SENIOR INFORMATION TECHNOLOGY APPLICATIONS DEVELOPER

DEFINITION

Performs advanced professional duties pertaining to the design, development and maintenance of software application solutions to meet business needs; may serve as a lead or supervisor with responsibility for assigning, directing and monitoring the work of subordinate professional staff; may serve as a project manager, with responsibility for managing large development or customization of commercial, off-the-shelf (COTS) projects; coordinates application deployments; may design, develop, test, document and implement Intranet and Internet websites; performs advanced professional level applications maintenance and customer support duties; performs other related duties as assigned.

CLASS CHARACTERISTICS

This is the advanced journey-level class in the IT Applications Developer series. Incumbents at this level work under minimal direction, receiving occasional supervision while working toward a definite objective that requires use of a wide range of procedures and planning to meet and resolve complex problems.

This class is distinguished from the class of IT Applications Developer II by the performance of lead or supervisory worker and/or advanced professional duties.

EXAMPLES OF DUTIES

- 1. Serves as a lead or supervisory worker over subordinate professional information technology staff within an assigned work unit; schedules and assigns work; distributes resources; provides direction and guidance regarding processes and procedures; monitors staff work and work products to help meet unit goals and objectives; may provide input or write employee performance reviews.
- 2. May serve as the project lead over large, complex applications development projects; develops and monitors project budgets and resources; monitors vendor performance to ensure compliance with county standards and specifications; interfaces with clients to define project scope and review project activities, recommendations and outcomes; coordinates the use of project resources based on project requirements; designs and implements project testing and quality assurance processes.
- 3. Writes complex application design specifications and documentation using flow diagrams, schematics, file structures, reports, forms and menus.
- 4. Communicates with application users as well as other technology staff in order to define application development requirements; designs and writes complex computer programs

using various computer languages and/or database platforms; writes, revises and maintains code for application development, enhancement or modification using programming logic, scripts and documentation; evaluates and resolves program relationship and system integration issues.

- Coordinates design, development, implementation and testing processes with other technology staff to implement application design specifications and ensure integration across multiple platforms and technologies.
- 6. Designs, develops, implements, documents and maintains websites, including Information Architecture, navigation, searching, content management, graphics design, user interfaces, security and audio/visual streaming. Develops website navigation and application frameworks; writes programming code and scripts; creates database connections; ensures compliance of web pages and sites with County policies and procedures.
- 7. Monitors and analyzes website/system volume capacities; monitors and analyzes traffic patterns; monitors and tests website functionality to ensure optimal performance for end users; implements performance improvements and/or site expansion.
- 8. Monitors web servers and performs server administration and maintenance duties to ensure optimal performance.
- 9. Implements website security to help ensure the integrity and protection of data and to prevent intrusion from external sources.
- 10. Performs various application quality assurance activities; tests, troubleshoots and debugs programs using appropriate technology; executes testing plans to validate functionality; resolves programming issues; refines data and formats final products.
- 11. Provides recommendations for improving hardware and/or software in order to accomplish business goals; recommends and/or implements operating system adjustments to maximize application performance and resource resolution.
- 12. Customizes purchased third-party software to meet County needs and standards.
- 13. Coordinates program and/or system development activities with vendors; maintains effective communications with users regarding vendor activities, problems, status, timelines and other details.
- 14. Provides professional support and troubleshooting assistance to customers pertaining to applications-related matters; investigates, troubleshoots, evaluates and resolves complex application function problems.
- 15. Conducts online, group and/or one-on-one training sessions with application users and/or technology staff in order to provide information on application functions; designs and prepares training materials.
- 16. Prepares reports, correspondence and other documents; participates on committees and task forces; attends meetings, conferences and training sessions.

17. Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

Knowledge Of:

- Principles of supervision, including how to train and motivate staff.
- Project management principles and techniques including project budgeting, quality assessment and control and resource management.
- Information technology hardware and software similar to that used by the hiring department.
- General operations, services, concepts, terms and activities common to a comprehensive, state-of-the-art information technology program.
- Advanced principles, methods and techniques used in designing, developing, testing, documenting and implementing business applications.
- Advanced principles pertaining to the application development lifecycle; application design principles using flowcharting techniques and prototype development tools.
- Current industry standard application and web development languages and technologies used in the Department.
- Current industry standard graphical user interface development programs and tools used in the department.
- Methods and techniques of evaluating business requirements to provide technology solutions.
- Operational characteristics of local and wide area network systems.
- Operational characteristics of communication systems, equipment and devices.
- Tools and equipment used in testing the functionality of computer applications.
- Principles and practices of customer service in an information technology environment.
- Methods and techniques of developing and presenting technical documentation and training materials.

Ability to:

- Assign, direct, lead and supervise the work of others.
- Coordinate and administer complex information technology projects; plan and schedule the work of assigned project team members to accomplish project goals.

- Perform professional level applications development duties, including programming, maintaining, troubleshooting and repairing various application structures and websites, from inception to final testing and implementation.
- Gather and evaluate information in order to reason logically, draw valid conclusions, take appropriate actions and/or make appropriate recommendations.
- Develop, maintain, test and troubleshoot program structures, flow charts, layouts and screens using standard technologies and tools.
- Read and interpret source code from commonly used programming languages; develop a working knowledge of new programming languages.
- Communicate technical information to a wide variety of users.
- Troubleshoot and repair a variety of complex and difficult application issues using appropriate program testing methods and tools.
- Plan, organize, prioritize and process work to ensure that deadlines are met.
- Interpret and apply complex and technical information pertaining to computer and network systems.
- Adapt quickly to changes in policies, procedures, assignments and work locations.
- Communicate effectively, both verbally and in writing.
- Establish and maintain effective working relationships with those encountered during the course of the work.

<u>Experience:</u> Three years performing applications development and analysis at a level that is comparable to the County of Orange class of IT Applications Developer II;

<u>Education</u>: College level education or training directly related to the competencies and attributes required of the position may be substituted for up to one year of the required experience at the rate of three semester units or the equivalent, equaling one month of experience and one hour of training equaling one hour of experience. College level education or training beyond a bachelor's degree, which is directly related to the competencies and attributes required of the position, may be substituted for up to an additional year of required experience at the same rate identified above.

<u>Special Requirement</u>: Depending upon assignment, demonstrated professional level competency and/or certification pertaining to the information technologies used by the appointing department may be required.

ADDITIONAL REQUIREMENTS

Depending upon assignment, some positions in this class may require possession of a valid California driver's license, Class C or higher.

PHYSICAL AND MENTAL REQUIREMENTS

Frequent standing or sitting for extended periods; frequent walking; occasional driving may be required, depending upon assignment; infrequent pushing/pulling; infrequent bending, kneeling, squatting and crawling; infrequent lifting up to 25 pounds; constant use of good overall vision for reading/close up work; infrequent use of color perception and occasional eye/hand coordination; frequent repetitive motion from writing and using a computer keyboard; occasional grasping, holding and reaching; frequent hearing/talking to others on the telephone and in person; frequent decision making and concentration; occasional public contact; occasional working alone.

Additional physical/mental requirements or frequencies may be required, depending upon assignment.

ENVIRONMENTAL CONDITIONS

Work is typically performed in an indoor office environment, but occasionally requires travel to other locations. Work environments may include high levels of noise, dust and/or unpleasant odors. Occasional early morning, evening, holiday and/or weekend work may be required.