

**CLASS SPECIFICATION**  
**Applications and Database Administrator**

**GENERAL PURPOSE**

Under direction, plans, organizes, oversees and participates in the work of professional information technology staff engaged in providing applications development, maintenance and support to City managers and staff; consults with managers and staff to determine needs and develop technology solutions and tools; performs database management and administration services including database security and disaster recovery planning; and performs related duties as assigned.

**DISTINGUISHING CHARACTERISTICS**

Applications and Database Administrator is responsible for planning, coordinating and participating in the work of professional staff engaged in providing applications development, maintenance and support services to City departments for achievement of their business, operational, public service and productivity objectives. The incumbent is responsible for ensuring effective planning and completion of multiple information systems and technology projects of varying size and scope to ensure the delivery of high quality, customer-focused products and services, efficiently and cost-effectively. The incumbent also provides enterprise database management and administration services and is responsible for managing database security and disaster recovery planning.

**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.

1. Plans, organizes, coordinates and leads the work of staff assigned to work as team members on various projects; provides day-to-day leadership and works with staff to ensure a high performance, customer service-oriented work environment which supports achieving City technology objectives and service expectations; provides input to employee performance evaluations; participates in developing, implementing and evaluating work programs, plans, processes, systems and procedures to achieve City goals, objectives and performance measures consistent with the City's quality and service expectations.
2. Plans, coordinates and participates in developing and managing applications projects and other technology solutions assignments; develops and recommends project scope of work, detailed project plans, milestones and deadlines; oversees and participates in designing, developing, programming, and implementing new applications or application enhancements; monitors project progress and prepares status reports; reviews and acts on project change requests; approves deliverables; integrates new projects into overall work plans; coordinates and integrates work on multiple projects; manages project completion to ensure accountability for results.

3. Plans and coordinates staff assignments; assists and mentors staff on technical work issues and requirements; oversees and may participate in performing business process and work flow analyses; identifies and resolves conflicts in project and staff priorities; ensures customer priorities are clear and respected; works with staff to resolve design, project management, development, testing and implementation issues.
4. Plans and may participate in planning for unit and systems integration testing; approves placing applications into production; monitors operations and performance; ensures timely and effective problem identification and resolution; investigates and resolves escalated customer concerns and complaints; supervises the development of systems and user documentation; supervises and oversees customer training.
5. Serves as enterprise database administrator; designs, installs, integrates, normalizes, physically reorganizes and manages database environments and structures to optimize database performance; performs database administration functions, including setting up and running database management utilities to backup, reorganize and restore databases and resolve production and operational problems; monitors memory and disk usage and manages available database resources; monitors database performance and conducts performance tuning tasks; administers database security processes and procedures; develops, recommends and implements security permissions, privileges, standards and guidelines; creates database user accounts; installs and configures application software over databases; researches, tests, reviews and installs service packs; sets up, maintains, modifies and monitors system maintenance jobs.
6. Serves as a technical resource to applications and other technology services staff and users on logical database/data structure design, integration, administration and management.
7. Coordinates and integrates project activities with other technology services sections.
8. Participates in the development and updating of disaster recovery plans, including data storage and recovery plans.

#### **OTHER DUTIES**

1. Participates in City-wide technology development efforts; researches proposed technology solutions; participates in workgroup meetings; tests, evaluates and makes recommendations on potential software packages for implementation by the City.
2. Serves on committees and task forces as assigned.
3. Attends a variety of meetings, training sessions, conferences and seminars as required.

#### **QUALIFICATIONS**

##### **Knowledge of:**

1. The Systems Development Life Cycle.
2. Principles and methods of systems analysis.
3. Applications design principles and development methodologies and tools.

4. Software development and maintenance tools and utilities applicable to position responsibilities.
5. Programming theory and programming languages used in City applications.
6. Operating system capabilities and constraints applicable to enterprise information systems and platform operating systems.
7. Standard PC software packages, including word processing, spreadsheets and database programs.
8. Relational database and object-oriented theory, design rules and development practices, including data modeling, data flow and entity relationship analysis, data structure analysis, logical and physical database design, data access methods, storage capacity management and database recovery techniques.
9. Database management systems and software, including architectures, diagnostic tools, commands and utilities.
10. Database development and administration tools including tools and utilities for monitoring and tuning database performance.
11. Network architecture and design concepts, including topologies, protocols, configuration, and connectivity testing and troubleshooting issues as they affect applications design.
12. Systems integration design concepts as they relate to applications design and development.
13. Functions, capabilities, characteristics and limitations of standard computer platforms and devices, including PCs, LANs and servers.
14. Principles and practices of sound business communication.
15. Principles, practices and methods of project leadership management as they apply to information technology projects.

**Ability to:**

1. Plan, organize, coordinate and participate in the work of a technology services section and perform project leadership/management responsibilities to ensure project accountability.
2. Identify technology management issues and opportunities, analyze problems and alternatives and develop sound conclusions and recommendations.
3. Develop and maintain effective client relationships with City managers and end users.
4. Balance responsibilities for multiple projects to ensure timely, high-quality results.
5. Perform applications and database troubleshooting and tuning to resolve complex systems, data management, communication and interoperating problems.
6. Perform business process analyses and reach sound, logical conclusions regarding user needs and business requirements.

7. Understand and apply functional requirements to the development of systems proposals, specifications and recommendations for cost effective information systems and technology solutions.
8. Communicate clearly and effectively to diverse audiences of technical and non-technical personnel, both orally and in writing.
9. Prepare clear, concise and accurate process, procedure and applications documentation, reports of work performed and other written materials.
10. Read, interpret, explain and apply technical information on business processes, software and hardware for technical and non-technical users.
11. Exercise sound independent judgment within general policy guidelines.
12. Keep technical skills current to meet continuing work responsibilities.
13. Use tact and diplomacy when dealing with sensitive, complex and/or confidential issues and situations.
14. Establish and maintain highly effective working relationships with City management, staff and others encountered in the course of work.

**Education, Training and Experience:**

A bachelor's degree in information systems, information technology or a closely related field. At least five years of progressively responsible experience in developing complex databases and database applications.

**Licenses; Certificates; Special Requirements:**

A valid California driver's license and the ability to maintain insurability under the City's vehicle insurance policy.

**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 job, the employee is regularly required to sit; talk or hear, both in person and by telephone; use hands to finger, handle and feel computers and standard business equipment; and reach with hands and arms. The employee is frequently required to stand and walk.

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, the incumbent is regularly required to use written and oral communication skills; read and interpret complex data, information and documents; analyze and solve complex problems; use math/mathematical reasoning; perform highly detailed work under changing, intensive deadlines, on multiple concurrent tasks; work with constant interruptions, and interact with City management, staff 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.

The employee works under typical office conditions, and the noise level is usually quiet.