

JOB TITLE: SYSTEMS ANALYST PROGRAMMER

PAY GRADE: CL 26

LAST REVISED: AUGUST 2016

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job. Additional or different duties from the ones set forth below may be required to address changing business needs/practices.*

SUMMARY DESCRIPTION

This position performs analysis, programming, technical documentation and report writing functions to assist the district in implementing, supporting and integrating technology systems. Programming tasks will involve working with relational databases, data files, scheduled processes and reporting software. As new systems are adopted by the district, this position will learn to work with new tools and programming languages as required. Technical designs may be provided for both programming and reporting tasks, but follow up with end-user will be required to gain critical understanding of the design details and understanding of business processes. This position will follow programming standards of the Informational and Instructional Technology (IIT) Division and will have all work reviewed by a Systems Analyst Programmer, Senior and/or a supervisor within IIT.

REPRESENTATIVE DUTIES - *The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.*

1. Troubleshoots application errors; isolates problems from symptoms, determines alternatives and develops and implements solutions; works with user community to improve user instructions and training for greater understanding of application functionality.
2. Creates end user and IIT support documentation on existing systems, and updates documentation as changes are made to programs.
3. Based upon technical design specifications, uses PL/SQL and other languages to accurately create and modify database packages and procedures, and to write end-user reports utilizing data in the various databases of the district.
4. Tracks and documents objectives for applications, analyzes and defines current organizational functions, processes, sources and uses of information, and other data to determine application needs and requirements.
5. Performs testing to validate accuracy of changes. Creates test plans, executes test plans, and shares results of test plans to end users, senior level programmers, and managers in the district.
6. Accesses and analyzes log files to determine sources of errors and data inconsistency using a variety of command line and/or GUI interfaces.
7. Designs and creates end-user reporting screens to provide data in a format that is understandable by non-technical personnel.
8. Creates and maintains build scripts.
9. Follow processes for version control.



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10. Basic command knowledge in a Linux environment.
11. Performs other related duties as assigned.

QUALIFICATIONS - *The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.*

Knowledge of:

Programming languages used by the district such as PL/SQL, Pro-C, and Java
Relational databases
Linux shell scripting
Object Oriented programming principles
Problem solving and analytical skills
Interpersonal skills to provide technical support and ask functional questions necessary to inform technical specifications
Basic software application, operating systems, hardware, telecommunications and networking principles
Software testing methodologies
Version control software

Ability to:

Follow a technical design, adhere to programming principles, understand and modify database packages, procedures and functions
Learn new programming languages, adapt to changing technologies
Use methodical testing and troubleshooting techniques to find errors and data inconsistencies
Design database schemas and analyze relational database tables, triggers and procedures
Create coherent user documentation and training materials
Document technical systems using a variety of data modeling tools
Take initiative on next steps, initiate problem solving methods, and proactively ask questions of other senior programmers to ensure that code is in keeping with district IIT standards
Prioritize work in order to meet deadlines and schedules
Communicate clearly and concisely, both orally and in writing
Operate a variety of computer terminals, printers and peripheral equipment

Education and Experience Guidelines - *Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. Examples of ways to obtain the knowledge and abilities would be:*

Education/Training:

Bachelor's Degree with major course work in computer science or a related field, especially database design and programming.

Experience:

One year of experience in analysis, design, and programming. This can be course work in this area. **License or Certificate:**

Possession of a valid California driver's license.



Job Description

PHYSICAL DEMANDS AND WORKING ENVIRONMENT - *The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.*

Environment: Work is performed primarily in a standard office setting.

Physical: Primary functions require sufficient physical ability and mobility to work in an office setting; to stand or sit for prolonged periods of time; to occasionally walk, stoop, bend, kneel, crouch, reach, and twist; to lift, carry, push, and/or pull light to moderate amounts of weight; to operate office equipment requiring repetitive hand movement and fine coordination including use of a computer keyboard; and to verbally communicate to exchange information.

Vision: See in the normal visual range with or without correction.

Hearing: Hear in the normal audio range with or without correction.