

## DATA BASE SYSTEMS SUPERVISOR

### DEFINITION

Supervises and participates in the analysis, design, implementation, and maintenance of the District's integrated data base management system; administers the installation, modification, and utilization of the system.

### TYPICAL DUTIES

Supervises a small group of technical staff engaged in analyzing, designing, implementing, maintaining, and modifying an integrated data base management system for the District's data processing activities.

Plans, organizes, and schedules the activities necessary to implement and maintain a data base management system.

Analyzes applications programs and systems to determine their data elements and the interrelationships and commonality of the data base management system and the controls necessary for access to the data elements of the system.

Defines the various elements of the data base in standard terminology and assembles, compiles, and updates a dictionary of data elements.

Coordinates the development, installation, and revision of the data base management system with applications and software systems and programming personnel.

Administers the implementation, maintenance, modification, and utilization of the data base management system.

Develops and is responsible for a security and integrity system to protect the data base elements from unauthorized access, use, change, or removal.

Provides technical assistance to system users in detecting and resolving problems related to the database.

Directs the maintenance of data base documentation, including directories, glossaries, and cross reference listings.

Participates in the evaluation and selection of data storage and retrieval equipment and systems software.

Plans, organizes, schedules, and participates in the training and orientation of personnel relative to the requirements and utilization of the integrated database management system.

Performs related duties as assigned.

### DISTINGUISHING CHARACTERISTICS

**A Data Base Systems Supervisor** is responsible for the integration of data base elements into a common system for the purpose of improving the efficiency of the data processing components related to applications and software systems and programming. An employee of this class analyzes many systems for discrete and common elements and integrates these elements into an operable system which satisfies the needs of all systems while maintaining the integrity of the data of each system.

## DISTINGUISHING CHARACTERISTICS (Cont.)

A **Software Systems Engineering Manager** is responsible for managing the work of technical staff engaged in evaluating, installing, customizing, optimizing, troubleshooting, and monitoring the District's computer and network system software and Wide Area Network.

## SUPERVISION

General direction is received from a Software Systems Engineering Manager. Supervision is exercised over assigned technical personnel.

## CLASS QUALIFICATIONS

### Knowledge of:

- Characteristics and capabilities of data processing equipment
- Principles and methods of data base integration
- Data base systems such as Rdb, Access, SQL Server, etc.
- Principles and techniques of data base systems analysis, design, and programming
- Principles of data base systems documentation
- Principles, procedures, and methods used in data acquisition, storage, structuring, and retrieval
- Data warehousing technologies such as MS SQL Server, etc.
- Data warehouse concepts and applications including extraction, transformation, load concepts, modeling, cleansing, and query tuning
- Enterprise Resource Planning (ERP) systems such as SAP, Peoplesoft, Oracle, etc.
- Query and reporting tools
- New developments in computer concepts, methodology, and technology
- Characteristics of systems software
- Principles of supervision and training

### Ability to:

- Supervise a small group of technical staff engaged in the design, analysis, implementation and maintenance of an integrated data base management system
- Integrate data from a wide variety of systems into a data base management system
- Analyze large quantities of data for discrete and common components
- Analyze and interpret detailed data base systems and procedures
- Define data base elements in an effective manner
- Cope with novel and difficult problems
- Recognize significant factors and relationships
- Provide technical assistance to users and staff members with lower-level skills
- Respond to data base systems problems accurately and take appropriate action
- Train data processing employees in the application of new concepts related to integration of data elements
- Communicate highly complex technical concepts both orally and in writing

Ability to: (Cont.)

Write clear and comprehensive reports and instructions  
Evaluate the work of assigned personnel  
Estimates needs for staff and maintain work schedules  
Meet project schedules and deadlines  
Work tactfully and effectively with District personnel  
Learn and apply new concepts in information technology  
Learn the characteristics of new data base systems and update skills to adapt to changing technology

ENTRANCE QUALIFICATIONS

Education:

Graduation from a recognized four-year college or university, with a degree in management information systems, computer science, computer engineering, business administration, public administration, or a related field.

Experience:

Four years of recent full-time paid experience in business applications analysis, design and programming for medium or large scale, multi-programmed computers, including two years of experience in data base analysis and management. Supervisory experience and experience with an Enterprise Resource Planning (ERP) system are desirable.

Special:

A valid California Class "C" driver's license.  
Access to an automobile.