CLASS TITLE: WEB DEVELOPER

CHARACTERISTICS OF THE CLASS

Under general supervision, functions as a technical expert in the design, development, implementation, and maintenance of computer applications for web-enabled business systems, and performs related duties as required.

This class is assigned to the City's Engineering Information Technology Job Family which consists of engineers and developers responsible for designing, building, testing, deploying, and supporting IT products and solutions.

ESSENTIAL DUTIES

- Gathers, documents, and analyzes business requirements in order to define the scope of web-based software applications

- Performs system analysis and system design functions for highly difficult web-based software applications and systems

- Designs, develops, implements, and maintains complex software programs and procedures designed to meet business information and business process automation needs

- Monitors computer applications to determine conformance with requirements (e.g., user, security, performance, reliability, and maintainability)

- Modifies and maintains computer programs, procedures, and databases to conform to business and process changes and to technology, security, infrastructure, or other environmental changes

- Troubleshoots and corrects complex software malfunctions

- Employs industry-standard processes to test and implement defect-free, high-quality software applications that meet system load, system performance, and system reliability requirements

- Produces documentation of various types associated with software applications (e.g., scope requirements, logical designs, technical designs, test plans, etc.)

- Recommends upgrades to current computer systems based on various factors (e.g., business needs, availability of new technology, etc.)

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

- Three (3) years of work experience in the design and development of computerized systems, including at least one year in designing, coding, and implementing public-facing production websites and interactive web applications, or an equivalent combination of education, training, and experience.

Licensure, Certification, or Other Qualifications

- One year of experience designing, coding, and implementing public-facing production websites and interactive web applications with relational databases (e.g., PostgreSQL, MySQL, Oracle Enterprise Database, etc). **is preferred**

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

Considerable knowledge of:

- *applicable computer programming languages and software packages
- *programming logic and data manipulation
- *methods and techniques of database analysis and design
- *computer operating systems
- *methods, practices and procedures for analyzing business needs
- *methods, practices and procedures for analyzing and resolving computer and software related problems
- *designing, constructing and implementing web-based software applications and tools

Moderate knowledge of:

- *computer systems administration and management
- *IT systems development practices, standards, and procedures, including Agile Software Development practices
- *technical project management practices
- *web application usability, presentation, and interface design practices
- *business system documentation methods, practices, and procedures

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.
- 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.

- BUSINESS FUNCTION KNOWLEDGE – Assesses the needs of primary business functions. Suggests technical solutions for business functions, and implements action plans to improve ongoing business performance in ways that minimize day-to-day disruption of operations.

- CHANGE ADVOCATE – Supports change initiatives by following new directions as directed and providing appropriate information. Asks for feedback and ideas on how to do a better job and tries new approaches.

- CUSTOMER PARTNERSHIP – In response to requests for new types of assistance, refers representatives of the customer to the appropriate IT contact. Gathers information about customers' business and technology products and services. Solicits customer recommendations for improved day-to-day functionality and translates simpler recommendations into technical business requirements.

- CUSTOMER SERVICE – Asks questions in response to customers' requests for assistance on day-to-day needs. Responds promptly and courteously. Updates customers on progress. Solicits support and guidance as needed and refers/escalates customer requests appropriately. Applies attention to detail to routine tasks defined in formal, written procedures and oral instructions. Responds constructively to customer feedback on task output.

- INFORMATION SEEKING – Asks questions and solicits procedural information that explains how day-to-day tasks are conducted. Collates facts and data. Checks and monitors progress of activities in area of responsibility. Seeks out the appropriate people for guidance when needed to get things done.

- STRATEGIC THINKING – Resolves routine issues related to strategy implementation. Escalates issues identified as impacting the customer or strategic initiatives.

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