

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

Functional Area - Operations Management

Title	Test apps deployment on various hardware platforms
Code	107991L4
Description	This unit of competency applies to development personnel in the DMT (digital Media Technology) profession. One of the key procedures to determine the success or failure of apps is its stringent testing on hardware platform(s) to be deployed. This UoC concerns the competencies in performing the testing on designated hardware platform(s) and ensure the conformance to requirements.
Level	4
Credit	3
Competency	<p>Performance Requirements</p> <p>1. Knowledge for apps deployment on various hardware platforms</p> <ul style="list-style-type: none"> • Master programming knowhow, concepts and techniques • Familiar with the organisation's apps testing guidelines or procedures, if any • Possess proficient software test analysis skills • Comprehend the complicated environment for apps on various software platforms and versions, such as: <ul style="list-style-type: none"> ○ Diverse hardware and form factors ○ Different network connectivity conditions ○ Rapid pace of mobile OS updates ○ Frequent introduction of new devices ○ Customer expectation of quick upgrades, etc. • Possess good understanding about apps development and testing, such as: <ul style="list-style-type: none"> ○ Features and limitations of different operating systems ○ Features and limitations of different hardware platforms ○ Available apps testing tools and testers ○ Programming techniques under different platforms, etc. • Keep abreast of new research and development in apps testing methods and tools <p>2. Test apps deployment on various hardware platforms:</p> <ul style="list-style-type: none"> • Identify the platforms for deployment of the apps in concern, such as: <ul style="list-style-type: none"> ○ Android ○ iOS ○ Other possible platforms ○ Various versions of the above platforms • Identify the various aspects of testing that need to be conducted, or according to those laid down in the organisation's apps testing guidelines, for examples: <ul style="list-style-type: none"> ○ Functionality ○ Performance ○ Network ○ Security ○ Compatibility ○ Conformance ○ Usability ○ Installation ○ Provisioning, etc. • Create and maintain test conditions and scripts for apps based on problems and technical requirements identified from the above findings • Perform the following tests for the apps in all concerned platforms:

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	<ul style="list-style-type: none"> ○ Testing on general cases ○ Stress testing on extreme cases ○ Other related testing ● Perform all essential steps listed in the testing procedure, then analyse the results gathered, such as: <ul style="list-style-type: none"> ○ Examine the screenshots (or alike) for each step of the test ○ Consolidate performance data including memory, CPU, duration, etc. ○ Compare reports against previous runs to identify regressions and bottlenecks, etc. ● Evaluate and visualize the test results if necessary ● Prepare test report based on the outcome findings, especially on the operations and performance of the apps on various platforms ● Consolidate and present the completed test reports and recommendations to the apps development team or supervisor for comment <p>3. Exhibit professionalism</p> <ul style="list-style-type: none"> ● Always conduct the apps deployment testing on various hardware platforms in an objective and fair manner, without any deceive doings ● Always conduct the apps deployment testing according to guidelines and procedures, without any deviation or omission
Assessment Criteria	<p>The integrated outcome requirements of this UoC are the abilities to:</p> <ul style="list-style-type: none"> ● Complete the apps deployment testing on various hardware platforms within time and budget constraints ● Produce test reports that fully reflect the information gathered during the testing period, especially those on the operations and performance of the apps on various platforms
Remark	