GENERAL PURPOSE

Under the supervision of a Senior Software Engineer, 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

A Programmer I/II performs assigned responsibilities for programming, testing and implementing web and client/server-based applications; modifies and enhances existing applications to meet District requirements and works to maximize user and administrative efficiencies.

Programmer II is distinguished from Programmer I in that incumbents in the former class typically perform more in-depth analysis and translation of business requirements.

Programmer II is distinguished from Senior Software Engineer by the latter’s development and maintenance of programming standards, means, and methods, as well as the supervision of others.

ESSENTIAL 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 class.

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 applications modifications, conversions or enhancements.

Researched methods to meet end user requirements; designs and documents screens, utility programs and menus. Reads and studies manuals 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.

Performs related duties as assigned. May share on-call responsibility within the programming group for critical system support.

**DESIRED MINIMUM QUALIFICATIONS**

**Knowledge of:**

Computer programming principles, techniques and procedures for business and technical system applications, including design principles and systems development.
methodologies to ensure efficient systems operation and maintenance; standard programming languages and utilities similar to those used by the District; standard software development tools and utilities; basic 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.

Ability to:

Understand and apply user systems specifications in writing program code; to code in multiple languages; complete project responsibilities and programming assignments efficiently and in accordance with District standards; prepare clear and concise program documentation, assembles work reports, and other written materials; make sound independent decisions within established guidelines; understand and follow written and oral work instructions; communicate clearly and concisely, orally and in writing; work collaboratively and effectively as a project team member; operate a computer platform and peripheral equipment on a backup basis; establish and maintain effective working relationships with those contacted in the course of work.

Training and Experience:

A typical way of obtaining the knowledge, skills and abilities outlined above is graduation from a regionally accredited college or university with a bachelor’s degree (BS) in computer science or programming; practical experience in writing program code; or a combination of training and three years of .NET programming experience.

PHYSICAL AND MENTAL DEMANDS

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

Physical Demands

While performing the duties of this class, employees are regularly required to sit; talk and hear, in person and by telephone; use hands repetitively to finger, handle, feel or operate standard office equipment; and reach with hands or arms. Employees are frequently required to walk and stand and occasionally to lift up to 25 pounds.

Specific vision abilities required by this job include close vision and the ability to adjust focus.

Programmer I/II Flex
Mental Demands

While performing the duties of this class, employees are regularly required to use oral and written communication skills; read and interpret data, information and documents; analyze and solve problems; use math and mathematical reasoning; learn and apply new skills or information; perform highly detailed work on multiple, concurrent tasks; work effectively as a team member; and interact with District end users, employees, vendors and other encountered in the course of work.

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 under typical office conditions, and the noise level is moderately quiet. When providing backup to computer operations staff, employees work in a computer room environment where the noise level is occasionally moderately noisy.

FLSA DETERMINATION: Meets the administrative/computer exemption from overtime
FLEX REQUIREMENTS
Programmer I (Flex)
Programmer II

REQUIREMENTS

A Programmer I may advance or “flex” to the Programmer II class after 6-24 months of experience in the Programmer I class and successfully passing Microsoft Exam 70-480, Programming in HTML5 with JavaScript and CSS3.

PERFORMANCE RATING

In addition to the requirements listed above, incumbents must receive an overall performance rating of, “Meets Expectations” or better on their most recent annual performance evaluation to flex to the higher class.

COMMENTS

The Programmer I must also demonstrate proficiency developing, debugging, and enhancing web-based .NET/ASP.NET applications; working with peers and customers to deliver solutions that meet business needs; developing and helping implement operational improvements; documenting work performed; providing customer service that exceeds expectations. A Bachelor’s degree in computer science and/or Microsoft Certified Solutions Architect: Web Applications certification is desired, but not required.

A passing score on Microsoft Exam 70-480, Programming in HTML5 with JavaScript and CSS3, is required for all employees flexing to the Programmer II classification after April 10, 2017.