long
beach
unified
school
district

WEB APPLICATIONS DEVELOPER

JOB SUMMARY

Under general supervision, create applications, workflows and databases based on user requirements using current web technologies and SQL-based databases with increasing requirements of initiative and independence of action; design web pages and applications to meet customer needs including graphic design, coding techniques, and database integration; troubleshoot assigned system or environments and support changes, upgrades and related functions; provide support and training to school site and departmental web content creators; perform related duties as assigned.

EXAMPLES OF DUTIES

The classification specification does not describe all duties performed by all incumbents within the class. This summary provides examples of typical tasks performed in this classification.

- Develop, test and implement custom programs using standard programming languages in web-based applications, and database management systems with increasing requirements of initiative and independence of action. *E*
- Provide support and training to school site and departmental web content creators; consult with users to determine systems and software requirements and objectives and support common personal computer software applications. *E*
- Design and maintain an appealing flow and uniformity of District websites; present a consistent visual image on the web by promoting uniform fonts, formatting, icons, images, layout techniques and modularization including maintenance of HTML templates and image archives. *E*
- Create applications, workflows and databases based on user requirements; create and design software and processes to streamline District functionality. *E*
- Assist in assuring District websites meet Web Content Accessibility Guidelines (WCAG) for individuals with disabilities including those utilizing adaptive technology; review content and provide assistance regarding web accessibility. *E*
- Convert documents, graphics and other content from a variety of formats into a web-optimized format; assure web pages display properly and quickly on a variety of different browsers and computer hardware; create or alter graphics for web pages and applications. *E*
- Communicate changes in assigned configuration to customers and perform related support activities. *E*

- Troubleshoot and resolve system issues; debug programs by preparing test data and testing program operations; run test data in actual computer operations; detect and resolve programming errors and miscalculations. *E*
- Troubleshoot third-party software which uses web technology and/or SQL-based databases; confer with vendors as directed. *E*
- Optimize new and existing web applications for desktop browsers and mobile devices; install software packages, data conversion, and package maintenance. *E*
- Maintain and update application software, web server software, and database software on related servers. *E*
- Identify core services of departments and the technology utilized; analyze existing operating procedures and requirements; prepare description of user needs, program functions, and procedures required to develop or modify web or software applications to improve production or work flow. *E*
- Maintain records and prepare reports regarding website design, implementation activities, status of projects, and user traffic and statistics as directed; write and maintain user documentation. *E*
- Communicate with administrators, staff and others to coordinate activities, schedule work, resolve issues and exchange information. *E*
- Provide programming and analysis support to the business and instructional areas and train and support users on installed software; assist and instruct users in the use of various report writer or document management products. *E*
- Attend and participate in a variety of committees, meetings and trainings related to assigned activities; prepare and make presentations as assigned. *E*
- Provide recommendations for changes or improvements to assigned environments; develop and provide user guides or training as assigned. *E*
- Operate a computer and assigned software; drive a vehicle to conduct work. *E*
- Perform related duties as assigned.

Note: At the end of some of the duty statements there is an italicized "E" which identifies essential duties required of the classification. This is strictly for use in compliance with the Americans with Disabilities Act.

DISTINGUISHING CHARACTERISTICS

The Web Applications Developer is the entry-level classification in the series and incumbents perform the more routine tasks and duties with increasing requirements of initiative and independence of action. Work is typically reviewed while in progress and fits an established structure or pattern. Incumbents participate in a variety of technical and programming projects with a focus on providing support and training to school site and departmental web content creators.

The Senior Web Applications Developer is the full journey-level classification within the Web Applications Developer series and has oversight responsibility of the District's website and application design activities to assure the content supports the mission, vision and values of the District. The Senior Web Applications Developer serves as a lead and provides work direction and guidance to incumbents in the Web Applications Developer classification. Incumbents must possess a thorough understanding of how to implement web accessibility standards. Positions in this class are normally filled by advancement from

the Web Applications Developer level, or when filled from the outside, require significant related experience.

EMPLOYMENT STANDARDS

Knowledge of:

Principles, practices and techniques of creating web applications, designing web pages and database structures.
Principles of program design, coding, testing and implementation.
Principles and techniques of business process analysis and design.
Programming and macro languages used in web-based applications and database and document management systems.
Practices and techniques of training and supporting technology users.
Methods and procedures of operating server and desktop computers and peripheral equipment.
Fundamentals of creating accessible web pages, online forms and digital media.
Methods of progressive enhancement and responsive/adaptive design.
Current web development tools, computer graphics packages, courseware authoring tools and learning and content management systems.
Oral and written communication skills.
Interpersonal skills using tact, patience and courtesy.
Correct English usage, grammar, spelling, punctuation and vocabulary.
Record-keeping and report preparation techniques.

Ability to:

Perform programming duties in the analysis of systems requirements and preparation of web applications, graphics and database structures.
Assist in assuring District websites meet Web Content Accessibility Guidelines (WCAG).
Develop accessible web-based resources for teaching and learning.
Create common application features in dynamic web-based applications such as pop-up menus, forms, animation and rotating graphics.
Analyze user issues, evaluate alternative and devise efficient cost-effective, user-friendly solutions.
Manipulate digital photographs for the web using advanced application software.
Understand multiple database structures, report writer techniques and forms design.
Meet schedules and timelines.
Participate in systems and programming studies and analyses.
Seek technical guidance as required.
Research, compile, organize and analyze statistical and technical data.
Provide technical assistance and recommendations concerning existing applications and systems.
Communicate effectively both orally and in writing.
Maintain current knowledge of technological advances in the field.
Establish and maintain effective working relationships with others.
Maintain records and prepare reports.

Education and Training:

Associate's degree in computer science, information technology or a related field including coursework in web applications programming.

Experience:

One year of web application development experience.

Any other combination of education, training and experience, which demonstrates that the applicant is likely to possess the required skills, knowledge or abilities, may be considered.

SPECIAL REQUIREMENTS

Positions in this classification require the use of a personal automobile and possession of a valid California Class C driver's license.

WORKING ENVIRONMENT

Office environment.
Constant interruptions.
Extended viewing of a computer monitor.

PHYSICAL DEMANDS

Dexterity of hands and fingers to operate a computer keyboard.
Hearing and speaking to exchange information.
Sitting for extended periods of time.
Seeing to read a variety of materials and view a computer monitor.

AMERICANS WITH DISABILITIES ACT

Persons with certain disabilities may be capable of performing the essential duties of this class with or without reasonable accommodation, depending on the nature of the disability.

APPOINTMENT

In accordance with Education Code Section 45301, an employee appointed to this class must serve a probationary period of six (6) months during which time an employee must demonstrate at least an overall satisfactory performance. Failure to do so shall result in the employee's termination.

PCA: 07/15/2021