

MODESTO CITY SCHOOLS

REVISED

Job Description

JC# 0004

SYSTEMS AND APPLICATIONS MANAGER

OVERALL RESPONSIBILITY

Under general direction, provide leadership and assume management responsibility for the operations, support and maintenance of the systems and applications that support the district's enterprise-wide technology infrastructure. Responsible for the coordination of all development activities including the analysis, design, development, configuration, testing, implementation, integration, operations and management of systems and applications projects to meet the requirements and needs of the District.

SPECIFIC RESPONSIBILITIES

1. Coordinate development activities, installations, upgrades and system modifications for district systems and applications. *E*
2. Identify and review the District's current and future needs with existing industry applications; oversee planning development, application analysis and managing of District software solutions; ensure cost effective selection and operations of software to meet both administrative and curriculum needs. *E*
3. Supervise the design, analyses and monitoring of enterprise applications databases; plan, organize and execute the migration and conversion of data; ensure the integrity and security of data; supervise and participate in department/enterprise disaster recovery planning and data security administration; oversee the administration of application-level security protocols; assign roles and permissions. *E*
4. Analyze complex applications and system needs from end-users while maintaining a high level of customer service. Develop application implementation plans and work with stakeholders, staff and vendors, as needed. *E*
5. Manage and coordinate all systems and database engineering, data mining and database integration to meet the District's needs for data and information management. *E*
6. Analyze, write, troubleshoot, edit and execute moderate to complex SQL queries. *E*
7. Manage the design or modification of user interface applications and back-end databases using various programming and scripting languages. *E*
8. Manage Application Programming Interfaces (API) development, including design, testing and final implementation acceptance steps. *E*
9. Monitor the District business systems, student information systems, digital dashboards and other systems for data integrity and proper operations. *E*
10. Analyze, plan and manage long-term needs of software and database integration and development. *E*
11. Create technical methodologies and documentation for development and data integration solutions; generate and keep up to date documentation for district systems and applications. *E*
12. Provide technical expertise, information and assistance regarding data collection, data integration and decision support. *E*
13. Develop policies and procedures for operations and data integration, application development and usage. *E*
14. Communicate with other departments to report and resolve software, database and operations problems while maintaining a high level of customer service. *E*

SYSTEMS AND APPLICATIONS MANAGER (continued)

SPECIFIC RESPONSIBILITIES (continued)

15. Determine and manage the best practices to visually represent business and operational needs to be implemented into system designs. *E*
16. Supervise, review and manage support staff in the area of database administration application interface development, dashboard development and support, CMS, SIS, ERP, and minor level of application development after determining existing vendor systems are not adequate. *E*
17. Utilize best practices and design methods to ensure the success of projects. *E*
18. Analyze and suggest improvements for district systems and applications. *E*
19. Select, supervise, train and evaluate staff. *E*
20. Maintain professional and technical knowledge by attending education workshops, reviewing professional publications, establishing personal networks, benchmarking state-of-the-art practices and participating in professional societies. *E*
21. Resolve product or service problems by clarifying the customer's complaint, determine the cause of the problem, select and explain the best solution to solve the problem, expedite correction or adjustment and follow-up to ensure resolution. *E*
22. Effectively communicate and maintain cooperative relationships with those contacted in the course of work.
23. Perform other related duties as assigned.

WORK YEAR

Approved days as specified on the Management Salary Schedule

SALARY

Management Salary Schedule

QUALIFICATIONS

Knowledge/Ability

Minimum Requirements:

- Knowledge of Windows server operating systems and networking.
- Knowledge of computer technology and software, SQL, Server Management Studio, T-SQL, etc.
- Knowledge of and the ability to apply problem solving processes and techniques.
- Knowledge of best practices around information security and access protocols.
- Knowledge of the principles and methods of programming and software development.
- Knowledge of and ability to apply effective supervision techniques.
- Knowledge and ability to apply management, budgeting and contract administration principles and practices.
- Ability to lead in a team environment.
- Ability to understand and implement complex oral and written directions given in English.
- Ability to compose clear, complete and concise correspondence and reports independently using correct grammar, syntax, punctuation and spelling.
- Ability to read, interpret and apply knowledge gained from complex technical publications, manuals, and other documentation.

SYSTEMS AND APPLICATIONS MANAGER (continued)

QUALIFICATIONS (continued)

Knowledge/Ability

Minimum Requirements:

Ability to analyze complex administrative and data systems, identify problems and develop logical conclusions and effective solutions.

Ability to establish and maintain effective working relationships with end-users and information technology staff.

Ability to clearly document procedures and provide training for staff and users on implementation and operation requirements of the system.

Ability to communicate effectively to both technical and non-technical users.

Ability to be flexible, adaptable and learn quickly in various technical and creative environments.

Ability to prioritize and complete tasks to deliver effective technology solutions within required time frames.

Ability to apply project management processes and perform project management planning.

Ability to apply programming principles, basic logic and software development techniques and procedures.

Experience

Minimum Requirements:

Web-related programming experience with one or more of the following technologies: ASP.NET, ASP, JSP, Java Servlets, VBScript, XML, XHTML, CSS, CHTML, XSL.

Database and query experience including any of the following: SQL Server, Oracle, Access.

Experience in the development of on demand and automated end-user data reporting.

Five (5) years experience in information technology OR three (3) years experience in information technology **and** a bachelor's degree in a related field.

Desirable Qualifications:

Five (5) years of increasing responsibility in successful systems analysis and application implementation and support experiences (i.e., SIS and ERP applications, including oversight and management of staff supporting these systems).

Education/Credential

Minimum Requirements:

Graduation from High school or General Education Development (GED) Certificate or California High School Proficiency Examination (CHSPE) Certificate **and** five (5) years of experience in information technology **OR** Bachelor's Degree in Computer Science, Information Technology, or related field, **and** three to four (3-4) years experience in information technology.

Desirable Education:

Bachelor's degree in Computer Science or Information Technology.

License

Valid California Driver's License

Physical Characteristics

With or without the use of aids:

Sufficient vision to read small print.

Sufficient depth perception to file documents.

Sufficient hearing to hear work area noise and normal conversation in person and on the telephone.

Ability to speak in a voice that can be clearly heard and understood on the telephone and in face-to-face conversations.

Ability to reach horizontally and vertically with arms.

Sufficient dexterity to manipulate small objects, print or write legibly, operate telephone, type, use computer keyboard, typewriter and other business machines.

Sufficient physical ability to sit or stand for prolonged periods of time.

SYSTEMS AND APPLICATIONS MANAGER (continued)

REPORTS TO:

Chief Technology Officer or designee

Board Approved: 10/19/15

Cabinet Approved: 11/26/19

Board Approved: