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

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 years of 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 using the Java programming language and framework

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**

- One year of experience with HTML, CSS and JavaScript **is preferred**

WORKING CONDITIONS

- General office environment

EQUIPMENT

- Standard office equipment (e.g., telephone, printer, photocopier, fax machine, calculator)
- Personal computers and peripheral equipment (e.g., desktop computer, laptop computer, hand-held computer, computer terminals, scanner)
- Local area/wide area communications network

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, taking 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
- *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
- *SYSTEMS EVALUATION - Identify measures or indicators of system performance and the actions needed to improve or correct performance relative to the goals of the system
- *PROGRAMMING – Write computer programs for various purposes
- *TECHNOLOGY DESIGN – Generate or adapt equipment and technology to serve user needs
- *TROUBLESHOOTING – Determine causes of operating errors and decide what to do about it

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
- REASON TO SOLVE PROBLEMS - Apply general rules to specific problems to produce answers that make sense
- MAKE SENSE OF INFORMATION – Quickly make sense of, combine, and organize information into meaningful patterns

Other Work Requirements

- INITIATIVE – Demonstrate willingness to take on job challenges
- LEADERSHIP – Demonstrate willingness to lead, take charge, and offer opinions and direction
- DEPENDABILITY – Demonstrate reliability, responsibility, and dependability and fulfill obligations
- ATTENTION TO DETAIL – Pay careful attention to detail and thoroughness in completing work tasks
- ANALYTICAL THINKING - Analyze information and using logic to address work or job issues and problems
- INNOVATION – Think creatively about alternatives to come up with new ideas for and answers to work-related problems

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
April, 2012

Minimum Qualifications revised July, 2014