JOB DESCRIPTION
Senior Database Administrator
Code Number: 10010

GENERAL PURPOSE

Under direction, serves as database administrator for District systems applications; serves as an expert technical resource to Information Systems staff on database architecture, design and administration; recommends and maintains department standards for database design and data administration; maintains responsibility for systems security; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

Senior Database Administrator is distinguished from Database Administrator II in that incumbents in the former class are typically a technical expert in multiple specialties, demonstrate a high-level of competence, work with a significant degree of independence, manage complex systems applications or databases that are enterprise wide and/or provide lead direction over 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.

Oversees and participates in the physical design of database formats for user front-end entry and inquiry; creates standard database and database menu formats, designs database structures, by writing and compiling database programs and assisting with Information Systems department staff using SQL and related database/programming languages; captures basic requirements, performs logical design, implements design using established techniques.

Oversees and performs database management and administration tasks; creates and maintains user accounts, roles and access privileges; troubleshoots database and data administration problems to identify the source of problems and performs or requests fixes or repairs; provides database infrastructure support in data warehousing and transaction processes; ensures database capacity.

Installs and executes programs and scripts to upgrade database structures for existing applications; monitors and tunes database applications for optimal performance; performs backup and recovery tasks.

Works with other Information Systems staff, technical specialists from other departments, vendors and end users to evaluate conceptual design alternatives and establish optimal physical designs to support major applications requirements and multi-platform/networked systems installations.

Participates in developing or refining hardware, software, data/database and network specifications; evaluates and tests vendor products for conformance with District requirements and standards; may participate in recommending the selection and purchase of hardware and software.

Performs database upgrades and software version management; may lead small projects that relate to database or system upgrades or patches.

Monitors trends and developments in database design and data administration technologies; provides technical support to project study and development committees.

Works with vendors, users, application developers, and management to obtain information and develop an understanding of needs and recommends potential solutions utilizing relational technology.

Applies a very high degree of expertise and specialized knowledge of database management techniques which facilitate and expedite the usability, consistency, accuracy, integrity, security, timeliness, and availability of data.

Approves the access to resources and data.

Works with other Information Systems staff, technical specialists from other departments, vendors and end users to evaluate conceptual design alternatives and establish optimal physical designs to support major applications requirements and multi-platform/networked systems installations.

Participates in the resolution of production problems that involve database issues; oversees the migration of database components between the test and production environments; ensures the continued cost effective performance of the database management system and related applications.

Provides daily work instructions, guidance, and performance feedback to team members when assigned; gives input for team member performance appraisal.

Assists in preparing budget requests to meet District requirements.

In the role of Project Leader:

Works on or assigns team members to work on information technology projects including hardware, software, and network components; oversees and participates in the overall implementation of projects.

Leads a project team, oversees and participates in project management process groups of initiating, planning, executing, monitoring and controlling, and closing.

Determines high-level project requirements, business needs, purpose or justification; and identifies stakeholders and functional area participation.

Refines project requirements, scope, objectives, deliverables, acceptance criteria, constraints, assumptions and alternative solutions; creates work breakdown structures and/or network diagrams; performs definition, sequencing, resource estimating, and duration estimating of project activities for overall schedule development; estimates activity costs and overall project budget; develops quality plans; identifies and documents project roles and responsibilities; determines information and communication needs of stakeholders; identifies risks and performs risk analysis and response planning; plans purchases, acquisitions and contracting services.

Performs activities to accomplish project objectives, collects project data and reports cost, schedule, technical and quality progress, and status information; ensures quality assurance; acquires and develops project team; makes needed information available to stakeholders; obtains and reviews quotations, bids, offers or proposals from sellers.

Collects, measures, and disseminates performance information; assesses measurements and trends for process improvements; reviews, approves and controls changes to deliverables; verifies and controls scope, schedule, costs, quality and risks; manages communications with stakeholders to satisfy requirements and resolve issues; performs contract administration.

Closes out all project activities, analyzes project success or failure, gathers lessons learned; monitors early operations and captures issues and archives project information for future use.

Performs related duties as assigned.

DESIRED MINIMUM QUALIFICATIONS

Knowledge of:

Principles, methods and techniques in the design and operation of information systems for mid-range computers and platforms equivalent to those used by the District, including operating system architecture, characteristics and commands; principles, practices and methods of systems administration and maintenance; network architecture and principles of communications and connectivity; relational database theory, functionality and applications development forms; principles and practices of database design; principles and practices of systems analysis and design; computer programming principles, techniques and procedures for business and technical system applications; standard programming languages and utilities similar to those used by the District; software development tools and utilities; computer-assisted software engineering tools and procedures; project planning, prioritizing and scheduling techniques; systems trouble-shooting principles and practices; basic accounting, statistical, business and office procedures commonly supported by system applications; project management.

Ability to:

Lead a database administration team; analyze and define requirements and recommend efficient, cost-effective database structures and data administration methodologies; organize, plan and complete projects efficiently and in accordance with District quality standards; prepare clear, concise and accurate database documentation, user guides, reports of work performed, and other written materials; troubleshoot database and related network, hardware and software problems and make or recommend modifications; ensure database capacity; design and implement database security measures; organize, plan, and complete projects efficiently and in accordance with District quality standards; work collaboratively in a project team environment; make sound, independent decisions within established guidelines; communicate clearly and effectively orally and in writing; follow and apply written and oral instructions; 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, or a closely related field; and four years of progressively

responsible experience in systems analysis, design and administration; or an equivalent combination of training and experience. A Master's degree in computer science or business is desired, but not 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 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 to regularly lift up to 10 pounds. Specific vision abilities required by this job include close vision, the ability to distinguish colors and shades 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 leader or member; and interact with District end users, employees, vendors and others 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