

Job Description

Job Title: Database Administrator

Position Code: 6E23, FE23

Job Classification: Exempt

Supervisor: Director I, Technology

Pay Grade: 42

Contract Length: 245 Days

Job Summary

Position is responsible for designing, implementing, maintaining, and administering assigned large-scale, complex, database management systems which support mission-critical operations. Position ensures the availability, integrity, security, and efficiency of assigned databases. Position develops standards and procedures; consults with departments/users to determine system needs, analyzes requirements, and conducts feasibility studies; conducts system audits and tests; performs database system management activities; and develops documentation.

Essential Duties

1. Consults with departments/end users to assess database system needs and objectives; interacts with the programming staff to review proposed database applications requirements; evaluates the impact on the database management system; and conducts feasibility studies and cost benefit analyses.
2. Designs, implements, and maintains database management system structures and server configurations that support user needs, ensuring that the logical database design is completed, validated, and translated into the physical file structures and access methods of the system.
3. Defines and establishes physical database parameters such as location and access method; and calculates optimum values such as the amount of computer memory to be utilized.
4. Develops, maintains, and controls database dictionaries with descriptions of data elements.
5. Determines requirements and guidelines for database system/server backups; and develops, tests, and implements plans for database recovery.
6. Defines, specifies, and maintains access levels and system privileges for users.
7. Develops and administers database security systems and procedures to safeguard databases against accidental or unauthorized modification, destruction, or disclosure.
8. Monitors database system access and conducts system audits to identify security violations.
9. Develops database system performance standards and criteria; conducts system tests to determine the integrity of the database; and makes necessary changes.
10. Diagnoses and troubleshoots system failures and determines logical solutions to complex system administration problems.
11. Monitors and analyzes database management system/server usage and performance factors (i.e.: CPU time, response time, disk usage, distribution of records, and core requirements); and restructures the system for optimal performance.
12. Develops and implements systems enhancements, upgrades, and improvements.
13. Designs and implements a data archive plan for retaining and disposing of data files.
14. Performs data modeling and simulations for pilot projects.
15. Analyzes current database management systems and makes recommendations for the procurement and installation of new systems.
16. Assesses training needs and conducts individual/small group training to end-users and technical staff in database use.
17. Prepares and maintains documentation of database system operations.
18. Models nondiscriminatory practices in all activities.

Other Duties

1. Performs any other related duties as assigned by the Director I, Technology or other appropriate administrator.

Job Specifications

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed on the following page are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities, who are otherwise qualified, to perform the essential functions.

Minimum Qualifications (Knowledge, Skills and Abilities Required)

Must possess a Bachelor’s degree in computer science, information technology, or a related field and considerable experience in a related database systems administration position using Microsoft, Sun Solaris, and Oracle RDBMS; or any equivalent combination of education and experience that would provide the noted knowledge, skills, and abilities. Experience in the implementation of integrated student information, financial, work order tracking, and human resources/payroll systems preferred. Must possess a comprehensive knowledge of database management systems/design techniques and a demonstrated ability to design database system structures and server configurations. Must possess a comprehensive knowledge of database system performance monitoring/tuning; capacity planning; testing and restructuring; and system backup, recovery, and security techniques. Must possess the ability to analyze system requirements; conduct feasibility studies; and develop database management system standards, procedures, specifications, and documentation. Must possess a demonstrated ability to analyze and resolve system problems related to database design and systems operations. Must possess the ability to conduct training and explain technical material to users. Must possess excellent analytical, organizational, and communications skills. Must possess the ability to establish and maintain effective working relationships with technical staff and end users.

Working Conditions and Physical Requirements

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodation may be made to enable individuals with disabilities to perform essential functions. Must have the ability to sit for extended periods of time; exhibit manual dexterity to dial a telephone, to enter data into a computer terminal; to see and read a computer screen and printed material with or without vision aids; hear and understand speech at normal classroom levels and on the telephone; speak in audible tones so that others may understand clearly in normal classrooms and on the telephone; physical agility to lift up to 25 pounds.

Work Environment

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. Duties are normally performed in a school/classroom environment. The noise level in the work environment is usually moderate.

Supervision Exercised: None

Supervision Received: Director I, Technology

This job description in no way states or implies that these are the only duties to be performed by this employee. The Database Administrator will be required to follow any other instructions and to perform any other related duties as assigned by the Director I, Technology or appropriate administrator. Newport News Public Schools reserves the right to update, revise or change this job description and related duties at any time.

Approvals:

Supervisor

Date

I acknowledge that I have received and read this job description.

Employee Name (Print)

Signature

Date