JOB TITLE:	DATABASE ENGINEER	DIVISION:	DISTRICT – INFORMATION SYSTEMS
REPORTS TO:	SENIOR INFORMATION SYSTEMS MANAGER	EEO CATEGORY:	03 - TECHNICIAN
FLSA:	NON-EXEMPT	SAFETY-SENSITIVE:	NO
CLASSIFICATION:	NON-REPRESENTED	LOCATION:	SAN FRANCISCO

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

Position Summary

Under general direction, performs detailed analysis of current and projected data processing applications. Determines and designs common databases that satisfy individual applications data requirements and ensure overall data integrity and security. This classification interprets the systems analysis of user needs to ascertain the logical relationship of data items and using normalization techniques construct the data bases; responsibilities include regular contact with user department personnel and close coordination with the respective systems and programming analyst and other position-related responsibilities as assigned. Responsibilities also include developing scripts and programs, when necessary, for the effective use of District data.

Essential Responsibilities

- Works with systems analysts and programmer analysts to determine data requirements
- Specifies the content, structure and security of the databases
- Administers the District's Microsoft SQL Server and Oracle Databases
- Develops scripts and programs to manipulate and migrate data from both internal and external sources
- Aids programmer analysts and systems engineers in most effective use of data base SQL DML statements
- Develops necessary user interfaces for the reporting and manipulation of District data for internal use
- Creates and maintains documentation of data base schema for programmer's use and sub-schema for end user use.
- Establishes appropriate operating recovery and rollback procedures to preserve the integrity of the databases in event of hardware or software failures
- Evaluates database loading and program performance characteristics to recommend improvements

- Initiates database restructuring whenever it is needed to provide additional physical space or changes in data structure
- Establish appropriate constraints in the use of data manipulation language statements for each sub- schema
- Establish and maintain appropriate physical and logical security of all databases
- Establishes and maintains effective working relationships with District employees, customers, vendors and all others contacted during the course of work using principles of excellent customer service
- Performs additional related duties as assigned
- Regular and reliable attendance and performance are required

Required Knowledge, Skills and Abilities

Working knowledge of:
- Relational databases
- Extracting, transforming and loading data (ETL)
- Network Environment
- Administering Microsoft SQL Server and Oracle Databases

Ability to:
- Use a personal computer and software such as Windows, SQL, Visual Studio IDE, Microsoft SQL Server (and related tools) as well as Always On Availability Groups, Oracle (and related tools), and Embarcadero Technologies tools (RapidSQL, ERStudio, DBArtisan)
- Work effectively and productively with end users
- Follow the safety and health rules and safe working practices applicable to the job

Minimum Qualifications

Education and/or Experience:
- Four-year degree in computer science, mathematics, management science or related field. (Additional position related qualifying experience may be substituted on a year-per-year basis in lieu of degree)
- Four (4) years of recent full time position-related experience in relational data base design, creation and support
- Experience using MS Office (Word, Excel, and Access), Visual Studio IDE, Crystal Reports, Microsoft SQL Server (in an Always On Availability Group environment) and Oracle Database Engines
- Experience with data extraction and reporting/presentation software highly desired
- Experience with personal computer applications that work with databases
- Experience with SQL, OLAP, ETL, and data warehousing

Physical Requirement:

Mobility to work in a typical office setting. Ability to communicate in person and over the telephone. Ability to read printed materials and a computer screen. Routine use of computer, telephone and other office equipment. Ability to travel to District facilities.