Occupational Group: Information Technology Job Family: Quality Assurance Job Family Code: IQ

# IT QUALITY ASSURANCE

## **General Summary**

Responsible for managing the development, documentation, enhancement and maintenance of quality assurance and testing processes for assigned organizational areas.

IT Quality Assurance Analyst I

Jobcode: IQAA20 Pay Band: ID

FLSA Status: Non-exempt

#### Distinguishing Characteristics

Under direct supervision, verify correct functionality of software by testing and analyzing processes (applications and/or services). Escalates more complex issues discovered through the testing process to a higher-level resource.

## Recommended Education and Experience for Full Performance

Bachelor's degree in Computer Science, Management Information Systems (MIS), Information Technology, Engineering or similar technical degree and two (2) years of experience in systems or business analysis related to technology or systems quality assurance (QA). Any combination of education from an accredited college or university in a related field and/or direct experience in this occupation totaling six (6) years may substitute for the required education and experience.

#### Minimum Qualifications

Associate's degree in Computer Science, Management Information Systems (MIS), Information Technology, Engineering or similar technical degree and two (2) years of experience in systems or business analysis related to technology or systems quality assurance (QA). Any combination of education from an accredited college or university in a related field and/or direct experience in this occupation totaling four (4) years may substitute for the required education and experience.

#### Essential Duties and Responsibilities\*

- 1. Build and execute test cases for functional, regression, and/or performance testing; may include both backend and front-end testing of entire system, subsystems, and interfaces to other systems as needed.
- 2. Review, maintain and may build test plan, test cases; implement test strategy, test case design, test coverage, and traceability on assigned projects based on approved protocol.
- 3. Gather test requirements, and perform analysis of existing systems and new requirements.
- 4. Work proactively with analysts and development team in problem analysis and defect resolution.
- 5. Work with supervisors as needed to ensure integration testing is comprehensive and complete.
- 6. Report defects, defect status, and testing status accurately and concisely.
- 7. Drive test case design reflective of knowledge of quality assurance methodology and software development life cycles.
- 8. Demonstrate effective interpersonal skills to establish personal credibility and rapport with team members, management, and stakeholders. Communicate findings, results, requirements and timelines in an objective manner.
- 9. Coordinate user acceptance testing.

IT Quality Assurance Analyst II

Jobcode: IQAA23 Pay Band: IE

FLSA Status: Exempt

#### Distinguishing Characteristics

Under general supervision, verify correct functionality of software by testing and analyzing processes (applications and/or services). May serve as quality assurance lead.

#### Recommended Education and Experience for Full Performance

Bachelor's Degree in Computer Science, Management Information Systems (MIS), or Information Technology and four (4) years of experience in software programming, systems testing, or systems quality assurance (QA). Any combination of education from an accredited college or university in a related field and/or direct experience in this occupation totaling eight (8) years may substitute for the required education and experience.

#### Minimum Qualifications

Bachelor's degree in Computer Science, Management Information Systems (MIS), Information Technology, Engineering or similar technical degree and two (2) years of experience in software programming, systems testing, or systems quality assurance (QA). Any combination of education from an accredited college or university in a related field and/or direct experience in this occupation totaling six (6) years may substitute for the required education and experience.

#### Essential Duties and Responsibilities\*

- 1. Participate in component level design review and planning process to translate design requirements and project specifications into test suite and test plans.
- 2. Archive, maintain, and support all test artifacts for reuse on subsequent projects, including test environments, test data, and application instances as appropriate.
- 3. Create and maintain automated test suites using a working knowledge of scripting language.
- 4. Build and execute test cases for functional, regression, and/or performance testing; including both backend and front-end testing of entire system, subsystems, and interfaces to other systems as needed.
- 5. Review, maintain and build test plan, test cases; implement test strategy, test case design, test coverage, level of effort, and traceability on assigned projects based on approved protocol.
- 6. Gather and analyze test requirements, and perform analysis of existing systems and new requirements.
- 7. Work proactively with analysts and development team in problem analysis and defect resolution.
- 8. Ensure integration testing is comprehensive and complete.
- 9. Report defects, defect status, and testing status accurately and concisely.
- 10.Drive test case design reflective of knowledge of quality assurance methodology and software development life cycles.
- 11. Demonstrate effective interpersonal skills to establish personal credibility and rapport with team members, management, and stakeholders. Communicate findings, results, requirements and timelines in an objective manner.
- 12. Coordinate user acceptance testing.
- 13. Keep current of industry standards, evolving technologies and methodologies, and tools for quality assurance, development, and testing. Assist in the evaluation and selection of development and testing tools.
- 14. Apply experience with systems lifecycle tools, such as test bug tracking, and test and/or requirements management tools.

## IT Quality Assurance Analyst III

Jobcode: IQAA26 Pay Band: IF

FLSA Status: Exempt

#### Distinguishing Characteristics

Under minimal supervision, verify correct functionality of software by testing and analyzing processes (applications and/or services). Serve as quality assurance lead.

#### Recommended Education and Experience for Full Performance

Bachelor's Degree in Computer Science, Management Information Systems (MIS), or Information Technology and six (6) years of experience in software programming, systems testing, or systems quality assurance (QA). Any combination of education from an accredited college or university in a related field and/or direct experience in this occupation totaling ten (10) years may substitute for the required education and experience.

#### Minimum Qualifications

Bachelor's Degree in Computer Science, Management Information Systems (MIS), or Information Technology and four (4) years of experience in software programming, systems testing, or systems quality assurance (QA). Any combination of education from an accredited college or university in a related field and/or direct experience in this occupation totaling eight (8) years may substitute for the required education and experience.

#### Essential Duties and Responsibilities\*

- 1. Participate in entire software development lifecycle; become a domain expert on the system under test. Recommend development lifecycle process improvements for quality assurance.
- 2. Assist management with supervising and mentoring quality assurance team.
- 3. Lead the evaluation and selection of testing tools.
- 4. Participate with management in strategic planning for testing policies and procedures.
- 5. Participate in component level design review.
- 6. Build and execute test cases for functional, regression, and/or performance testing; including both backend and front-end testing of entire system, subsystems, and interfaces to other systems as needed.
- 7. Review, maintain and build test plan, test cases; implement test strategy, test case design, test coverage, level of effort, and traceability on assigned projects based on approved protocol.
- 8. Gather and analyze test requirements, and perform analysis of existing systems and new requirements.
- 9. Work proactively with analysts and development team in problem analysis and defect resolution.
- 10. Ensure integration testing is comprehensive and complete.
- 11. Report defects, defect status, and testing status accurately and concisely. Assume responsibility for local procedures pertaining to the defect tracking system, including defect creation, resolution, and status reporting.
- 12. Drive test case design reflective of knowledge of quality assurance methodology and software development life cycles.
- 13. Demonstrate effective interpersonal skills to establish personal credibility and rapport with team members, management, and stakeholders. Communicate findings, results, requirements and timelines in an objective manner.
- 14. Coordinate user acceptance testing.
- 15. Archive, maintain, and support all test artifacts for reuse on subsequent projects, including test environments, test data, and application instances as appropriate.
- 16. Create and maintain automated test suites using a working knowledge of scripting language.
- 17. Keep current of industry standards, evolving technologies and methodologies, and tools for quality assurance, development, and testing. Assist in the evaluation and selection of development and testing tools.
- 18. Apply experience with systems lifecycle tools, such as test bug tracking, and test and/or requirements management tools.

IT Quality Assurance Manager I

Jobcode: IQAX30 Pay Band: IG

FLSA Status: Exempt

## Distinguishing Characteristics

Manages a quality assurance team that verifies correct functionality of software by testing and analyzing processes (applications and/or services). Accountable for managing the development, enhancement and maintenance of quality assurance and testing processes for assigned organizational areas. May lead process improvement for immediate unit or program.

#### Recommended Education and Experience for Full Performance

Bachelor's Degree in Computer Science, Management Information Systems (MIS), or Information Technology and eight (8) years of experience in software programming, systems testing, or systems quality assurance (QA). Any combination of education from an accredited college or university in a related field and/or direct experience in this occupation totaling twelve (12) years may substitute for the required education and experience. At least two (2) years of leading/supervising QA team.

#### Minimum Qualifications

Bachelor's Degree in Computer Science, Management Information Systems (MIS), or Information Technology and six (6) years of experience in software programming, systems testing, or systems quality assurance (QA). Any combination of education from an accredited college or university in a related field and/or direct experience in this occupation totaling ten (10) years may substitute for the required education and experience. At least one (1) year of leading/supervising QA team.

#### Essential Duties and Responsibilities\*

- 1. Exercise full management responsibility for a technical group, including recruiting, hiring, training, developing, evaluating, and setting priorities.
- 2. Analyze and resolve complex issues and provide alternative solutions as necessary. Influence leadership on specific recommendations for current operations and future development.
- 3. Interpret, implement and ensure compliance with agency administrative policies and procedures. Recommend new internal policies, guidelines and procedures.
- 4. Approve technical changes, schedule projects and oversee timelines.
- 5. Implement and monitor quality standards.
- 6. Ensure work completion within schedule, budgetary, and design constraints; make decisions about analysis, design, and testing; solve complex technical problems; provide alternative methods for achieving goals when necessary.
- 7. Manage vendor relations.

Bargaining Unit: IT Quality Assurance Analyst I, II, III may be covered by a collective

bargaining agreement.

IT Quality Assurance Manager I not represented.

**Statutory Requirements:** 

#### **Conditions of Employment:**

**Working Conditions:** Working Conditions for individual positions in this classification will vary based on each *agency's utilization*, *essential functions* and the *recruitment needs* at the time a vacancy is posted. All requirements are subject to possible modification to reasonably accommodate individuals with disabilities.

## Established: 6/16/2016

**Revised:** 

<sup>\*</sup>Essential Duties and Responsibilities are intended to be cumulative for each progressively higher level of work. The omission of specific statements does not preclude management from assigning other duties which are reasonably within the scope of duties. Classification description subject to change. Please refer to SPO website (<a href="https://www.spo.state.nm.us">www.spo.state.nm.us</a>) to ensure this represents the most current copy of the position.

<sup>\*\*</sup> Means two (2) or any combination of full-time equivalent (FTE) status that equals at least two (2) regular or term status employees in non-temporary positions.