

SAN DIEGO COUNTY OFFICE OF EDUCATION
Personnel Commission

CLASS TITLE: APPLICATION ARCHITECT

DEFINITION:

The job of Application Architect is to design and create major aspects of the architecture of an application, including: user interface, middleware and infrastructure; to provide technical leadership to the applications development team; to provide design and code reviews and ensure that uniform enterprise wide application design standards are maintained; and to collaborate with other stakeholders to ensure architecture is aligned with business requirements.

REPRESENTATIVE DUTIES:

This position description is intended to describe the general nature and level of work being performed by the employee assigned to the position. This description is not an exhaustive list of all duties, responsibilities, knowledge, skills, abilities, and working conditions associated with the position. Incumbents may be required to perform any combination of these duties. All requirements are subject to possible modification to reasonably accommodate individuals with a disability.

ESSENTIAL FUNCTIONS:

Evaluate SDCOE applications development needs and apply technical principles and concepts to develop business solutions.

Create SDCOE application design standards.

Create functional designs and application systems architecture across all technologies and platforms.

Design an application's technical infrastructure, such as specific databases, programming languages, utilities, and testing approaches.

Determine enterprise-wide architecture platform and technology requirements for applications.

Analyze procedures and data to develop logical solutions to complex applications programming problems.

Recommend, design, and develop complex applications and supporting hardware and software.

Monitor quality assurance and security procedures for business applications.

Ensure compliance with application design and development policies.

Independently perform complex application development/programming analysis.

Keep up-to-date on emerging application design technologies and methodologies and attend training classes as necessary.

Perform complex application analysis, design and development duties.

Evaluate, test, implement, and support new operating systems and hardware.

Evaluate application development practices and create development standards, policies and procedures.

Conduct meetings with customers and transform requirements into effective applications.

Provide detailed design and specification documentation for all applications and databases.

Provide project management, oversight, leadership and support.

Represent Information Technology at advisory and user group meetings.

Verify stability, interoperability, portability, security, and scalability of application architecture.

Install, research, test and verify proper functioning of software updates.

Research new features, software and tools.

Generate documentation for staffing and training.

OTHER FUNCTIONS:

Performs other related duties as assigned for the purpose of ensuring the efficient and effective functioning of the work unit.

EDUCATION AND EXPERIENCE:

Experience: Five (5) years of experience in the design, development, and implementation of client server or Web-based applications with the scope of 1000+ users, including three years in ASP.NET Core MVC and three years of experience with SQL and Microsoft SQL Server, Oracle, or DB2.

Education: Bachelor's degree in computer science, information systems, business administration or related field.

Equivalency: A combination of education and experience equivalent to a bachelor's degree in computer science, information systems, business administration or related field or extensive technical training, and five (5) years of experience in the design, development, and implementation of client server or Web-based applications with the scope of 1000+ users, including three years in ASP.NET Core MVC and three years of experience with SQL and Microsoft SQL Server, Oracle, or DB2.

SKILLS, KNOWLEDGE, AND ABILITIES:

SKILLS are required to perform multiple, technical tasks with a need to occasionally upgrade skills in order to meet changing job conditions. Specific skill-based competencies required to satisfactorily perform the functions of the job include: operating standard office equipment including pertinent software applications; planning and managing projects; problem-solving and organizational skills; and preparing and maintaining accurate records.

KNOWLEDGE is required to perform: Principals and practices of application testing, analysis, and security administration; Methods and techniques used to design, develop, test and implement applications; Methods and techniques of evaluating business requirements and developing information systems solutions; Principals and practices of programming languages and operating systems; Project management and reporting; methods and techniques of developing complex application technical manuals and documentation; Microsoft software development best practices; Microsoft ASP.NET Core MVC Framework fundamentals; Visual Studio .NET Development Environments; Structured Query Language (SQL); Database design and development; Microsoft SQL Server 2014 and above; C#; Web API; Azure cloud services; JavaScript; Hyper Text Markup Language (HTML); SQL Server Integration Services (SSIS); Business Objects Enterprise; Microsoft operating systems; Microsoft Office products; Agile software development (SCRUM or Kanban).

ABILITY is required to schedule activities and/or meetings; gather, collate, and/or classify data; and use basic, job-related equipment. Flexibility is required to work with others in a wide variety of circumstances; work with data utilizing defined but different processes; and operate equipment using defined methods. Ability is also required to work with a diversity of individuals and/or groups; work with a variety of data; and utilize specific, job-related equipment. Problem solving is required to analyze issues and create action plans. Problem solving with data requires independent interpretation of guidelines; and problem solving with equipment is limited. Specific ability-based competencies required to satisfactorily perform the functions of the job include: adapting to changing work priorities; communicating with diverse groups; setting priorities; building collaborative relationships; working with constant interruptions; meeting deadlines and schedules.

RESPONSIBILITY:

Responsibilities include: working independently under broad organizational policies to achieve organizational objectives; leading, guiding, and/or coordinating others; Utilization of resources from other work units is often required to perform the job's functions. There is some opportunity to impact the organization's services.

WORK ENVIRONMENT:

The usual and customary methods of performing the job's functions require the following physical demands: some lifting, carrying, pushing, and/or pulling, and significant fine finger dexterity. Generally, the job requires 60% sitting, 20% walking, and 20% standing. The job is performed under minimal temperature variations.

Established	Approved by the Personnel Commission	Revised	FLSA Status	Salary Range
9/2016	September 21, 2016	10/2019	Exempt	Classified Management Grade 038