effective manner
	• Always perform apps development according to organisational and / or international standards, regardless of those personal preferences

Assessment Criteria	The integrated outcome requirements of this UoC are the abilities to: • Complete the apps development work within required time frame and budget constraints; and • Complete the apps development based on designated program documents and specifications
Remark	