CLASS TITLE: QUALITY ASSURANCE ANALYST

CHARACTERISTICS OF THE CLASS

Under supervision, works with the Application Development Team to test and ensure quality expectations are met and ensure high-quality software delivery by planning, implementing, and automating quality assurance testing; and performs related duties as required.

This class is assigned to the City's Analyst Information Technology Job Family which consists of analysts that work with stakeholders to identify and define needs/issues, document requirements, perform analysis, solve problems with fact-based analysis, and provide recommendations.

ESSENTIAL DUTIES

- Plans and implements testing (e.g., regression, functional, data validation, system integration, load, or performance tests) for new and existing functionality
- Works closely with development teams to design testing strategies and integrate testing into the development process
- Plans, creates, executes, and automates test cases, working with business partners, developers, and other stakeholders
- Documents and analyzes test results and recommends corrective action
- Isolates, reproduces, manages, and maintains defects and test case databases, and verifies fixes
- Designs, builds, prices, and enhances the service(s), as well as service delivery and cost recovery
- Writes test automation code and reports results
- Supports user acceptance testing conducted by business partners or end users
- Conducts exploratory testing and risk analysis for complex features, including those that span across platforms or teams
- Identifies opportunities to reduce testing time and effort by automating repeatable tests
- Enhances and maintains the test automation framework
- Applies automated testing approaches such as model-based testing or record-and-replay
- Researches, recommends, and implements new testing technologies and practices, such as incorporating machine learning
- Works with the business unit leadership to understand the business outcomes of the service, and with architects, technology brokers, and external service providers to understand the underlying technologies
- Defines and champions quality and testing best practices among development teams
- Tracks service KPIs to drive ongoing improvements in service delivery performance
- Collaborates and shares information with other software QA engineers by participating in a community of practice
- Reviews developers' test plans to ensure comprehensive coverage

NOTE: *The list of essential duties is not intended to be inclusive; there may be other duties that are essential to particular positions within the class.*

MINIMUM QUALIFICATIONS

Education, Training, and Experience

- Graduation from an accredited college or university with an Associate degree and one (1) year of quality assurance testing experience, or and equivalent combination of education, training, and experience.

Licensure, Certification, or Other Qualifications

- Preference may be given to applicants who possess professional software testing or quality assurance certification/credentials

WORKING CONDITIONS

- General office environment

EQUIPMENT

- Standard office equipment (e.g., phone, printer, copier, computers, mobile devices)
- Standard productivity suites (e.g., Microsoft Office Suite, OpenOffice, Google Workspace)

PHYSICAL REQUIREMENTS

- No specific requirements

KNOWLEDGE, SKILLS, ABILITIES, AND OTHER WORK REQUIREMENTS

Knowledge

Some knowledge of:

- *software development experience
- *writing test automation scripts
- *general industry standard programming/database languages
- *designing and implementing test plans
- *test management tools
- *test automation frameworks
- *agile practices and experience with agile planning tools
- *application performance monitoring and observability tools

Knowledge of applicable City and department policies, procedures, rules, and regulations

Skills

- ACTIVE LEARNING - Understand the implications of new information for both current and future problem-solving and decision-making
- ACTIVE LISTENING - Give full attention to what other people are saying, take time to understand the points being made, ask questions as appropriate, and not interrupt at inappropriate times
- CRITICAL THINKING - Use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems
- COMPLEX PROBLEM SOLVING - Identify complex problems and review related information to develop and evaluate options and implement solutions
- TIME MANAGEMENT - Manage one's own time or the time of others

- COORDINATION WITH OTHERS - Adjust actions in relation to others' actions
- JUDGEMENT AND DECISION MAKING - Consider the relative costs and benefits of potential actions to choose the most appropriate one
- SYSTEMS ANALYSIS - Determine how a system should work and how changes in conditions, operations, and the environment will affect outcomes

Abilities

- COMPREHEND ORAL INFORMATION - Listen to and understand information and ideas presented through spoken words and sentences
- SPEAK - Communicate information and ideas in speaking so others will understand
- COMPREHEND WRITTEN INFORMATION - Read and understand information and ideas presented in writing
- WRITE - Communicate information and ideas in writing so others will understand
- CONCENTRATE - Concentrate on a task over a period of time without being distracted
- RECOGNIZE PROBLEMS - Tell when something is wrong or is likely to go wrong
- REASON TO SOLVE PROBLEMS - Apply general rules to specific problems to produce answers that make sense
- COME UP WITH IDEAS - Come up with a number of ideas about a topic
- MAKE SENSE OF INFORMATION - Quickly make sense of, combine, and organize information into meaningful patterns
- REACH CONCLUSIONS - Combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events)

Additional Competency Requirements

- COMMUNICATION FOR RESULTS – Writes, speaks and presents effectively. Explains the immediate context of the situation, asks questions with follow-ups and solicits advice prior to taking action. Develops presentations to influence others by using graphics, visuals or slides that display information clearly. Listens and asks questions to understand other people's viewpoints.
- GROWTH MINDSET – Takes ownership of personal growth. Identifies knowledge gaps. Asks questions of subject matter experts and seeks help when needed. Keeps abreast of information, developments and best practices within a field of expertise (e.g., by reading, interacting with others or attending learning events).
- INITIATIVE – Volunteers to undertake tasks that stretch his or her capability. Identifies who can provide support and procures their input. Identifies problems and acts to prevent and solve them.
- OWNERSHIP AND COMMITMENT – Volunteers to undertake tasks that stretch his or her capability. Checks the scope of responsibilities of self and others. Monitors day-to-day performance and takes corrective action when needed to ensure desired performance is achieved. Identifies problems and acts to prevent and solve them. Identifies who can provide support and procures their input.
- CONSULTING – Shares information regarding procedures and routine activities. Provides guidance and advice. Suggests caution as appropriate. Asks questions that raise awareness and demonstrate insight.

- DESICSION MAKING – Applies values, policies and procedures to make timely, routine decisions of limited, clear choice. Seeks instructions or escalates matters that require judgment.

- INFORMATION SEEKING – Gathers and analyzes information or data on current and future trends of best practice. Uses appropriate tools, techniques and sources to gather, update and monitor information. Checks for accuracy of interpretation. Seeks out the appropriate people for guidance when needed, depending on the type of issue.

- PROBLEM SOLVING – Asks questions and looks for data that helps to identify and differentiate the symptoms and root causes of everyday, defined problems. Suggests remedies that meet the needs of the situation and those directly affected. Escalates issues appropriately.

- PROCESS ORIENTATION – Understands key work processes within own functional area. Follows defined processes as required to accomplish assigned work. Identifies opportunities for process improvement and modifies own work style and approach to incorporate changes.

- QUALITY MANAGEMENT – Understands the principles of quality techniques, standards and measurements and uses them in own area of work. Is able to use techniques to evaluate a set of requirements and adjust as needed. Can analyze results and apply meaning to own work.

- THOROUGHNESS – Applies attention to detail to routine tasks defined in formal, written procedures and oral instructions. Seeks guidance on the quality and the degree of completion required to complete new tasks. Reprioritizes, as new deadlines are set. Responds constructively to customer feedback on task output.

Other competencies as required for successful performance in the lower-level series.

All employees of the City of Chicago must demonstrate commitment to and compliance with applicable state and federal laws, and City ordinances and rules; the City's Ethics standards; and other City policies and procedures.

The City of Chicago will consider equivalent foreign degrees, accreditations, and credentials in evaluating qualifications.

* May be required at entry.

City of Chicago
Department of Human Resources
March 2023