

## SANTA CLARA COUNTY OFFICE OF EDUCATION

### **CLASS TITLE: WEB DEVELOPER/PROGRAMMER – SENIOR**

#### **BASIC FUNCTION:**

Under the direction of the Manager – Web Services and Applications Development, serves in a senior role for new and modified web development projects and provide technical direction and assistance to the team; designs, develops, analyzes, implements and maintains web applications for the Santa Clara County Office of Education, districts, schools, and partners; develops applications and databases using web-based interactive technologies; communicates with users and project team members to recommend design options, determines functionality, simulations and programming needed for system requirements.

#### **DISTINGUISHING CHARACTERISTICS:**

This class is designed to prepare incumbents for promotional opportunities into higher levels of employment. The incumbent is expected to consistently work independently with limited direction in carrying out assigned tasks in a fast-paced environment, which are subject to change into complex and situations, depending on unknown and quickly developing variables. The incumbent must be able to troubleshoot a variety of commonly occurring problems and calmly handle suddenly developing complex problems and situations with wide-reaching impact. The incumbent is also expected to make recommendations for improvement regarding day-to-day operations, and to assist in guiding, training, and organizing the work of assigned project team members.

#### **REPRESENTATIVE DUTIES:**

The following duties are examples of assignments performed by incumbents in this classification. It is not a totally comprehensive list of duties, nor is it restrictive regarding job assignments.

#### **ESSENTIAL DUTIES:**

Performs complex web application design, development, and support based on requirements.

Reviews application development with team members, clients and modify as necessary; communicates with clients, users and project team to determine functionality, programming needed for recommended design options or to resolve complex problems.

Develops and establishes standard procedures and best practices for the project team; researches and implements new technologies and provides technical direction and assistance to the team.

Participates in the scheduling of the programming efforts of staff to assure timely completion of projects; provides direction and technical assistance to staff in the resolution of technical and programming problems; maintains timelines for projects to assure compliance with project delivery dates.

Creates applications that are efficient, reliable, maintainable, extensible, and testable using various programming languages and SQL stored procedures.

Designs, creates and maintains data dashboards, including for data warehousing.

Creates test plans for applications, executes test and document results, assists users to develop and execute application testing, provides support to client and resolves problems. Debugs problem programs.

Implements applications in production environment, prepares production documentation and instructions; prepares and maintains technical and end user documentation. Prepares and submits change management documentation.

Develops application based data dashboards.

Identifies opportunities for operational improvements to existing systems; analyzes user work processes, creates requirements.

Updates request-tracking systems with issues status and resolution information.

Writes and submits status reports as assigned.

In a strategic customer-oriented manner, develops and maintains effective working relationships with County Office personnel, school districts, and the public to support the assigned job functions.

Participates in continuous learning, professional development, training, and ongoing education as needed or required to stay current with emerging technologies, relevant APIs, industry best practices and Web usability standards.

Operates a computer, a variety of software, and other office equipment as assigned; drives a vehicle to conduct work as assigned.

Attends and conducts a variety of meetings as assigned, which may occur beyond the normal work day or work week.

**OTHER DUTIES:**

Perform related duties as assigned.

**KNOWLEDGE AND ABILITIES:**

**KNOWLEDGE OF:**

.NET, C#, Visual Studio, AJAX/JavaScript, CSS, HTML, XML, JAVA, Python, PHP, JQuery, JSON, Transact SQL, Bootstrap Responsive UI.

Team software development roles and practices.

Object oriented design and one or more object-oriented programming languages.

Database performance optimization.

MSSQL query design and Server-side scripting techniques including Transact SQL, Active Server Pages (ASP or ASP.NET), VB.NET -as well as client-side scripting such as JavaScript.

Systems analysis and design.

Data profiling and analysis.

Windows and IOS operating systems.

Emerging technologies and software.

Current versions of web development programs and languages.

Proper English usage including grammar, spelling, punctuation and sentence structure.

Establish and maintain effective work relationships with those contacted in the performance of required duties.

Correct English usage, grammar, spelling, punctuation and vocabulary.  
Interpersonal skills using tact, patience and courtesy.  
Oral and written communication skills.

**ABILITY TO:**

Effectively use programmer development environment software such as .NET, C#, Visual Studio, AJAX/JavaScript, CSS, HTML, JAVA, Python, PHP, and Bootstrap Responsive UI. Be an authority in these areas and be a technical resource to Web Programmers.

Oversee, coordinate and perform responsible web development and programming activities.

Train and provide work direction and guidance to others.

Create applications that are efficient, reliable, maintainable, extensible, and testable using various programming languages and SQL stored procedures.

Design, create and maintain data dashboards. (Data Warehouse)

Maintain databases.

Communicate effectively in both oral and written form.

Interpret technical procedures and documentation, and explain technical concepts in non-technical terms to team members, clients and users.

Conduct small group and individual client training.

Prioritize, organize and schedule work assignments and projects.

Work under limited supervision with only occasional instruction and assistance.

Establish and maintain cooperative work relationships with those contacted in the performance of required duties.

Prioritize and schedule work.

Work independently with little direction.

Meet schedules and time lines.

Establish and maintain cooperative and effective working relationships with others.

Perform complex problem solving as well as critical thinking, using logic and reasoning to identify strengths and weaknesses to solutions and approaches.

Work with stakeholders during user acceptance testing to identify, analyze, and resolve bugs.

Work with management, administrators, and other team members to solve complex development challenges.

Write and test SQL scripts to migrate data between systems as required.

Analyze source systems for data transformation to a data warehouse.

Write complex ETL scripts to load data from source systems to a data warehouse.

**EDUCATION AND EXPERIENCE:**

Any combination equivalent to: Bachelor's degree in Computer Science, or related field, and four years of increasing responsible experience in programming web based applications. A Master's degree in Computer Science, or a related field is preferred.

**LICENSES AND OTHER REQUIREMENTS:**

Valid California driver's license.

**WORKING CONDITIONS:**

**ENVIRONMENT:**

Office environment.

PHYSICAL DEMANDS:

Dexterity of hands and fingers to operate a computer keyboard.

Seeing to read a variety of materials.

Sitting for extended periods of time.

Hearing and speaking to exchange information.

Approved by the Personnel Commission: March 12, 2014; Revised Approval: April 12, 2017



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Kristin Olson  
Director-Classified Personnel Services

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