Job Description

Please note this job description is not designed to cover or contain a comprehensive listing of activities, duties, or responsibilities that are required of the employee for this job.

Job title	Applications Developer I/II

GENERAL PURPOSE

Under general supervision (Applications Developer I) to direction (Applications Developer II) codes, tests, and debugs software applications; modifies and enhances existing programs, scripts, and documentation; analyzes and translates business requirements; works with technology staff to perform end-user testing, change management, and systematically deploy new application releases; assists in training end users in implementing new applications; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

Applications Developer I: This is the entry-level classification in the Applications Developer series. Initially under close supervision, incumbents perform the more routine programming and coding tasks while becoming familiar with the District's information technology environment and practices. As experience is gained, assignments become more varied, complex, and difficult; close supervision and frequent review of work lessen as an incumbent demonstrates skill to perform the work independently. Positions at this level usually perform most of the duties required of the positions at the Applications Developer II level but are not expected to function at the same skill level and usually exercise less independent discretion and judgment in matters related to work procedures and methods. Work is usually supervised while in progress and fits an established structure or pattern. Exceptions or changes in procedures are explained in detail as they arise.

Applications Developer II: This is the fully qualified journey-level classification in the Applications Developer series. Positions at this level are distinguished from the Applications Developer I level by the performance of the full range of duties as assigned, working independently, and exercising judgment and initiative. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit. This class is distinguished from the Senior Applications Engineer in that the latter performs the more complex work assigned to the series, serves in a project lead capacity on an ongoing basis, and/or provides technical and functional direction over lower-level staff.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision (Applications Developer I) to direction (Applications Developer II) from assigned supervisory or management personnel. Exercises no direct supervision over staff.

TYPICAL DUTIES AND RESPONSIBILITIES

The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this position.

Positions at the Applications Developer I level may perform some of these duties and responsibilities in a learning capacity.

➢ Assists technology staff with translating system specifications into logical processes to prepare detailed system designs or enhancements; conducts system analysis and programming of applications or enhancements, using applicable business and scientific programming languages; designs screens, utility programs, supporting scripts, and documentation.

➢ Meets with users; studies application requirements within assigned area of responsibility; prepares documentation and drawings for coding and logic flow; using designated programming languages, writes, edits, debugs, and revises program code for application modifications, conversions or enhancements.

➢ Researches methods to meet end-user requirements; designs and documents screens, utility programs, and menus; conducts research to determine and apply recommended computer programming principles, techniques, and procedures.

➢ Designs, edits, writes, tests, documents, and implements system maintenance, software upgrades and conversions, program modifications, and enhancements; maintains database files.

➢ Assists technology staff in the design and development of end-user reports as well as implementing and supporting back-office reports.

➢ Works with assigned testers and the Quality Assurance division to execute test plans, ensuring performance, outcomes, and security are within specification; modifies or assists in modifying programs to correct identified issues.

➢ Performs nightly version control and change control to ensure all assets are available to the software development and QA/QC team.

➢ Performs peer code reviews by analyzing structure, clarity, input validation, documentation, and security.

➢ Conducts program and feature testing duties; develops and executes testing plans to determine program functionality; resolves any programming issues.

➢ Creates and maintains software documentation; trains and assists technical and clerical employees with systems enhancements.

➢ Ensures applications operate in a fully automated fashion and require minimal intervention, maximizing the District's technology investment.

➢ May share on-call responsibility within the programming group for critical system support.

➢ Observes and complies with all District and mandated safety rules, regulations, and protocols.

➢ Performs related duties as assigned.

REQUIRED QUALIFICATIONS

Positions at the Applications Developer I level may exercise some of these knowledge and abilities statements in a learning capacity.

Knowledge of:

➢ Computer programming principles, techniques, and procedures for business and technical system applications.
➢ Principles, practices, framework and a diverse range of programming languages used in software development.
➢ Asynchronous application program concepts and methods.
➢ Theory and concepts of Development and Operations (DevOps) as it relates to the development and deployment of software.
➢ Fundamental web development principles, practices, methods and protocols.
➢ Methods, techniques and tools used in browser development and multiple browser compatibility including responsive design principles.
➢ Design principles and systems development methodologies to ensure efficient systems operation and maintenance.
➢ Multiple testing methods used in software development to determine functionality and reliability.
➢ Methods and techniques of preparing work-process flow diagrams.
➢ Cross browser compatibility, responsive design principles, browser development tools, and asynchronous application programming.
➢ Basic principles and practices of database development including query languages, entity relationship diagrams (ERD's), stored procedures and database security methods.
➢ Functions, capabilities, characteristics, and limitations of standard computers, mobile devices, and related equipment.

➢ Basic accounting, statistical, business, and office procedures commonly supported by line-of-business applications.
➢ District and mandated safety rules, regulations, and protocols.
➢ Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and District staff.
➢ The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
➢ Modern equipment and communication tools used for business functions and program, project, and task coordination, including computers and software programs relevant to work performed.

Ability to:

➢ Understand and apply user systems specifications in writing program code.
➢ Perform coding in multiple languages and work in both a Windows and OS X based development environment.
➢ Prepare work flow diagrams to document business processes.
➢ Troubleshoot and resolve applications functionality and reliability issues.
➢ Complete project responsibilities and programming assignments efficiently and in accordance with District standards.
➢ Prepare clear and concise program documentation.
➢ Work collaboratively and effectively as a project team member.
➢ Train others on work practices and procedures.
➢ Independently organize work, set priorities, meet critical deadlines, and follow-up on assignments.
➢ Use tact, initiative, prudence, and independent judgment within general policy and procedural guidelines.
➢ Understand and carry out written and oral instructions.
➢ Effectively use computer systems, software applications relevant to work performed, and modern business equipment to perform a variety of work tasks.
➢ Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
➢ Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Experience:
Any combination of experience and education that provides the required knowledge and abilities is qualifying, along with the specific licenses/certifications as outlined below:

➢ Applications Developer I: Three (3) years of professional programming experience supporting diverse and comprehensive technology systems.

➢ Applications Developer II: Five (5) years of progressively responsible professional programming experience supporting diverse and comprehensive technology systems, or two (2) years of experience as a Applications Developer I with the District.

Education:

➢ Applications Developer I/II: Equivalent to a bachelor's degree from an accredited college or university with major coursework in computer science, programming, or a related field.

Licenses/Certifications:

➢ None.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone. This is primarily a sedentary office classification although standing in work areas, walking between work areas may be required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects up to 25 pounds.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Employees work in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.

FLEX REQUIREMENTS

Positions in the Applications Developer I/II class series are flexibly staffed; positions at the Applications Developer II level are normally filled by advancement from the Applications Developer I level; progression to the Applications Developer II level is dependent on (i) management affirmation that the position is performing the full range of duties assigned to the classification; (ii) satisfactory work performance; (iii) the incumbent meeting the minimum qualifications for the classification including any licenses and certifications; and (iv) management approval for progression to the Applications Developer II level.

This job description has been reviewed and approved by all levels of management in cooperation with the union (if applicable):

Approved by:	*Board of Directors*
Date adopted:	*March 29, 2020*
Date modified:	
FLSA determination:	*Exempt*

Job Description Acknowledgment

I have received, reviewed, and fully understand the job description for Applications Developer I/II. I further understand that I am responsible for the satisfactory execution of the essential functions described therein, under any and all conditions as described.

Employee Name (print): _____ *Date:* _____

Employee Number: _____

Employee Signature: _____