

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

Functional Area - Operations Management

Title	Perform game testing
Code	107941L3
Description	This unit of competency applies to all Digital Media Technology (DMT) practitioners who are designated to conduct testing for game applications. Similar to all software applications, testing is a mandatory and critical stage in the development life cycle, and specific testing methodologies needed to be applied to games. This UoC is concerned with the effective testing of a game application, and all its related tasks and work.
Level	3
Credit	3
Competency	<p>Performance Requirements</p> <p>1. Knowledge for game testing</p> <ul style="list-style-type: none"> • Possess basic programming knowhow, concepts and techniques • Possess basic understanding about common programming techniques and practices for game applications • Fully understand the details of the game applications to be tested • Comprehend the techniques and tools for conducting effective game testing • Possess the ability for problems and abnormalities identification • Possess the personal traits as a game tester, including: <ul style="list-style-type: none"> ○ Good at playing games ○ Good eye for details ○ Ability to write well (literacy skill), etc. <p>2. Perform game testing</p> <ul style="list-style-type: none"> • Always maintain a correct attitude towards and follow good practices for game testing, such as: <ul style="list-style-type: none"> ○ Keep an orderly control on elements / factors to be tested, one at a time ○ Keep an eye on everything including even the smallest part ○ Never assume something without trying in the testing processes ○ Keep track of all technical bugs and logical bugs discovered, etc. • Work out a test case (or follow an established one) in a sense of destructing the game product • Work out a test plan (or follow an established one) detailing the game elements to be tested, the testing methods and the procedures to follow • Write scripts for automatic testing when deemed necessary, such as regression testing • Perform manual testing for designated portions of the game / game elements as appropriate • Conduct various form of testing for the game application, such as but not limited to the followings: <ul style="list-style-type: none"> ○ Functionality testing to look for general problems within the game itself or its user interface ○ Compliance testing against those technical requirements ○ Soak testing to cater for problems such as memory leaks or rounding errors ○ Stress, volume and load testing to check the game's stability and limits ○ Compatibility testing with all associated devices and platforms ○ Regression testing to ensure that all the old capabilities still work after a bug has been fixed ○ Multiplayer testing to ensure all connectivity methods are working, etc. • Prepare a report after completing the above testing, with highlights such as:

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	<ul style="list-style-type: none"> ○ The kinds of bugs / abnormal situations discovered ○ Under what circumstances will the bugs appear (defect tracking) ○ Information about the bug's manifestation, if any ○ Other problems observed, etc. <ul style="list-style-type: none"> ● Keep an accurate and detailed logging on activities associated with game testing, for reporting to management and subsequent reviews <p>3. Exhibit professionalism</p> <ul style="list-style-type: none"> ● Always perform game testing activities with full dedication and effort, not omitting any step or item ● Always perform game testing activities with objectivity and fairness, and report all problems based on evidences rather than subjective judgements
Assessment Criteria	<p>The integrated outcome requirements of this UoC are the abilities to:</p> <ul style="list-style-type: none"> ● Successfully complete the game testing by checking all required game components with the designated methods and procedures; and ● Successfully uncover and report bugs and problems embedded in the game applications
Remark	