SENIOR PROGRAMMER ANALYST

DEFINITION

Under general direction, performs advanced professional level programming design of the City's systems and applications; serves as an expert technical resource on programming and application database design and administration, integration of disparate applications or systems, and web and mobile application development; website operations; and maintains responsibility for developing and overseeing developed application security.

SUPERVISION RECEIVED/EXERCISED

Receives supervision from an Information Services Manager. May exercise supervision over assigned staff.

DISTINGUISHING CHARACTERISTICS

Senior Programmer Analysts are responsible for developing and recommending standards for application development, website, and data design to ensure the City's business process needs are being met. Incumbents ensure data integrity and security of the City's information assets while developing and providing efficient application systems, communication, and computing support to meet the City's mission and goals. Assignments are given in terms of broad operational or project requirements and performance is measured in terms of overall performance and results. This position differs from the Information Services Manager in that incumbents of the latter assume responsibility for a division.

EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES

May include, but are not limited to, the following:

Develops standards, policies and procedures for application development, website operations and data analytic/business intelligence systems based on industry best practices; utilizes policies and procedures for safeguarding the City's information assets within developed applications and integrations with other systems.

Collaborates with City staff on architectural and database considerations for enterprise applications ensuring proper management of the City's data resources in a lead capacity and as a member of a team.

Defines scope, boundaries, and deliverables for assigned applications development projects to meet user requirements; translates system specifications/requirements into logical system processes; develops system documentation; proposes potential solutions and work estimates.

Directs and assigns projects and tasks to Programmer Analysts to meet division goals.

Designs and develops systems and/or subsystems; writes or modifies program code using applicable software development tools and programming languages; develops and executes system test plans to ensure application performance conforms to specifications; develops standards and procedures to obtain optimal performance of City business systems.

Provides application production and user support for developed systems and other assigned applications; analyzes and troubleshoots functional and technical problems; researches enterprise system and interface documentation; and identifies errors and works with other technical staff, vendor representatives and users to make changes to solve problems.

Develops custom queries and reports to meet user business requirements; writes program code to extend system functionality; incorporates new subsystems and makes other application changes and updates; develops test environments and participates in conducting and analyzing the results of application testing processes to ensure performance against application requirements; and develops user and application documentation including training guides and training processes.

Provides day-to-day administration, installation, upgrading, monitoring, and troubleshooting of applications consistent with the needs/direction of the City; reviews application design, integration of systems, including application servers, and makes recommendations regarding enhancements and/or improvements.

Utilizes developed or business intelligence and data analytics tools to provide historical or predictive analysis of key City data sources. Applies critical thinking and data visualization skills to present data in a format that is understood by a wide range of staff and the public.

Evaluates solutions, conceptual design alternatives and establishes 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 City requirements and standards; and participates in recommending the selection and purchase of hardware and software.

Collaborates with staff in developing application specific backup and restore strategies; develops I.T. disaster recovery processes for developed and assigned applications.

Assists programmers with technical problems, design issues and verifying, isolating and documenting the existence of vendor errors; develops and documents standard procedures for integrations of vendor supplied software.

Handles user requests for security changes and provides support for City applications; allocates and reallocates resources for optimum configuration, application performance, and cost.

Reviews, evaluates, and recommends new tools, technology, and products for the development or enhancement of various applications in accessing or processing the information on the database.

May supervise personnel, including making recommendations for hiring, conducting performance evaluations, training, work allocation, and disciplinary actions.

Performs related duties as required.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

Current technology in operating systems, application development technologies, database design and industry trends.

Relational database concepts, database architectures, standard database software and general database structure and administration. Formal data structure designs and the ability to implement data structures to maximize efficiency and flexibility.

System design and analysis, client-server and web architecture, data analytics systems along with relevant technical knowledge of database systems.

Programming theory and applicable programming languages. Advanced systems design principles and applications development methodologies, tools, documentation and utilities applicable to the City's enterprise systems and applications.

Business Intelligence systems, artificial intelligence systems for data analytics including the ability to implement, analyze and support such systems.

Advanced principles and techniques of project planning, job scheduling and related control requirements.

Principles and practices of effective employee supervision, including selection, training, work evaluation and discipline.

Ability to:

Provide direction to professional staff.

Analyze, design, program, install and maintain complex applications and computer systems.

Provide supervisory direction and perform project management responsibilities.

Assign, monitor and review the work of project team members and other developers.

Design, develop and maintain applications, SQL operations, website operations, data analytics, report and query design and optimization.

Utilize data visualization techniques and tools to present analytical and business intelligence data in meaningful and easily understood formats.

Analyze problems, information requirements, and needs, develop logical solutions, read and comprehend technical information, and document technical information in writing.

Use independent judgment and initiative in making recommendations regarding applications, development and enforcement of application standards and security.

Communicate clearly and concisely, both orally and in writing, and prepare clear and concise written reports and correspondence.

Establish positive working relationships with representatives of community organizations, state/local agencies and associations, City management and staff, and the public.

Skill to:

Safely operate a motor vehicle.

MINIMUM QUALIFICATIONS

Four (4) years of experience involving application design and development, operation and maintenance of application software, and database design and administration functions;

AND

A bachelor's degree from an accredited college or university with major course work in Computer Science, Business Administration, Information Systems, or related field. Additional qualifying experience may be substituted for the required education on a year-for-year basis.

SPECIAL REQUIREMENTS:

Possession at time of appointment and continued maintenance of a valid California Driver's

Depending upon assignment, additional licenses and/or certificates may be required.

APPROVED: ___*(Signature on File)*_____   DATE: 10/6/21
                        Director of Personnel Services

NEW: 10/5/2021 TJM;SCM;bn