

**SANTA CLARA COUNTY OFFICE OF EDUCATION  
PERSONNEL COMMISSION**

**CLASS TITLE: DATABASE ADMINISTRATOR II**

**BASIC FUNCTION:**

Under the direction of the Manager - Systems Administration, perform database development and data warehouse system development to support to the County Office and school districts; assure the integrity of database systems; perform the installation, maintenance and upgrade of database related products; maintain documentation and reports related to County Office data systems.

**REPRESENTATIVE DUTIES:**

**ESSENTIAL DUTIES:**

Participate in the design and development of database and data warehouse systems; provide database analysis and data modeling, and perform normalization procedures to ensure an integrated database system for existing and new applications.

Maintain production and test databases; ensure proper database performance and operation.

Assure data integrity, referential constraints, triggers, and procedures for database systems to ensure proper database operation.

Participate in the analysis and diagnosis of database system problems and with the assistance of the DBA III, take appropriate corrective action for resolution.

Maintain technical policies and specifications for data importing and exporting, database system development, maintenance, backup, and recovery; coordinate implementation of policies.

Maintain database security related to applications and operations.

Maintain standards in database system development that optimize system integration and functionality.

Provide consultation on database-related aspects of software applications to determine the advisability and functionality of their use by COE internal departments and client districts.

Maintain the daily operation of backups for logical logs and physical database systems.

Recover lost data from database backups.

Monitor, evaluate, and analyze MS/SQL table and usage.

Interface with system administration and operations staff to ensure efficient use of database systems; serve as second level user support.

With the assistance of the DBA III, perform the installation and upgrade of MS/SQL, Open Database Connection (ODBC) Driver, client-server application components, report writer servers, QSS software, and database related products.

Support customer service staff in data access or database system related problems.

Maintain current knowledge of database system technologies related to MS/SQL, systems administration, and SQL.

Drive a vehicle to various sites to conduct work.

**OTHER DUTIES:**

Perform related duties as assigned.

**KNOWLEDGE AND ABILITIES:**

**KNOWLEDGE OF:**

Relational database design methods, techniques, characteristics, and practices.

Proper programming development procedures in a client-server environment.

Relational database techniques for performance monitoring and tuning, indexing, security, recovery, data segmentation, locks arrangement, and data integrity.

Multiple operating systems and applications disciplines such as UNIX/Linux/Windows Server/Oracle/SAP.

Networking concepts technology and related components of a client server environment.

Proper SQL and programming skills for writing database triggers and stored procedures.

SQL and Non-SQL data loading principles.

Data integration tools such as OLAP applications.

Microsoft SQL Server Analysis Services (SSAS) and SQL Server Integration Services (SSIS).

Data warehousing concepts including ETL (extract, transform and load) operations.

**ABILITY TO:**

Maintain database systems, provide data modeling table normalization, and performance.

Design and develop data warehouse schemas and models.

Conduct database needs assessments.

Develop proper specifications related to database systems administration.

Analyze and evaluate database systems and modify database systems effectively to meet office needs.

Manage data across the enterprise through well-established data design standards.

Develop and support conceptual, logical, and physical data models.

Support data access, acquisition and physical database design.

Support architectural compliance and infrastructure coordination.

Verify data models reflect business requirements and data usage.

Develop and implement data model meta-data.

Develop and enforce metadata standards.

Define data archiving/purge standards.

Develop XML schemas for SOA entity services.

Provide timely estimation of database/storage utilization and plan enhancements/upgrades required.

Quickly identify database problems, evaluate causes and take correction action for resolution.

Perform database programming.

Create triggers, stored procedures and SSIS packages.

Maintain ETL process and its components using Microsoft technology or similar tools.

Communicate effectively in both oral and written form.

Establish and maintain accurate records and files and prepare reports.

Work independently with minimal supervision.

Work various shifts to meet the needs of the assigned duties.

Establish and maintain effective relationships with those contacted in the performance of assigned duties.

**EDUCATION AND EXPERIENCE:**

Any combination of training and experience equivalent to: bachelor's degree in computer science, information systems, or related field and three years of directly related experience in database system administration and design & programming development in a client-server environment specializing in data modeling and normalization as well as data warehouse schema design using designated tools.

**LICENSES AND OTHER REQUIREMENTS:**

Valid California driver's license.

**WORKING CONDITIONS:**

**ENVIRONMENT:**

Indoor environment.  
Driving a vehicle to conduct work.

**PHYSICAL DEMANDS:**

Hearing and speaking to exchange information and make presentations.  
Dexterity of hands and fingers to operate computer keyboard.  
Seeing to perform assigned activities.  
Sitting for extended periods of time.  
Bending at the waist, kneeling or crouching.

Approved by Personnel Commission Approval: June 10, 2015



Norma Gonzales  
Director-Classified Personnel Services

6/10/15

Date