

# **Sacramento County Office of Education Job Description**

## **Classification Title: Database Designer/Applications Developer**

### **DEFINITION**

Under general direction develops, designs, documents, evaluates, and supports Web-based data management systems, applications, and frameworks; performs a variety of professional, technical, and analytical services involving the evaluation of custom database-driven websites, office operations support, and problem resolution; performs related duties as assigned.

### **DIRECTLY RESPONSIBLE TO**

Appropriate administrator

### **SUPERVISION OVER**

None; however, may direct the work of other staff assigned to the department.

### **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, applications, and databases for custom database-driven websites, based upon logical data models by employing program and business requirements and analysis; plans, codes, and implements server based technology solutions; 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 and Web programming standards to address accessibility 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 in hard copy and online; 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; establishes and maintains a variety of file systems used in the department; 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 and training equivalent to possession of a Bachelor's degree which demonstrates the ability to perform the duties and responsibilities as described; coursework in computer science, information systems, or other related fields preferred; sufficient formal and/or informal training in applications development, database design, analysis, management, and integration on the Web; experience working as a programmer in a client-server environment.

### **Knowledge of**

Utilization and purpose 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, Visual Basic.NET (VB.NET), .NET MVC, Photoshop, 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 validation; data communications and network systems; fundamentals of page layout and graphic design.

### **Skill and Ability to**

Communicate clearly in oral and written form; interact with users and staff in non-technical, clear 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 office hardware/software configurations including set-up, maintenance, and back-up; ability to learn new software applications and hardware and adapt to changes in technology; produce and present a variety of reports.

Revisions approved by Personnel Commission 9/8/20

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