

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

Functional Area - Operations Management

Title	Perform server programming for apps request
Code	107989L4
Description	This unit of competency applies to development personnel in the DMT (digital Media Technology) profession. Server programming is one of the key components in the process of mobile apps development. This UoC concerns competencies in carrying out the tasks for server side programming in the capacity of a developer.
Level	4
Credit	3
Competency	<p>Performance Requirements</p> <p>1. Knowledge for server programming for apps request</p> <ul style="list-style-type: none"> <li>• Master programming knowhow, concepts and techniques</li> <li>• Possess specialized programming skills in areas such as: <ul style="list-style-type: none"> <li>○ Authoring</li> <li>○ Engineering</li> <li>○ Quality testing, etc.</li> </ul> </li> <li>• Familiar with programming languages related to server side programming such as: <ul style="list-style-type: none"> <li>○ PHP</li> <li>○ Node.js</li> <li>○ Python</li> <li>○ Java, etc.</li> </ul> </li> <li>• Familiar with third party server linkage, for examples: <ul style="list-style-type: none"> <li>○ Apple</li> <li>○ Google, etc.</li> </ul> </li> <li>• Keep abreast of the new developments and technological advancements in the ICT industry</li> </ul> <p>2. Perform server programming for apps request:</p> <ul style="list-style-type: none"> <li>• Identify the server side programming tasks for the apps to be developed</li> <li>• Create the necessary components for the required server programming, which may include but not limited to the following: <ul style="list-style-type: none"> <li>○ RESTful API creation</li> <li>○ Socket creation for bi-directional communication</li> <li>○ Determine post data payload format, for e.g. JSON to server side and decode</li> <li>○ Determine the iteration between server side code and persistence data, etc.</li> </ul> </li> <li>• Write efficient computer code or script to make the various features work</li> <li>• Ensure that sound, graphics, animations and timing all work as intended</li> <li>• Make good use of processing and data storage capacity</li> <li>• Create and link databases to the user interface such that information can be retrieved, stored and processed</li> <li>• Make appropriate adjustments reiteratively to the server programming tasks until the desired outcomes are achieved</li> <li>• Present the completed server side programming deliverables to the game development team or supervisor for comment and approval</li> </ul> <p>3. Exhibit professionalism</p> <ul style="list-style-type: none"> <li>• Always devote fully to all activities related to the server side programming tasks, and remain current and updated with related technologies</li> </ul>

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	<ul style="list-style-type: none"><li>• Always perform the server programming development according to requirements and expectations, and place the interests of potential users as the highest priority consideration</li></ul>
Assessment Criteria	The integrated outcome requirements of this UoC are the abilities to: <ul style="list-style-type: none"><li>• Complete the server programming development tasks within time and budget constraints</li><li>• Grasp users' expectations towards the server programming in concern and produce outputs with appropriate contents and level to satisfy the users</li></ul>
Remark	This UoC also applies to other requests such as web request