

Software Quality Assurance Manager

Position Details

Class Code: 1512

Job Family: Information Systems Classification: Support Professional

Terms of Employment: Pay Grade 64 on the Support Professional Salary Schedule

FLSA STATUS: NON-EXEMPT

Position Summary

Under general direction, responsible for managing new and existing quality assurance (QA) initiatives to increase quality of in-house developed or customized software delivered to customers.

Essential Duties and Responsibilities

This list of Essential Duties and Responsibilities is not exhaustive and may be supplemented.

- Determines QA strategy, methodology, and techniques addressing all phases of development; works with management to implement QA plans.
- 2. Participates in developing and reviewing the software development process.
- 3. Plans, schedules, supervises, and evaluates the work of assigned staff.
- 4. Oversees and ensures quality of bug reporting and test plans, cases, and matrices.
- 5. Responsible for managing the source code repository; establishes a baseline for each component, program, application, and system; maintains update history log; monitors development teams' submissions to repository for compliance with change control policies and reports variances to appropriate authority.

- 6. Responsible for managing automated software testing system to ensure proper installation, configuration, modification, and updates as required; serves as primary contact for testing system vendor.
- 7. Provides technical and operational support/services to development teams in support of software unit, functional, interface, and integration testing, test script development, self-assessment and improvement, streamlining processes, reengineering, and training; ensures quality assurance standards are met.
- 8. Evaluates software requirements to create/implement comprehensive test plans and scripts and load scripts, tests, and time effort estimates.
- 9. Tests programs and applications; identifies and verifies transactions from inception through posting to Clark County School District records.
- 10. Monitors, tracks, and reports test statuses/bug statistics to development teams and management.
- 11. Assists development teams in determining whether ambiguous testing errors originate in test scripts or programs/applications.
- 12. Analyzes programs/applications under development for control and operational weaknesses; assists with various development phases to ensure that controls are adequate before programs/applications become operational.
- 13. Reviews programs/applications before release for compliance with quality standards and objectives; reports findings to appropriate staff/management and recommends corrective actions.
- 14. Develops and maintains self-inspection checklists designed to examine compliance with quality standards, policies, and procedures.
- 15. Coordinates, interfaces, and serves as a liaison with divisions, departments, staff, vendors, and others to accomplish assigned work.
- 16. Works with District staff and outside auditors to ensure compliance with applicable policies, regulations, standards, and requirements.
- 17. Prepares and maintains quality assurance documentation/reports.
- 18. Conforms to safety standards, as prescribed.
- 19. Performs other duties related to the position, as assigned.

Distinguishing Characteristics

Involves major focus on best practices and management of automated software testing tools, test cases, and suites to ensure specification compliance and proper software functionality. Involves management of source code control and versioning tools, change control process, and continuous improvement with the goal of customer satisfaction and zero-defect software development.

Knowledge, Skills, and Abilities (Position Expectations)

- 1. Knowledge of and experience with software development lifecycle, programming, and systems analysis principles/procedures.
- 2. Knowledge of and experience with advanced principles of quality assurance and management.
- 3. Knowledge of project management principles and practices.
- 4. Knowledge of and experience with enterprise computing systems and landscapes including personal computer, server, and mainframe hardware/software products, capabilities, and interfaces.
- 5. Knowledge and experience with employee supervision principles/practices, including work planning, organization, training, performance review/evaluation, and discipline.
- 6. Knowledge of team motivation, development, and management.
- 7. Experience with automated testing tools and source-code control tools.
- 8. Experience with performing benchmark testing of client-server, web, and Windows applications including server and client hardware/software.
- 9. Experience in authoring QA methodologies and strategies to include white box, black box, and stress/load testing, test-case planning, documentation, and reporting.
- 10. Experience with different software development methodologies (i.e., waterfall, rapid application development (RAD), Agile, etc.)
- 11. Experience with testing in different programming language environments, (i.e., C#/ASP.NET, PHP, Java, etc.)
- 12. Ability to utilize and follow change control mechanisms in system landscapes to protect systems and information assets.
- 13. Ability to participate in application/service outage investigations; determines in which component malfunction(s) exist.
- 14. Ability to communicate verbal and written instructions clearly with different audiences.
- 15. Ability to prepare clear and concise reports, documentation, and other written materials; maintains organized and accurate records of work performed; assists in developing training materials/programs.
- 16. Ability to supervise, train, and evaluate assigned staff.
- 17. Ability to read and interpret complex and detailed program specifications.
- 18. Ability to coordinate multiple projects and meet predetermined deadlines.
- 19. Ability to read and interpret written/verbal instructions.
- 20. Ability to plan and organize work.

- 21. Ability to exercise judgment within established procedural guidelines.
- 22. Ability to maintain current knowledge of technology, applications, and practices.
- 23. Ability to work flexible hours or shifts.
- 24. Ability to be on-call for after-hours support.
- 25. Ability to work cooperatively with employees, vendors, contractors, outside agencies, and the public.
- 26. Ability to recognize and report hazards and apply safe work methods.
- 27. Possess physical and mental stamina commensurate with the responsibilities of the position.

Position Requirements

Education, Training, and Experience

- 1. High school graduation or other equivalent (i.e., General Educational Development (GED), foreign equivalency, etc.)
- 2. Bachelor's degree from an accredited college or university with major coursework in information systems, computer science, or a related field, and four (4) years of work experience in software testing, including experience in multi-platform environments such as mainframe, client/server, and web-based systems, utility tools, analysis, design, computer programming/operations, and the following technologies: Unix, Oracle, MS SQL, Windows, and electronic document management/workflow; or,
 - Associate's degree with major coursework in information systems, computer science, or a related field and six (6) years of experience as outlined above; or, Eight (8) years of work experience as outlined above.
- 3. Three (3) years of experience with automated testing and source code control tools, such as Quick Test Pro, Quality Center, Load Runner, Source Safe, CVS, SCLM, or similar.

Licenses and Certifications

A valid driver's license or state-issued identification card.

Preferred Qualifications

Certification in software testing such as those offered by International Software Testing Qualifications Board (ISTQB) or American Software Testing Qualifications Board (ASTQB) or similar.

Document(s) Required at Time of Application

- 1. Copy of a valid driver's license or state-issued identification card.
- 2. High school transcripts or other equivalent (i.e., GED, foreign equivalency, etc.)
- 3. College transcript(s), if applicable.
- 4. Specific documented evidence of training and experience to satisfy qualifications.

Examples of Assigned Work Areas

District facilities, and travel to and from schools and other District office settings.

Work Environment

Strength

Medium – exert force of 20-50 lbs., occasionally; 10-25 lbs., frequently; or up to 10 lbs., constantly.

Physical Demand

Frequent sitting, standing, walking, climbing, crawling, stooping, kneeling, crouching, reaching, handling, repetitive fine motor activities, talking, and hearing. Hearing and speech to communicate in-person, via video conference and computers, or over the telephone. Mobility to work in a typical office setting and use standard office equipment. Stamina to remain seated and to maintain concentration for an extended period of time. Frequent near and far acuity, depth perception, focal length change, and color vision. Vision to read printed and online materials, a Video Display Terminal (VDT) screen, or other monitoring devices.

Environmental Conditions

Varies from a climate-controlled office setting to work outdoors with temperatures ranging from mild/moderate to extreme cold/heat. Exposure to noise levels ranging from moderate to loud for occasional to frequent time periods.

Hazards

Furniture, playground/office equipment, communicable diseases, chemicals and fumes (as related to specific assignment), and power/hand-operated equipment and machinery (as related to specific assignment).

Examples of Equipment/Supplies Used to Perform Tasks

Various computers, monitors, printers, modems, servers, telephones, fax machines, copiers, etc.

AA/EOE Statement

The Clark County School District is proud to be an equal opportunity employer. The Clark County School District is committed to providing all applicants and employees equal employment opportunities without regard to race, color, religion, sex, gender identity or expression, sexual orientation, national origin, genetics, disability, age, military status, or other characteristics protected by applicable law. Here at Clark County School District, we are a diverse group of people who honor the differences that drive innovative solutions to meet the needs of our students and employees. We believe that through a culture of inclusivity, we have the power to reflect the community we serve.

Job Revision Information

Revised: 05/26/23Created: 08/20/10