

**APPLICATIONS SPECIALIST IV**

**CLASS SUMMARY**

Develop, administer, and integrate, District websites and advanced multi-tier computer systems. Responsible for planning, analysis, design, development, testing, implementation and maintenance of information systems. May also act as a coordinator for information systems projects including district-wide public and employee only websites and student web portal.

**REPRESENTATIVE DUTIES**

Project Coordination: identify scope of project; develop detailed task list and interdependencies; estimate time requirements; identify critical milestones; identify and assess risks; prepare contingency actions; coordinate project activities with project team. May setup and configure the District's Web Content Management system (WCM) server farm including user access and security. Administer both website application and SQL database servers; integrate to Active Directory Services, and assimilate into the District network infrastructure.

Planning: assess current functional organization, processes, and information systems; develop information systems model, research and evaluate new web and mobile technology, including portable devices, related products, hardware tools to optimize development and functionality of websites and applications.

Analysis: gather data to identify customer requirements; interpret and evaluate requirements; define scope of work to meet customer requirements; identify time, technology, and resource constraints; develop high level systems and functional specifications; prepare cost/benefit analysis (feasibility study), alternative options with pros & cons, and risk analysis; develop test strategy. Researches, evaluates, and recommends new software packages as needed.

Design: develop detailed design specification including website governance plans, entity relationships and business process models; identify maintenance requirements; perform feasibility studies for alternative designs; identify physical requirements for system implementation; prepare and conduct design review; identify impact on existing systems; determine deployment impact on website and users, perform usability testing and human factors analysis; develop test plan; define security requirements; develop system design prototype.

Development: create new and/or modify existing system interfaces, business rule logic, databases and environments. Write new or customize existing server web application components as well as mobile applications. Create, maintain, manage and implement WCM's branding solutions, master site collections, templates, cascading style sheets and site collections. Assists other developers and performs analyses to resolve complex project issues including analysis of technical feasibility of proposed systems solutions.

Testing: perform unit, integration, system, volume, and performance testing; perform data conversion and user acceptance testing. Implement preventative maintenance procedures for the live website environments.

Implementation: install and tune production systems, perform user training, and post-implementation assessment, and perform follow up procedures after implementation of district websites.

### APPLICATIONS SPECIALIST IV cont'd

Maintenance: plan, analyze, design, develop, test, and implement system enhancements including existing Web Content Management (WCM) system functions.

### ORGANIZATIONAL RELATIONSHIP

This position reports to the designated supervisor or administrator.

#### Desirable Qualifications Guide

Training and Experience: Bachelor's degree in Information Technology, Computer Science or related field and five years experience as programmer/analyst with systems analysis and applications design, including experience in system or database design and transaction processing, implementation of web and mobile technologies; or an equivalent combination of training and experience.

Knowledge: *Problem Definition*: problem identification techniques; information summarization and generalization techniques; detailed anomaly documentation; inquiry framing and clarification; relevancy and accuracy assessment information. *Problem Analysis*: symptom v. cause categorization; hypothesis formulation and testing; system-wide impact analysis; creative problem solving; situational application of principles. *Solutions Testing*: solution feasibility and relevance assessment; test procedure organization; data synthesis; solution integration. *Resolution Planning*: complex process organization and management; solution selection facilitation; data collection and analysis for decision making; contingency planning. *Solution Implementation*: change management processing; obstacle mitigation techniques; new process organization; outcome forecasting; technical documentation. *Fundamental Principles*: website architecture and design; server and client side programming; mobile technology applications development.

Ability: *Basic*: probe, qualify, analyzes, interpret, and summarize information; compose and edit documents for appropriate purpose and audience; convert numerical data and predicts arithmetic results; summarize, interpret, and translate mathematical data. Good oral and written communication skills. *Thinking*: develop and apply creative solutions to new situations; analyze situation and consider risks, implications, and multiple viewpoints; examine information, analyze causes, and recommend action; analyze relationship between parts and whole, and process and procedures; investigate and apply new learning techniques and tools; analyze logic and principles, and examine information for relevance and accuracy. *Personal*: Maintain effective and cooperative work environment with departmental staff, faculty, administrators and vendors. *Technical*: analyze, integrate, and compare data; analyze organization of information and convert formats; analyze system configuration, and identify strengths and limitations; administer and maintain WCM systems, develop server, client, and mobile device applications, adjust and monitor system operation, and troubleshoot system malfunction and failures; recommend system modifications and improvements; analyze task and technology relationship and recommend solutions.

Physical Requirements: Ability to use a computer workstation throughout the workday.