

Sacramento County Office of Education Job Description

Classification Title: Applications Developer

DEFINITION

Under general direction develops, designs, documents, and evaluates full-stack (front and back end) web-based applications; performs a variety of professional, technical, and analytical services involving the evaluation of custom database-driven websites and collaboration with project team on application development, office operations support, and problem resolution; performs related duties as assigned.

DIRECTLY RESPONSIBLE TO

Appropriate Administrator

SUPERVISION OVER

None

DUTIES AND RESPONSIBILITIES

(Any one position may not include all of the listed duties, nor do all of the listed examples include all tasks which may be found in positions within this classification.)

Applications Development and Database Management

Develops, produces, and maintains structural design of various systems, full-stack applications, and databases for custom database-driven websites, based upon logical data models by employing program and business requirements and analysis; coordinates and aligns information systems with program objectives; codes, documents, and tests programs and resolves related problems; develops data migration/conversion techniques for system conversions or upgrades; follows federal accessibility, World Wide Web Consortium (W3C), and web programming accessibility standards and guidelines; recommends policy structures regarding database systems; researches new technology; develops database administration procedures; audits, modifies, and amends data in systems; designs, implements, and evaluates functionality and makes recommendations for improved methods; oversees and manages multiple concurrent projects; works closely with system users to ensure information system strategies are aligned with program needs; designs and implements program and project evaluation mechanisms; evaluates database integration, integrity, and security; organizes and analyzes material for efficient reporting and retrieval.

Communications/Technical Assistance

Designs and maintains custom websites; assists and supports organizational members and clients with database-driven websites, network, database, and application training and technical support; supports existing products and services by acting as agent for problem and operational issue resolution including database import/export and other related technical problems; conducts, compiles and analyzes client surveys; prepares exhibits and generates statistics from member databases; designs, produces, and distributes documents including custom reports; plans and prepares correspondence and documentation related to projects; collaborates with project team to develop strategies to enhance user effectiveness; assesses client needs and outlines project scope and objectives; estimates hours and resources needed for projects.

Office Operations Support

Assists and supports staff with internal systems, applications, and databases including developing procedures, forms, and other organizational tools; monitors and reports to management any deviation from procedures or policy; plans and implements departmental processes and projects; develops, prepares, and distributes materials to staff; trains and provides technical direction to end users and staff as needed; presents data and statistical information at meetings; supports internal operations, budget management, and project planning.

MINIMUM QUALIFICATIONS

Education, Training, and Experience

Any combination of education, training, and experience equivalent to possession of a bachelor's degree; at least one year web development experience in a client-server environment and formal or informal training in applications development, database design, analysis, management, and integration on the web required; coursework in computer science, information systems, or other related fields preferred.

Knowledge of

Utilization and purposes of management information systems; various operating systems, Internet browsers, and platforms; principles of organization and project management; web development and database integration using current programming languages and frameworks including the use of an object oriented programming language, Hypertext Markup Language (HTML), ColdFusion Markup Language (CFML), Structured Query Language (SQL), Cascading Style Sheets (CSS), JavaScript, ASP.NET, and XML/JSON; version control systems and bug/issue tracking systems; web server administration concepts; advanced knowledge of software design and relational database technology using SQL Server; testing tools and methodologies; dynamic report generation; server and web application security; federal accessibility standards and web code (W3C) validation; data communications and network systems; fundamentals of page layout and graphic design; standard software applications including videoconferencing platforms, spreadsheet and database applications.

Skill and Ability to

Communicate clearly and effectively in oral and written form with individuals from diverse groups; interact with users and staff in clear and non-technical terms; demonstrate initiative and act independently; work under time constraints to meet deadlines; set priorities, analyze problems, develop solutions, and make decisions on a variety of complex matters; establish and maintain cooperative working relationships with staff and clients; research and evaluate software applications; design and develop database systems and database connectivity to custom websites; use a variety of programming languages, databases, and operating systems on multiple platforms; develop and debug code within an Integrated Development Environment (Visual Studio); manage software configuration for products used for development; learn new software applications and hardware and adapt to changes in technology; produce and present a variety of reports.

Revisions approved by Personnel Commission 12/12/23

Former title: Database Designer/ Applications Developer

Revisions approved by Personnel Commission 9/12/17

Revisions approved by Personnel Commission 6/10/14

Revisions approved by Personnel Commission 7/19/11

Former title: Database Designer/Software Applications Developer

Revisions approved by Personnel Commission 10/14/08

Former title: Database Designer/Information Systems Analyst

Revisions approved by Personnel Commission 4/19/05

Revisions approved by Personnel Commission 9/30/98

Approved by Personnel Commission 1/95