

FRESNO COUNTY SUPERINTENDENT OF SCHOOLS

CLASSIFIED POSITION¹

JCN: 430
RANGE: 154
EXEMPT

SOFTWARE ENGINEER SPECIALIST

BASIC FUNCTION:

Under the direction of the assigned supervisor, perform a variety of technical duties in developing, maintenance, support and enhancement of software and related media intended for display to clients in a variety of scenarios, via Internet (web) and/or an intranet and employing web-enabled curriculum, browser-based forms and other related applications as assigned.

REPRESENTATIVE DUTIES:

ESSENTIAL DUTIES:

- Assist with the development and integration of custom technology-based solutions to enhance development of the content and applications.
- Create and maintain software documentation.
- Create website layout/user interface by using standard practices; integrate data from various back-end services and databases.
- Develop and implement new system applications as assigned; modify existing programs to enhance functions; integrate new software and revise programs as necessary to ensure adaptation with existing computer systems.
- Develop and maintain application system designs, and document application code and structure to allow for maintenance by others with similar skills.
- Gather and refine specifications and requirements based on technical needs.
- Generate innovative solutions based on interface standards using development tools.
- Identify, recommend, utilize and maintain advanced software applications necessary to support departmental functions.
- Perform a variety of specialized duties in developing, maintenance, support and enhancement of software and related media intended for display to clients in a variety of scenarios, via Internet (web) and/or an intranet and employment web-enabled curriculum, browser-based forms and other related applications.
- Provide training to department staff and users on relevant technology issues and applications related to the building of applications.
- Provide technical support to end users; receive, troubleshoot, and respond to user requests and inquiries regarding system performance, defects, and usability; assist users with navigating and utilizing web-based applications and automated systems.
- Reengineer application software systems into current computer software products based on multi-platform client server applications.
- Support and enhance the development of software for web-based applications and content intended for clients outside of the department.
- Write well designed, testable, efficient code by using best software development practices.
- Attend and participate in a variety of assigned meetings, committees, conferences, in-services and/or special events.
- Comply with schedules, policies, regulations, procedures, orders and directives of the County Superintendent.
- Exhibit professionally appropriate interpersonal skills including but not limited to tact, patience, flexibility and courtesy.
- Maintain a safe work environment.

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- Operate a variety of office equipment, including but not limited to a computer and assigned software applications.
- Serve as a liaison between County Superintendent and administrators, personnel, outside organizations or the public concerning assigned area.
- Serve as a technical resource concerning assigned program, function or instructional area.
- Work collaboratively and maintain effective working relationships with others in the course of work in assigned program.

OTHER DUTIES:

- Drive a vehicle to conduct work, using own transportation.
- Perform related duties as assigned.
- Travel may be required in and outside of California.
- Work a flexible work schedule as required.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

- Ability to work and thrive in a fast-paced environment, learn rapidly and master diverse web technologies and techniques
- Advanced knowledge of applicable software programs including: MS Excel,, Open Office, and Microsoft Word.
- Advanced knowledge of UI/UX design principles including user-centered design, prototyping, and responsive design best practices
- Advanced knowledge of standard web application technologies such as JavaScript, HTML, CSS, and Angular.
- Database-driven web application theory.
- Formal software development methodology.
- Knowledge of operating systems including Windows and macOS; server operating systems, and mobile operating systems including iOS and Android, encompassing application use across all platforms
- Maintain updates on emerging technologies/industry trends and apply them into operations and activities.
- Materials, methods and tools used in the operation and configuration of computer systems.
- Programming languages such as C#, ASP.NET, JavaScript or Angular.
- Software development technology such as defect tracking and source control software.
- Web applications, security, session management, and best development practices.
- Proper English usage, grammar, spelling, punctuation and vocabulary in all forms of communication.
- State Education Code, local, state and federal laws, codes, regulations and requirements and county office organization, operations, policies and objectives as related to assigned activities and/or instructional area.
- Theoretical and technical aspects of field of specialty.

ABILITY TO:

- Acquire and create digital medial resources.
- Combine graphic layout design with written text and scripting technology to develop professional electronic presentations.
- Design programming solutions for application problems and malfunctions.
- Investigate, troubleshoot and diagnose defects with electronic presentations.

- Investigate, troubleshoot and diagnose hardware, software and peripheral malfunctions.
- Maintain records related to work performed.
- Meet schedules and time lines.
- Modify existing programs to enhance performance and functions.
- Report and track defects in software with a bug tracking application.
- Analyze and evaluate situations accurately and adopt an effective course of action.
- Communicate effectively both orally and in writing.
- Drive a vehicle to conduct work.
- Interpret, apply, and explain rules, regulations, policies and procedures.
- Maintain consistent, reasonably regular, punctual attendance consistent with federal, state and local standards.
- Safely and successfully perform essential job functions consistent with federal, state and local standards, including meeting qualitative and/or quantitative productivity standards.
- Work confidentially and with discretion.
- Work independently with minimal direction.

EDUCATION AND EXPERIENCE:

EDUCATION:

- High School Diploma, General Education Degree (GED) or State High School Proficiency certificate.
- Bachelor's degree in computer science or related field preferred.

EXPERIENCE:

- One year of experience in software development and databases preferred.

LICENSES AND OTHER REQUIREMENTS:

- Valid California driver's license; when driving for work, maintain automobile liability insurance in accordance with California Insurance Code section 11580.1 or maintain other statutorily authorized financial responsibility.
- Enrollment in the California Department of Motor Vehicles Government Employer Pull Notice Program at time of hire and throughout employment with County Superintendent.

WORKING CONDITIONS:

ENVIRONMENT:

- Drive a vehicle to conduct work, using own transportation.
- Office environment.
- Regular interruptions.
- Small and large group meetings.

PHYSICAL DEMANDS:

- Bending at the waist, kneeling or crouching; climb or balance.
- Eyesight corrected or uncorrected sufficient to read a variety of materials including but not limited to fine print.
- Hearing with or without use of hearing aid(s) sufficient to hear any conversation with others; understandable voice and speech patterns.
- Manual dexterity and coordination sufficient to operate office and/or classroom equipment.
- Sitting, standing and/or walking for extended periods of time.

- Use hands to handle and/or feel; reach with hands and arms.
- Must frequently lift, push, pull or carry up to ten (10) pounds and occasionally lift and/or move up to twenty-five (25) pounds.

The physical demands and working conditions described here are representative of those that must be met by an employee to successfully perform the essential functions of this position, subject to reasonable accommodation

This position description may not be an exhaustive list of all duties, knowledge, or abilities associated with this classification, however it is intended to accurately reflect the principal job elements. Related duties, knowledge, or abilities to those expressly stated may also be required for successful performance of the position.

APPROVED:

Effective: 07/01/2004

Revised: 04/03/2027; 10/01/2017; 03/23/2026