MONTEREY COUNTY OFFICE OF EDUCATION

SYSTEMS ANALYST/LEAD

Classification: Classified

Salary Level: 48.5

DEFINITION:

The Systems Analyst/Lead is responsible for serving as the technical lead in the development, design, documentation, maintenance, evaluation, and support of software systems. This position will provide problem resolution for information systems applications; performing the lead role in the design and implementation of appropriate database and software solutions; providing consultation to clients to ensure that appropriate requirements for system development are obtained; performing a variety of technical and analytical services for MCOE and district staff for computer software applications; performing as a lead in acting as a liaison with software and other vendors to resolve general operation problems; assisting and instructing staff in utilizing computer application resources; maintaining records in the assigned helpdesk system; providing technical leadership to information systems specialists and performing related duties as required.

SUPERVISOR:

Manager of Software Systems

POSITION(S) SUPERVISED:

None; however may lead, train, or participate in team work assignments.

QUALIFICATION REQUIREMENTS:

To perform a job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed in the job description are representative (not an exhaustive list) of the knowledge, skills and/or abilities required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential duties of the position.

DISTINGUISHING CHARACTERISTICS:

Positions in this classification are distinguished from Information Systems Specialist II by the level of expertise required in both software development and database administration. This position has advanced application design and project management responsibilities, requiring extensive expertise in user need and case analysis, as well as systems integration. Positions in this classification require a high degree of systems architecture work, technical team leadership, and extensive data modeling and database maintenance/optimization expertise.

ESSENTIAL DUTIES:

- Develops and produces physical design of databases based upon logical data models by employing program and business requirements and analysis
- Works closely with MCOE and district personnel to gather and manage system requirements
- Provides leadership and guidance to Information Specialists I and II and other staff as needed
- Performs advanced analysis, evaluation, implementation, and maintenance of student information, business, and similar systems
- Builds the data and presentation of applications based on user needs
- Researches and develops database administration processes and practices
- Tests, troubleshoots, and resolves issues with software functionality
- Performs technical adjustments and installs technical updates to systems
- Maintains, analyzes, evaluates and updates database integrity and security settings
- Maintains detailed accounting of users and security access to system software
- Audits, modifies, and amends data in systems
- Monitors and reports on system usage
- Provides technical direction and consultation to users
- Formulates, assists and supports users with application training and technical support
- Organizes and analyzes data for efficient reporting and retrieval
- Assists users to integrate and/or retrieve data from various systems
- Performs as lead in evaluation of data and creation of reports; maintains quality controls
- Performs lead role in interfacing with software and hardware vendor personnel to resolve technical issues
- Performs lead role in vendor software upgrades
- Represents office at technical conferences
- Provides project management services and reporting
- Provides technical leadership in the design and implementation of training programs for MCOE and district personnel, students, and parents in the proper use of software systems
- Attends various web-based and other training sessions as required
- Performs other duties as required

PHYSICAL AND MENTAL CHARACTERISTICS:

Physical, mental and emotional stamina to perform the duties and responsibilities of the position; manual dexterity sufficient to write, use the telephone and business machines; vision sufficient to read printed materials; hearing sufficient to conduct in-person and telephone conversations; speaking ability in an understandable voice with sufficient volume to be heard at normal conversational distance or on the telephone; physical mobility sufficient to move about the work environment (office and location) and drive an automobile; physical strength to lift a minimum of 40* pounds; physical stamina sufficient to sit for prolonged periods of time; mental acuity to collect and interpret data, evaluate, reason and define problems, establish facts, draw valid conclusions, make valid judgments and decisions.

REQUIRED QUALIFICATIONS:

Education and Experience:

- Bachelor's degree in computer science, information engineering or other related areas
- Significant training and experience in software engineering leading to the ability to perform duties comparable to those listed herein
- Six (6) years of computer software application development experience with at least three years spent in a technical lead capacity
- Any combination of education and training equivalent to the above.

KNOWLEDGE OF:

- Soliciting and documenting user requirements, utilizing stakeholder interviews, use case analysis, prototyping, and acceptance testing
- Database design and development using logical data modeling and entity relationship diagrams
- MS-SQL installation, configuration, and administration
- Student information, finance, payroll, accounts payable, and similar systems
- Data integration techniques including replication, change data capture, and ETL.
- Methods for ensuring data integrity including entity, referential, domain constraints and data verification methods
- Policies, procedures, functions and general principles of the software development life cycle (SDLC) such as waterfall, spiral, agile, and rapid application development (RAD)
- Principles of process and systems analysis
- Principles of designing software solutions including input, output, storage, and processing requirements
- Visual Basic and other programming languages, methods and techniques for training
- Relational database development techniques and Structured Query Language (SQL)
- Web services and web-based application development
- Client/Server and N-Tier application development and deployment
- Principles, techniques, methods and procedures pertaining to the various aspects of a networked computer systems
- Basic accounting principles and their application within business systems
- Data visualization and reporting tools and techniques

SKILLS AND ABILITIES:

- Effectively manage user requirements and translate into design and build of systems and services
- Expertly analyze data and situations, reason logically and creatively identify problems, draw valid conclusions and develop effective solutions
- Promote the use of changing technologies and best practices in the design, build, and maintenance of systems and services
- Provide insight and direction to other staff on best practices in the design, build, and maintenance of databases
- Rapidly learn new skills and languages to enhance production and keep current with changing technologies
- Collaborate and coordinate with other technical staff to provide the best solutions possible
- Design and develop effective instruction for others in the use and care of computer software systems
- Rapidly adapt to changing technologies and learn functionality of new equipment and systems
- Manage time effectively between multiple tasks and location, and record time utilization

- Comply with the department's customer service standards, as outlined in associated policies and procedures
- Explain technical concepts in non-technical terms to individuals and groups
- Communicate effectively in both oral and written forms
- Expertly implement problem solving techniques
- Prepare and deliver clear and concise oral instructions
- Understand and carry out oral and written instructions
- Prepare written materials in an efficient and comprehensive manner
- Maintain record of work in trouble ticketing database

DESIRABLE QUALIFICATIONS:

- Experience with educational sector software systems, specifically ESCAPE Software
- Experience with state reporting requirements such as CASEMIS and CALPADS
- Advanced certification and/or training in database and software development

LICENSES AND CERTIFICATIONS:

- Possess and appropriate California Driver's License with evidence of insurability

Approved by:

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Assistant Superintendent, Human Resources   Date Approved:
or designee