DATABASE ADMINISTRATOR

DEFINITION

Plans, coordinates, and directs the configuration, development and implementation of Oracle and/or SQL Server relational database infrastructure and serves as liaison between the applications and the database staff.

TYPICAL DUTIES

Supervises and participates in the development of Oracle and/or SQL Server databases.
Defines and supervises work related to development, modification, testing, and installation of Oracle and/or SQL Server databases.
Provides support to the District's SQL Server application programmers.
Designs and implements database backup and recovery strategies and procedures.
Resolves problems related to database software or application programs.
Defines and supervises database security and/or access strategies and procedures.
Consults with vendors, contractors, application programming staff, and consultants relative to the establishment of and adherence to industry best practices and technical standards.
Reviews and revises Physical Data Models.
Develops and implements change management procedures including version control.
Writes and reviews documentation for system procedures and guidelines.
Reviews, recommends changes in and approves methodology for evaluating database performance.
Defines and implements technical processes to improve database productivity.
Monitors and forecasts system resources.
Creates database dictionaries.
Performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS AMONG RELATED CLASSES

The Database Administrator may act as a technical lead for a group of Database Specialists involved in the development of advanced data processing systems, preparation of technical specifications, and analysis of large, complex relational databases.

The Network Operations Manager is responsible for managing the day-to-day activities of the Network Operations Center.

A Senior Systems Specialist supervises a group of systems specialists involved in the development of long-range data processing systems, preparation of technical specifications, and analysis of hardware and software requirements.

SUPERVISION

General supervision is received from the Systems and Programming Director. General supervision is exercised over Database Specialists and other data processing personnel as assigned.

CLASS QUALIFICATIONS

Knowledge of:

Relational database management principles and tools
Functions and use of EDP hardware, software, and services
Complex EDP operating and applications systems
Data and data warehousing systems analysis and design
Business and educational data processing applications
Relational databases
Various higher-level programming languages, including CICS, SQL and PL/SQL
Principles and techniques of database administration and programming
Project management techniques, including work planning, scheduling, supervision, and
    reporting
Forecasting and resource planning techniques

Ability to:

Develop long and short range plans
Diagnose problems in relational database based software systems
Prepare work plans, time and cost estimates, and reports
Read, interpret, and apply technical information
Evaluate and adapt new data processing techniques
Formulate and express difficult technical concepts clearly and effectively in written and oral
    presentations
Establish and maintain effective working relationships with administrators, representatives of
    vendors, and Information Technology Division employees
Monitor, analyze, and forecast system resources and plan for future growth
Supervise technical personnel effectively

ENTRANCE QUALIFICATIONS

Education:

Graduation from a recognized college or university, preferably with a major in computer or information science, or business data processing. Graduate level courses in computer or information science, operations research or database techniques is desirable. Qualifying experience in addition to that required below may be substituted for the required education on a year-for-year basis.

Experience:

Five years of experience in the design, development, modification, improvement, and implementation of relational database management systems that includes access methods, definition languages, and teleprocessing software in an installation utilizing third-generation systems that support batch, teleprocessing, database, and real time applications. Experience with physical and logical database design, data security, development of plans for the conversion of existing systems to database systems, database recovery and backup techniques, on-line CICS data inquiry and updating, and optimum processing techniques also is required. Two years of this experience must have included using Oracle, SQL Server, or CICS. Two years of this experience must have been in a supervisory or project leader capacity.

<u>Special</u>:

A valid driver's license to legally operate a motor vehicle in the State of California and the use of a motor vehicle, or the ability to utilize an alternative method of transportation.

SPECIAL NOTES

1. Management class.
2. Exempt from FLSA.
3. An employee in this class may be subject to the reporting requirements of the District's Conflict of Interest Code.

This class description is not a complete statement of essential functions, responsibilities, or requirements. Requirements are representative of the minimum level of knowledge, skill, and/or abilities. Management retains the discretion to add or change typical duties of a position at any time.

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