

Position Description: Quality Analyst

Reporting Lines

Reports to:	Development Manager
Works Closely with:	Development Team members
Direct Reports:	No direct Reports

Overview

The Quality Analyst is responsible for designing, developing, and executing test plans and test cases that verify a software conformance to defined acceptance criteria (i.e. system behaviours) and feature design documents, as well as application standards. Testing will be both manual and automated, with the focus on automation over manual.

In addition to functional testing, the Quality Analyst will perform quality control activities for non-functional areas such as performance, security, installation/upgrade and sociability.

Key Areas of Responsibility

The following are areas of responsibility for the Quality Analyst. From time to time these responsibilities may vary and additional responsibilities may be added.

Solution Design and Test Planning

Working within an Agile development team(s), the Quality Analyst is responsible for developing and refining the test plans, covering functional and non-functional testing, both manual and automated.

Given this, the Quality Analyst will work with both Business Analysts and Developers to:

- Review the designs of systems and features to ensure testability
- Review and revise high-level acceptance criteria
- Document and implement test plans

Functional Testing

The Quality Analyst is responsible for planning, overseeing and performing functional testing, this will include:

- Reviewing acceptance criteria (i.e. behaviours) for accuracy, clarity and completeness
- Extending and maintaining the regression test suite, which doubles as the system (behaviour) specification
- Performing manual tests, recording the results and raising defects
- Developing and maintaining automated functional tests, using tools such as Concordion, jUnit and Selenium

- Installing, upgrading and configuring virtualised Linux/JVM/Oracle DB test environments
- Developing and executing automated smoke tests
- Performing exploratory testing

Non-Functional Testing

The Quality Analyst is responsible for planning, overseeing and performing non-functional testing, covering performance, security, installation/upgrade/configuration and sociability. This will include:

- Identifying and reviewing non-functional requirements
- Defining and executing performance testing (using jMeter) and troubleshooting and resolving performance related issues
- Using web application security tools such as IBM AppScan to identify security issues
- Communicating security test results to technical and business stakeholders and working collaboratively to resolve security issues
- Performing installations, upgrades and system configuration testing, including confirming the accuracy of installation documentation and release notes
- Profiling the production software environment(s) and performing sociability testing

Defect Management

On a day-to-day basis the Quality Analyst will identify, report and prioritise defects, working with the Business Analysts, and coordinate with Developers to locate and assist in identifying and resolving software defects.

Process Improvements

From time-to-time, the Quality Analyst is expected to provide advice to the Development Manager on how processes and procedures may be improved to promote excellence in quality assurance and control.

System Knowledge

The Quality Analyst is expected to build, share and retain critical in-depth knowledge of the systems developed and maintained by AusRegistry, such as the Domain Name Registry System and Renewable Energy Certificate Registry System.

Development Process & Team Activities

The AusRegistry Development Team utilise an Agile development process based on Extreme Programming.

Selection Criteria

- IT related Bachelors degree or a equivalent mix of training and experience
- 2 years as a Quality Analyst/Tester
- Thorough knowledge of the principles of functional and non-functional testing
- Hands-on testing experience within a whole range of functional testing including UAT, acceptance and system testing, both manual and automated testing
- Experience in working with at least one automated testing tool, plus an interest in working with Open Source testing tools like jUnit, Selenium and Concordion
- Experience in performance testing tools like JMeter, as well as in troubleshooting and resolving performance related issues
- Experience in logging and tracking defects from open to close, using an issue tracking tools such as JIRA
- Experience in working in a Unix, Linux and Oracle RDB environment
- Experience in installing, upgrading, configuring and verifying (smoke tests) virtualised test environments (VMs)
- Familiarity with the principles of technical design and programming, both OO and procedural
- Experience in programming, familiar with at least one programming language, preferably Java
- Knowledge of web application and networking (TCP, Ports, Firewalls, etc.) security
- High level analytical and problem solving skills, with a demonstrated ability to investigate complex issues and make informed decisions about them when written guidelines are not necessarily available
- Excellent communication skills, both written and verbal, and a passion for working in highly collaborative environments
- Knowledge of Agile methodologies