Analyst I-Programmer

DEFINITION:

Under the supervision of the Director-Information Services, leads and participates in programming, coding, testing and maintaining assigned computer systems and programs; maintains, enhances, upgrades, and secures District data systems; assists in prioritizing and managing programming requests; analyzes needs, evaluates, and designs systems and programs; assists end-users in the operation of systems; performs related work as required; trains and provides work direction to assigned personnel.

DISTINGUISHING CHARACTERISTICS:

The Analyst I- Programmer is the first level in the series. Incumbents program, code, test and maintain assigned computer systems and programs. The Analyst II- Programmer conducts more advanced programming, coding, testing and maintenance of computer systems and programs. The Analyst III - Programmer serves as a lead for large District programming projects. Incumbents oversee and implement programming functions for District-wide software.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following. Other duties may be assigned.

- Participates in programming, coding, testing and maintaining assigned computer systems and programs; troubleshoots, identifies and evaluates system and program problems and malfunctions; diagnoses and provide solutions or routes complex problems to appropriate personnel as needed.
- Reviews, analyzes and modifies existing systems and programs as necessary; prioritizes and responds to help desk work requests concerning existing computer systems and programs; compiles and edits programs and make necessary adjustments.
- Assists with SQL scripts and procedures necessary to maintain databases.
- Develops complex applications, queries, forms and reports to support instructional and operational needs of the District.
- Installs, configures and tests software applications and system interface programs.
- Designs, develops and implements new system applications, custom software systems and architecture for databases as appropriate; consults with users to provide technical support and to determine systems and program requirements and objectives.
- Maintains, monitors and analyzes District data systems security; troubleshoots technical problems, and responds to District needs for growth in storage and services.
- Participates in the development of specifications for hardware and software systems; coordinates, designs and implements in-house requests for new software functionalities.
- Evaluates, prioritizes, and coordinates programming requests and support activities; assure productive and sustainable use of resources.
- Analyzes data processing procedures, systems, and organizational structure; recommends, designs, and implements solutions to increase process automation, improve data integrity, and enhance system functionality.
- Communicates with administrators, department staff, vendors, service providers and other outside organizations to coordinate activities, resolve issues and to set up online payments.
- Prepares and maintains a variety of records and reports related to assigned activities.
- Operates a variety of office equipment including a computer and assigned software.
- Drives a vehicle to various sites to troubleshoot software and hardware related problems.
- Attends and participates in meetings, conferences and in-service trainings; maintains current knowledge of technological advances and industry trends.

QUALIFICATIONS GUIDE

Knowledge of:

- Principles, practices and techniques of data base structures, computer programming and system design.
- Advanced computer programming systems, utilities and applications utilized.

- Applicable programming languages.
- Methods and procedures of operating computers and peripheral equipment.
- Principles and techniques of systems analysis.
- Technical aspects of field of specialty.
- Techniques of testing and debugging computer programs.
- Record-keeping and report preparation techniques.
- Interpersonal skills using tact, patience and courtesy.
- Oral and written communication skills.

Ability to:

- Program, code, test and maintain assigned computer systems and programs.
- Review, analyze and modify existing systems and programs as necessary.
- Design, develop and implement new system applications as appropriate.
- Modify and participate in the development of SQL queries and stored procedures.
- Research and compile application and system requirements for software customization.
- Troubleshoot and repair system malfunctions.
- Provide technical assistance to computer systems users.
- Detect errors in data and program structure, logic and coding.
- Test and de-bug programs for accuracy and reliability.
- Communicate effectively both orally and in writing.
- Establish and maintain cooperative and effective working relationships with others.
- Maintain records and prepare reports.
- Understand and follow oral and written instructions.
- Meet schedules and time lines.
- Work independently with little direction.
- Prioritize and schedule work.

EDUCATION/EXPERIENCE:

Any combination equivalent to: bachelor's degree in computer science, information systems or related field and one - two years increasingly responsible programming experience.

LICENSES AND OTHER REQUIREMENTS:

Valid California Class C driver's license.

PHYSICAL DEMANDS:

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

- Hearing and speaking to exchange information in person or on the telephone.
- Seeing to view a computer monitor.
- Dexterity of hands and fingers to operate a computer keyboard.
- Lifting, carrying, pushing and pulling objects up to 25 pounds.
- Bending at the waist, kneeling or crouching.

WORK ENVIRONMENT:

Indoor/Office environment. The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The noise level in the work environment is usually moderate.

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