LANE COUNTY
H032
09/07/11

APPLICATION SYSTEM ARCHITECT

DEFINITION

The Application System Architect (ASA) strategically designs and implements information systems and networked software architectures that support core organizational functions, and assures their high availability. ASA gains organizational commitment for all systems and software plans, as well as evaluating and selecting all technologies required to complete those plans. In addition, ASA provides technical leadership across the organization, from strategic decision making down to the project planning level; and performs other duties as assigned.

CLASS CHARACTERISTICS

This is the most advanced level class in the Programmer Analyst series. Positions at this level are distinguished from other classes within the series by the level and breadth of responsibility assumed. Duties performed by employees at this level are typically strategic in nature and enterprise-wide in breadth. Positions in this class will specialize in strategic and complex areas of application technology and their integrations with other systems and/or services. Positions in the class are assigned responsibility for project coordination in multiple project areas and provide technical and functional supervision of assigned staff.

SUPERVISION RECEIVED AND EXERCISED

Receives general direction from assigned management personnel. Provides functional and technical supervision to assigned staff.

EXAMPLES OF DUTIES – Duties may include, but are not limited to the following:

- Design and implement long-term strategic goals and short-term tactical plans for managing and maintaining the organization's systems and software.
- Ensure that proposed and existing systems architectures are aligned with organizational goals and objectives.
- Provide architectural expertise, direction, and assistance to others.
- Develop, document, and communicate plans for investing in systems architecture, including analysis of cost reduction opportunities.
- Conduct research on emerging technologies in support of systems development efforts, and recommend technologies that will increase cost effectiveness and systems flexibility.
- Where applicable, design, develop, and oversee implementation of end-to-end integrated systems.
- Document the organization's existing systems architecture and technology portfolio; make recommendations for improvements and/or alternatives.

- Analyze system performance and address performance problems. Evaluate costs, specifications, and organizational policies to recommend system performance tuning.
- Facilitate group processes including meetings, electronic or verbal communications; internally and with outside groups.
- Research complex technology products and services, prepare procurement specifications, evaluate vendor proposals and ensure compliance with standards and architectural plans.
- Develop, document, communicate, and enforce processes and procedures for standardizing software, systems, and development and implementation methodologies.
- Maintain and improve technical knowledge including current and emerging technologies and best practices.
- Share knowledge and information with management, customers, and co-workers via written and verbal reports, presentations, training, and informal communication.
- May schedule, assign, coordinate, monitor, and review the work of assigned staff.
- May share on-call duties with other staff members and respond in a timely manner 24 hours per day when problems arise.

MINIMUM QUALIFICATIONS

Knowledge of

- Organizational goals and strategic plans
- Software architectures.
- Industry standard software development practices.
- Research and development methodologies.
- Information analysis and data modeling techniques.
- Computer operations, procedures and operating systems.
- File structures, database concepts and capabilities of computer equipment.
- Computer applications and hardware and software technologies.
- Technical documentation procedures.
- Personal computers, personal computer concepts, and the operation of personal computers.
- Data management techniques and concepts.
- User interface design.
- Software engineering techniques.
- Advanced systems analysis, design principles and supporting methodologies, and tools.
- Advanced troubleshooting procedures.
- Advanced applications development environments.
- Advanced security concepts and techniques.
- Principles of project coordination.

Ability to

- Convey technical information simply and clearly, both verbally and in writing.
- Establish and maintain effective working relationships including building effective teams.
- Program in one or more computer languages.
- Perform advanced systems analysis.
- Design, develop, implement and maintain complex application systems.
- Apply advanced technical writing methodologies and tools to develop and maintain policies, procedures and technical documents.
- Perform database administration duties.
- Evaluate, recommend and implement vendor developed software systems.
- Understand organizational goals and objectives and perform assigned work to meet those goals and objectives.
- Troubleshoot complex software system problems.
- Coordinate complex projects.

EXPERIENCE AND TRAINING

Training

- Equivalent to a Bachelor's degree from an accredited college or university with major course work in computer science or a related field.

Experience

- Eight years of systems analysis and programming experience that demonstrate increasing responsibility in application software maintenance, development, and architecture.
- An equivalent combination of experience and training that will demonstrate the required knowledge and abilities is qualifying.

Special Requirements

- If required to drive, must be in possession of a valid driver’s license at time of application, and a valid Oregon Driver’s license by the time of appointment.
- Security Clearance - These positions require a criminal background investigation and, as a condition of employment, security clearance to have and be able to maintain access to the Area Information Records System (AIRS) and/or the Law Enforcement Data Systems (LEDS).