JOB DESCRIPTION
Senior Solutions Engineer
Code Number: 10036

GENERAL PURPOSE

Under the direction of the Business Solutions Manager, develops processes and standards by which IT projects are conducted, enforces IT architecture standards, and makes decisions regarding which District-supported technologies will be leveraged for each project. Ensures the Business Solution team deliverables are timely, complete, properly architected, and have been reviewed for organization and accuracy. The Senior Solutions Engineer leads and mentors a team of professionals who interview end-users, vendors and partners, synthesizing requirements and creating a system design that is secure, supportable, and makes the best use of District resources.

DISTINGUISHING CHARACTERISTICS

A Senior Solutions Engineer provides guidance and mentorship to analysts, ensuring consistent interview, requirement development, specification, and documentation techniques.

A Senior Solutions Engineer is distinguished from a Programmer or Analyst in that incumbents in the former class are responsible for the development and enforcement of project specification and requirement standards, means, and methods.

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.

Develops and enforces the methodology by which District IT projects are defined, documented, and delivered. Reviews and provides guidance to business units during the research and selection phase for all major software implementations.

Works with the Senior Software Engineer to establish and enforce architectural standards that form the basis of all technology projects.
Defines, communicates, and enforces EMWD’s programming methodology to include contractors and business partners. Oversees the day-to-day operation of the Solutions Engineering team, including oversight of deliverable timeliness, quality, and security. Schedules, reviews, and assigns work to the Solutions Engineering team.

Leads complex application and interface development, enhancement, conversion, installation and/or maintenance tasks or projects in support of the District’s business applications; plans, organizes and defines scope, requirements, methods, end user objectives, schedules and priorities; coordinates activities with user representatives and outside vendors or consultants.

Interfaces with Programmers and other technical staff to ensure functional requirements, specifications, and interface design are fully understood and executed according to the documented design.

Conceptualizes and implements solutions using off-the-shelf applications, business process management (BPM) tools, as well as custom applications where appropriate.

Reviews anomalous test and quality control results to determine cause, recommend, and implement corrective action if necessary.

Promotes effective teamwork through regular communication and regularly solicits input from supervised staff.

Performs the final quality check and, working with others in the Business Solutions group, authorizes the release of final specifications to technical project team members.

Evaluates and tests vendor software packages for conformance with user requirements and District software standards, ensuring compatibility, interconnectivity and ease of maintenance; evaluates vendor software packages by reviewing documentation, interviewing users and testing the application in a demonstration environment; develops and presents design and technology alternatives; recommends the purchase or development of software to achieve user objectives consistent with District standards.

Provides ongoing project close-out support; identifies and evaluates gaps in documented functionality to efficiently resolve problems. Gives final sign-off on all project documentation and authorizes the promotion of applications to production.

Performs related duties as assigned. May share on-call responsibility within the solutions engineering team for critical project support.

**DESIRED MINIMUM QUALIFICATIONS**
Knowledge of:

Principles, methods and techniques in the design and operation of information systems for platforms equivalent to those used by the District; principles and practices of systems analysis and design, including database design and management and methods of ensuring efficient systems operation and maintenance; computer programming principles, techniques and procedures for business and technical system applications; standard business and scientific programming languages and utilities similar to those used by the District: hardware and operating system architectures; standard software development tools and utilities; project planning, prioritizing and scheduling techniques; systems troubleshooting principles and practices; testing methodologies; graphical user interfaces.

Ability to:

Analyze and define user problems and requirements and develop efficient, cost effective solutions; conduct information systems and procedures analysis and feasibility studies; analyze complex problems, evaluate alternatives and make sound recommendations; organize, plan and complete applications development projects efficiently and in accordance with District quality standards; prepare clear, concise and accurate program documentation, user procedures, reports of work performed, and other written materials; troubleshoot hardware and software problems and make or recommend modifications; make sound independent decisions within established guidelines; communicate clearly and effectively orally and in writing; 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 an accredited college or university with a bachelor's degree in computer science, mathematics or a closely related field; and five years of progressively responsible experience in application and interface development, systems analysis and design; or an equivalent combination of training and experience.

Demonstrated experience interviewing end-users, creating specifications, requirements, project plans, and leading technical project teams on large-scale software implementation projects is required.

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 or 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.

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 under changing deadlines with frequent interruptions; work effectively as a team member; and interact with District end users, employees, consultants, 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.
FLSA DETERMINATION: Meets the administrative/computer exemption from overtime