SALEM-KEIZER PUBLIC SCHOOLS JOB DESCRIPTION

7/09	**APPLICATION DEVELOPER IV**	2.14.9
Revised Date	Job Title	Index

PURPOSE

To improve student achievement through delivery of custom-developed and purchased applications and related components. The Application Developer IV may also support and administer data repositories supporting customer-developed and purchased applications and related components. The Application Developer IV position works at the most advanced level of analysis, design, development, testing, production support and project management skills and mentors Application Developers III, II and I in these areas as assigned.

SUPERVISION RECEIVED AND EXERCISED

Receives high-level statements of assignment related to District and users' strategic goals and priorities and from these formulates specific assignment tasks, plans, schedules, interactions and interdependencies.

Requires minimal task-level supervision and successfully handles multiple concurrent responsibilities involving all application-related activities from design through production support.

Works within accepted standards and methodologies with minimal supervision while providing regular communication to supervisor.

ESSENTIAL FUNCTIONS OF THE JOB - May include, but are not limited to, the following:

Delivering services to meet user information technology needs for custom developed and purchased applications and related-components (e.g. files, extracts, databases and repositories, reports, interfaces, imports/exports, jobs, procedures, processes).

Developing high level project assessments and charters based on initial service requests.

Serving as project lead for complex projects, including assignment, scheduling and oversight of project tasks.

Gathering, analyzing and documenting high level and detailed functional and technical requirements.

Identifying, analyzing and providing options for resolution of conflicting work programs, project proposals and support requirements.

Developing project strategies, planning and reviewing plans and progress with administrator, supervisor and appropriate interested parties.

Providing mentoring to technical staff in all areas of application design, development and support.

Gathering, analyzing and documenting business process requirements as they pertain to the use and requirements of technical components.

Designing and documenting conceptual and physical data models.

Identifying and developing detailed specifications for data conversion, transformation and archive requirements.

Developing and presenting detailed specifications appropriate to the size and complexity of a project.

Developing technical components as detailed in project specifications.

Developing and executing detailed test plans.

Assisting business users in the development and execution of detailed user test plans.

Developing and maintaining detailed project plans identifying tasks, dependencies, resources, schedules and potentially costs.

Developing and presenting implementation (pre-release) plans.

Developing and presenting communication plans as appropriate to the size and complexity of the project.

Developing detailed post-implementation verification/test plans.

Providing leadership in and ensuring adherence of projects to accepted project lifecycle methodologies.

Developing or providing significant technical input to the development of RFPs for purchase of vendor products and/or services; participating in and leading vendor selection processes.

Providing and triaging production support activities and issue resolution.

Demonstrating excellent written and verbal communication skills with ability to develop and present technical and business related information in formal and informal settings.

Leading technical team in the planning and implementation of application-related projects and integration of application components within the network.

Following industry-best practices in establishing application and data security models and protocols while enabling business user access to all appropriate resources.

Providing advanced level problem resolution using programming staff and operations personnel.

Remaining abreast of technical advancements and trends and assessing them for viability and practicality at the District.

Ramping up quickly and effectively in the utilization and application of technical tools, methodologies and components.

Serving as senior team member for strategic input to meet District and business goals through utilization of applications, data and related components.

Performing analysis and resolution for system-level problems in a complex environment involving multiple operating systems, vendors and platforms.

Evaluating and applying corrections to failing vendor software.

Performing disaster and contingency planning for the applications and data environment.

Maintaining regular and consistent attendance and punctuality.

Performing related duties consistent with job description and assignment.

MINIMUM QUALIFICATIONS

Knowledge of:

Structured project lifecycle methodologies including phases from project request through post-implementation support.

Application development tools reflective of the District's operating environment, currently including but not limited to MS SQL Server, Visual Studio, and Crystal Reports.

Software design and interdependencies of application, database, network, server and desktop components.

Database technologies, design considerations, data modeling and tuning requirements.

Advanced capacity planning methods and configurations.

Principles and practices of programming languages across a broad spectrum.

Principles and practices of software analysis and evaluation.

Use of robust version control repositories and processes.

Advanced computer security, principles and configurations.

Disaster planning, and in-depth knowledge of backup, restoration and recovery procedures and products.

Ability to:
Utilize, mentor in and participate in ongoing development of structured project lifecycle methodologies including phases from project request through post-implementation support.

Effectively select and utilize application development tools reflective of the District's operating environment, currently including but not limited to MS SQL Server, Visual Studio, and Crystal Reports.

Mentor technical staff in the use of application development tools.

Design and develop software components to effectively utilize the interdependencies of application, database, network, server and desktop components.

Acting on identified requirements, design and develop effective, efficient, stable and secure database components and interfaces.

Tune and optimize application and data components.

Utilize and mentor technical staff in the use of version control repositories and processes.

Provide leadership in establishing and executing disaster recovery activities including backup, restoration, and recovery procedures.

Perform problem analysis in complex high-pressure situations.

Monitor and optimize application performance.

Organize and document technical processes and procedures.

Analyze, evaluate and modify software and utilities.

Train technical staff as necessary.

Establish and maintain effective working relationships with those contacted in the course of work.

Quickly adapt to changing trends in technology, and select appropriate strategies and directions to maintain a high level of service and cost effectiveness in the computing resource.

Communicate clearly, concisely, and effectively, both orally and in writing, with technical and non-technical individuals.

Experience and Training
Any combination of experience and training that would provide the required knowledge and abilities is appropriate. A representative way to obtain the required knowledge and abilities would be:

Experience:

Five years of progressively complex experience as an application developer, with at least three years in a web-based environment utilizing relational databases and structured project lifecycle methodologies

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

Work Environment:
Climate controlled office settings with temperatures ranging from mild to moderate cold/heat. Exposure to noise levels from moderate to loud and occasional to frequent time periods.

Physical Requirements:
Frequent reaching, handling, handwork, talking and hearing. Mobility to work in a typical office setting and use standard office equipment, stamina to remain seated and maintain concentration for an extended period. Hearing and speech to communicate in person or over the telephone. Vision: Frequent near acuity; occasional far acuity. Vision to read printed materials, computer screens and/or other monitoring devices.

Strength: Sedentary/Medium – Exert force to 10-25 lbs. frequently, and up to 10 lbs. constantly or a negligible amount of force frequently to lift, carry, push, pull or move objects.

Salem-Keizer School District is an equal opportunity employer.

Position: Application Developer IV

I am willing and able to perform the duties of this job:

Signature:_____   Date: _____

Print Name: _____