DATABASE ADMINISTRATOR

Purpose Statement:

Under general direction, the Database Administrator ensures the integrity and efficiency of technical data resources and procedures to ensure optimal databases and related flows logical/physical of applications throughout SDCOE Data Systems: Student Information Systems, Custom, or other third-party applications; and the large-scale enterprise databases supported by Technology Services.

Diversity Statement:

Because each person is born with inherent worth and dignity, and because equitable access and opportunity are essential to a just, educated society, SDCOE employee commitments include being respectful of differences and diverse perspectives and being accountable for one's actions and the resulting impact.

Representative Duties:

This position description is intended to describe the general nature and level of work being performed by the employee assigned to the position. This description is not an exhaustive list of all duties, responsibilities, knowledge, skills, abilities, and working conditions associated with the position. Incumbents may be required to perform any combination of these duties.

Essential Functions:

- Identifies user requirements by researching and analyzing user needs, preferences, objectives, and working methods; study how users consume content, including data categorization and labeling; meet with focus groups to prioritize requirements.
- Translates business requirements into data structures.
- Designs, development, and implementation of custom ETL packages or extracts to support data automation flows and monitor its successful operation.
- Develops, implements, modifies, and evaluates the databases (e.g., Oracle and SQL) supported and coordinates the activities of application for technical support.
- Assists in planning, organizing, and overseeing the design, development, and implementation of complex information technology projects.
- Provides training and act as a resource for other staff regarding a comprehensive system or sub-systems.
- Maintains working knowledge of Relational Database Management Systems (DBMS) and data repositories such as operational data stores, Data lakes, Data Warehouses, and front-end tools.
- Researches and analyzes existing file structures, access methods and data relationships to manage and design databases that are consistent with Data Governance Standards.
- Assists with monitoring, tracking, and responding to requests for data queries and reports.

- Monitors the health of all database and information systems servers to ensure security and integrity, maximize performance and minimize downtime.
- Creates and utilizes SQL scripts to monitor system usage and recommends systems and/or processes to effectively manage traffic across applications servers.
- Researches and analyzes existing file structures, access methods and data relationships to manage and design databases that are consistent with changing design standards.
- Prepares and maintains database and systems design schematics, and train and assist end users in the availability and use of databases and information systems.
- Evaluates the impact of any new or changed databases and applications to determine their effect and/or relationship to existing data and applications.
- Monitors and manages security protocols for assigned databases and systems to defend against unauthorized access, use, modification or destruction of database and information systems servers. Determine and assign security access and protocols for end users.
- Performs and administers system configurations and performs programming tasks as needed to support system configurations and implementations.
- Assists with disaster recovery planning for databases and information systems and participates in disaster recovery tests.

Other Functions:
- Performs other related duties as assigned for the purpose of ensuring the efficient and effective functioning of the work unit.

Job Requirements: Minimum Qualifications:

Knowledge and Abilities

KNOWLEDGE OF:

Excellent understanding of the SDCOE's goals and objectives;

Business and technical requirements analysis, elicitation, modeling, verification, and methodology development;

Database management systems and tools, such as Microsoft SQL Server, Microsoft Data Management Concepts such as Database Clustering, Log Shipping, Availability groups, Performance Tuning;

SQL Server Management Studio and SQL Server Integration Services;

Software design concepts, general testing and debugging methods and database management techniques;

Advanced knowledge of relational databases, Microsoft SQL Server 2014;

Data integration and tools such as SQL, ETL, SSIS;

Network, PC, and platform operating systems, including Windows 2016, Windows 2019;

Technical knowledge of current systems software, protocols, and standards, including SFTP Protocols, NTFS, Data Encryption mechanisms (e.g. TDE);

Programming languages, including C#;

Applicable data privacy practices and laws.

ABILITY TO:

Develop Dashboards/Reports with different Analytics Views (Pivot Table, Chart, Tabular, and Power BI) complex data analysis;

Troubleshoot, analyze and resolve problems;

Develop and maintain computer programs/scripts;

Communicate effectively, both orally and in writing;

Meet schedules and timelines;

Work independently and as a member of a team;

Establish effective working relationships with those contacted in the course of work;

Organize and prioritize work;

Exercise appropriate judgment in making decisions;

Demonstrate attendance sufficient to complete the duties of the position as required.

Working Environment:

ENVIRONMENT:
Duties are typically performed in an office setting.
May be designated in an alternate work setting using computer-based equipment to perform duties.

PHYSICAL ABILITIES:
Must be able to hear and speak to exchange information; see to perform assigned duties; sit or stand for extended periods of time; possess dexterity of hands and fingers to operate computer and other office equipment; kneel, bend at the waist, and reach overhead, above the shoulders and horizontally, to retrieve and store files; lift light objects. All requirements are subject to possible modification to reasonably accommodate individuals with a disability.

Education and Experience:

Education: A Bachelor's degree in computer science, information systems or related field.

Experience: Five (5) years of progressively responsible experience in database management systems, tools, techniques, integration, server management, and development; strong knowledge in database programming (e.g. SQL, stored procedures); experience working with Data Presentation tools (Power BI); and Oracle Database Monitoring tools experience preferred.

Equivalency: A combination of education and experience equivalent to a Bachelor's degree in computer science, information systems or related field and five (5) years of progressively responsible experience in database management systems, tools, techniques, integration, server management, and development; strong knowledge in database programming (e.g. SQL, stored procedures); experience working with Data Presentation tools (Power BI); and Oracle Database Monitoring tools experience preferred.

Required Testing   Certificates, Licenses, Credentials
N/A   Valid California Driver's License

Continuing Educ./Training   Clearances
N/A   Criminal Justice Fingerprint/Background
                                   Clearance
                                   Physical Exam including drug screen
                                   Tuberculosis Clearance

FLSA Status: Non-Exempt
Salary Grade   Classified Support, Grade 071

Personnel Commission Approved: May 18, 2022
Revised: N/A