<u>DEFINITION:</u> This is advanced technical work in the development and maintenance of an agency's web presence.

An employee in this job is responsible for performing the full range of web support functions for a complex web site; or serving as a lead worker over positions performing technical web work. The full range of web support functions includes gathering and analyzing user and site requirements; recommending methods for delivering services or information through internet portals or pages; developing and maintaining the navigational structure and taxonomy by applying logic and best practices; writing code; publishing or coordinating the publishing of web site pages; testing web pages and applications and resolving problems to ensure web sites meet accessibility and usability standards; registering users, setting up groups, and assigning roles; and monitoring site traffic and determining site capacity to meet user demands and performance standards. Work may also involve developing and maintaining complex web applications; or administering web application contracts and managing contracted staff in the development or upgrade of web sites and applications for significant agency-wide or mission critical agency functions. Complex web sites are typically characterized by complex business processes, integration with other applications and databases to perform a complex processing function, complex security roles and requirements with other secure applications, and their criticality to the agency's mission. Work is differentiated from the Web Specialist 2 job by the responsibility for complex web sites; or serving as a lead worker over positions performing technical web work. Employees in this job are typically located in a centralized web unit. Employees in this job serve as liaisons with the Office of Administration to ensure that enterprise standards and initiatives are implemented on the agency's web site. Employees work with technical staff and content providers to coordinate the creation, modification, and implementation of content, services, site structure and updates, and to define system design and user interfaces based on customer needs and objectives. Work is assigned with broad instructions by a technical or administrative supervisor who provides assistance when needed and reviews completed work for accuracy and adherence to enterprise and agency standards.

<u>EXAMPLES OF WORK:</u> Meets with users to determine existing business processes, web service inefficiencies or problems, business objectives and requirements, operational needs, level of utilization, and computer equipment capability to design or modify a web solution that will meet their needs, identify alternatives, and provide solutions for improving web services.

Identifies plans to integrate complex business plans and requirements with internet services, including the technical and economic feasibility of each web service solution.

Proposes best methods for web page layout and design to the client and advises the client about state web page guidelines.

Identifies changes to the navigational structure and taxonomy based on web site activity and user feedback.

Develops and maintains the navigational structure and taxonomy on a complex web site.

Converts content into workable web pages through file conversion programs, mark-up languages,

and scripts.

Develops custom portlets or links to establish the web connection between the portal/web site and the application.

Develops and configures community portlets/subsites and page layouts. Develops and manages the use of templates.

Develops non-standard links which involve passing variables in the link.

Creates forms with functionality that perform highly complex calculations, verify data, and interact with other applications.

Tests web site accessibility and usability using assistive technologies to ensure sites meet ADA standards and other related requirements.

Serves as agency expert on accessibility standards and procedures. Develops accessibility testing documents for use by technical staff.

Reviews applications, dynamic site content, and custom navigation developed by others for compliance with accessibility, usability, and quality standards and procedures, completes appropriate documentation, prepares corrective action plans, and ensures remediation efforts have achieved the desired objectives.

Researches federal and state accessibility standards and best practices and recommends agency standards and procedures.

Plans and assigns permissions and folder level security for applications, pages, portlets, or objects.

Creates and maintains security on folders.

Advises users on risk/accessibility trade-offs to assist them in selecting appropriate levels of security.

Works with applications development or database staff in analyzing and resolving end-user security and resource access control problems with web applications.

Assigns roles to a user group for a large number of interactive web sites and pages with intricate authentication and authorization roles.

Plans authentication and authorization integration points with multiple internal and external secure applications.

Participates in gathering and preparing necessary documentation for security assessments.

Formats graphics and file sizes based on user connection speed and bandwidth limitations.

Develops and maintains monitoring scripts and schedules to monitor web site availability and efficiency and ensure web services are running appropriately on the site.

Reports on site and web services availability and makes recommendations to improve server availability and efficiency.

Maintains backup logs related to web site activities.

Installs, configures, and maintains the agency web servers, third party software, and patches on web servers.

Resolves web server software problems.

Ensures web and web application servers are reliable and scalable and provide acceptable levels of performance.

Plans server capacity and growth requirements and coordinates the acquisition of servers.

Provides ongoing maintenance and support for completed web application projects.

Configures and maintains web development software.

Deploys web applications to staging and production environments and prepares deployment documentation, code packaging, and technical documentation for the Enterprise Server Farm when necessary.

Develops complex web applications or leads complex web application development projects by providing definitions, design specifications, programming, testing, documentation, and implementation consultation.

Meets with business owners, development staff, or contractors to define the scope of the web application development project, identify project requirements and overall objectives and deliverables, coordinate the implementation schedule, oversee testing, monitor progress and address/resolve problems, ensure deliverables are met and in a timely manner, facilitate status meetings, and recommend deployment and payment.

Manages complex web applications development projects involving integration points with multiple internal and external applications.

Researches and recommends new technologies to improve the delivery of internet services.

Meets with vendors on new and existing products, evaluates usefulness and cost of products, and makes recommendations.

Troubleshoots and resolves web site operational problems such as network, server, and application problems.

Develops and modifies graphics and multimedia content such as streaming video and audio using multimedia software.

Manipulates streaming video to ensure it meets accessibility and usability standards.

Edits video, audio, and other images based on frame rates, bandwidth, codec, file compression, streaming/non-streaming formats, image quality, and other related factors.

Develops queries to produce complex customized web statistical reports and uses results to improve web site and web application services.

Serves as an agency representative at enterprise workgroups and committees.

Serves as the liaison with OA in implementing enterprise standards and initiatives on the agency's web site.

Provides technical guidance, training, and support to web users relative to web forms and applications, hardware and software problems, and usage.

Provides technical guidance, training, and support to applications developers regarding web standards, ADA requirements, and use of third party web software.

Conducts formal and informal training for content administrators regarding web design and content management.

Recommends training needs and plans appropriate training programs.

Functions as a lead worker for technical work by assigning and reviewing work, training employees, and performing quality control functions for the work.

Performs related work as required.

<u>REQUIRED KNOWLEDGES, SKILLS, AND ABILITIES:</u> Knowledge of web site development including navigational structure. Knowledge of web page authoring techniques and tools. Knowledge of web development programming languages. Knowledge of web testing processes and procedures.

Knowledge of web accessibility and usability design techniques.

Knowledge of permissions and folder level security for applications, pages, portlets, or objects.

Knowledge of server and workstation platforms.

Knowledge of the methods of converting content into workable web pages through file conversion programs, simple mark-up languages, and basic script.

Knowledge of image formatting, file size impacts, user connection speed, and bandwidth limitations for web graphics.

Knowledge of federal accessibility standards and best practices as they relate to website development and maintenance.

Knowledge of the methods of connecting to and querying a database for update and report functions.

Knowledge of the systems development life cycle.

Knowledge of the principles and practices of project management. Knowledge of the methods to

incorporate video and audio into web sites. Knowledge of the functions and capabilities of various web browsers.

Knowledge of functions and capabilities of portal technology.

Ability to read and interpret technical materials to troubleshoot web related problems.

Ability to communicate effectively orally. Ability to communicate effectively in writing.

Ability to establish and maintain effective working relationships.

MINIMUM EXPERIENCE AND TRAINING: One year as a Web Specialist 2;

or

Two years of experience in web site development or web site design, and an associate's degree in web development or web design or in any information technology field that includes or is supplemented by six credits in the area of web development or web design;

or

Four years of experience in web site development or web site design;

or

A bachelor's degree in web development or web design or in any information technology field that includes or is supplemented by six credits in the area of web development or web design;

or

An equivalent combination of experience and training.