FIRE DEPARMENT
SANTA CLARA COUNTY

DATABASE ADMINISTRATOR

DEFINITION

Under the direction of the Director of Information Technology or designee, the Database Administrator manages, supports, maintains, and develops the Department's databases, and provides application support for the records management system, other custom and SaaS applications; develops custom integrations, documents processes, prepares training materials, and generates advanced ad-hoc reports.

This classification is a Fair Labor Standards Act exempt, represented position in the Classified Service.

EXAMPLES OF DUTIES

The following duties listed are intended to describe the general nature and level of work performed. These duties may include, but are not limited to the following:

- Manage, develop, monitor, and maintain documentation for Department databases.

- Maintain data integrity with backup, archive, and recovery processes.

- Prepare and maintain procedures for disaster recovery, perform database file restoration, and prepare application security reports.

- Upgrade and improve existing systems, interfaces, and processes by assessing the current state and recommending and implementing feasible alternative solutions.

- Build and deploy custom software; create documentation and training materials for such software.

- Gather data, perform complex analysis, and generate ad hoc reports as requested by management.

- Manage complex application implementations by identifying and articulating the business needs; make recommendations and implement solutions for data integration.

- Document organizational processes, create mockups of new solutions, participate and provide feedback from vendor demonstrations.

- Develop, document, use, and troubleshoot workflows in various systems.

- Perform other duties as assigned.

EMPLOYMENT STANDARDS

Education and Experience:
A master's degree in computer science, quantitative systems, or a related field from an accredited college or university and one (1) year of full-time experience in application development, database design, integrations, and deployments.

Education and Experience: (continued)

Or

A bachelor's degree in computer science, quantitative systems, or a related field from an accredited college or university and three (3) years of full-time experience in application development, database design, integrations, and deployments.

Or

Possession of an associate's degree in computer science, quantitative systems, or a closely related field and five (5) years of full-time experience in application development, database design, integrations, and deployments.

Highly Desirable: Microsoft SQL Server certification

Knowledge Of:

- Advanced use and querying of SQL Server or other databases.

- FileMaker Pro or similar database applications.

- Programming fundamentals and ability to learn new programming languages.

- Python or JavaScript for web development, data analysis, etc.

- Advanced knowledge of Excel (advanced relational formulas, PivotTables, slicers, PowerPivot, BI Toolkit, macros, etc.).

- Incident reporting and timekeeping software applications.

- Data analysis and analytical reporting platforms (SSRS, Business Objects, Tableau, Tableau Server, Power BI).

- Software application development lifecycle, system documentation including project timelines, functional requirements, system architecture, detailed system design, entity relationship diagrams, process diagrams, and user interface definitions.

- Procedures to analyze and evaluate system design specifications and prototypes, and recommend effective data maintenance and update mechanisms and functions.

- Apple and Microsoft Server software.

- UNIX or any equivalent operating system.

- Cloud environments like Amazon Web Services, Microsoft Azure, etc.

Ability To:

- Manage SQL Server and other databases.

- Write advanced SQL queries and present results in easy-to-understand format.

- Trace, isolate, debug, and solve problems affecting databases and related systems.

Ability To: (continued)

- Write advanced relational formulas, set up PivotTables, slicers, PowerPivot, BI Toolkit, and create/edit macros, etc.

- Troubleshoot and resolve issues with applications.

- Extract, analyze and synthesize statistical data form disparate sources; create detailed and complex reports and their respective charts, graphs, and mapping.

- Generate and parse XML, JSON documents, and REST API request/responses.

- Analyze information and situations to define the problem and/or objective, identify issues, and formulate logical conclusions.

- Assimilate new technologies and develop new skills by utilizing technical manuals, journals, books, newsgroups, vendor documentation, and other documents.

- Guide vendors and developers in creating optimal user experiences.

- Utilize oral and written communication skills to develop technology plans, technical requirements, policies, and procedures and convey them to both technical and non-technical audiences.

- Organize and prioritize workload, and to plan, coordinate, and set priorities.

- Provide solutions for data integration with various Department applications.

- Work irregular or protracted hours, including evenings and weekends necessary to meet deadlines and achieve objectives.

- Work independently, with minimal supervision and collaboratively when needed.

- Establish and maintain excellent, effective, and professional working relationships with those contacted in the course of work.

Working Conditions/Physical Demands: Work is performed both in an office setting and in the field. Prolonged use and exposure to computer screens, charts, spreadsheets and reports. Exposure to noise. Work may involve physical exertion including stooping, reaching, lifting, crawling, and climbing. Use of telephone; write or type on keyboard to communicate; lift, push, pull of weight up to 25 pounds. Manual dexterity; clear, understandable speech; and visual and hearing acuity are also required.

Required License: Possession of a valid state of California driver's license.

Pre-Employment Requirements: The candidate must pass a background check, Live Scan fingerprinting, and completion of a medical examination.