

Specification of Competency Standards
for the Retail Industry
Unit of Competency

Functional Area - Website Monitoring and Testing Technology

Title	Implement website performance testing
Code	107252L5
Description	Implement performance test for website including stress testing, connection speed testing and load testing to ensure the quality of the website operation.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Understand the basics of website performance testing</p> <ul style="list-style-type: none"> • Recognize the purpose of the website stress testing, such as test web services in the case of strong pressure to continue to normal operation • Understand the purpose of the website speed test, such as speed test in different connection mode • Understand the purpose of the website load testing, such as measuring the performance of web services at a load level to ensure that web services are working within the requirements <p>2. Master website performance testing</p> <ul style="list-style-type: none"> • Perform quantitative assessment, such as the frequency system problems or under what circumstances the system problem occurs • Conduct qualitative assessment, such as whether the test can resist the Denial-of-Service attack • Analyse the contents of stress tests, such as repetition, concurrency, random changes etc. • Control the environment variables as a reference for system performance to determine under what load conditions, the system performance is in a state of failure • Master the method of load testing, such as the number of users accessing the web service at the same time, the number of online data processing, etc. <p>3. Exhibit professionalism</p> <ul style="list-style-type: none"> • Ensure the stress test must be controlled in an unfavourable execution environment. • Ensure the stress testing is a continuous performance test.
Assessment Criteria	<p>The integrated outcome requirement of this UoC is the ability to:</p> <ul style="list-style-type: none"> • Understand the basics of website performance testing • Master website performance testing including stress testing, connection speed testing, load testing • Prevent the website performance problems causing abnormal business operation.
Remark	