# **MODESTO CITY SCHOOLS**

JOB DESCRIPTION

## PROGRAMMER ANALYST

#### **DEFINITION:**

Under the direction of the Supervisor-Software & Development, program, code, test and maintain assigned computer systems and software applications; review and analyze district data needs; modify existing systems and programs as necessary; design, develop and implement new system applications as appropriate; integrate and transform data from multiple disparate sources; develop end-user reports and export data for State, federal and other reporting requirements.

## **ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Maintain, manage and oversee mission critical applications to ensure maximum availability and minimize downtime of computer systems and programs.
- Analyze requirements; develop design specifications, code and test software applications and components in accordance with department standards.
- Gather, transform and export data from State, Federal and other reporting requirements;
   maintain, enhance and provide support for growing library of multiple reports; communicate with data owners and data stewards to ensure data quality.
- Maintain source code integrity and security by utilizing source control software and following established data handling protocols.
- Program, code, test and maintain assigned computer systems and programs; troubleshoot, identify, evaluate and resolve system and program problems and malfunctions as assigned in call logging and defect tracking systems.
- Implement unit-testing and debug software applications using industry best practices; run test data in assigned computer systems; detect and resolve programming errors and miscalculations.
- Analyze and refactor code based to improve software functionality and to reduce the technical liability of deprecated code.
- Review, analyze and modify existing systems and programs as necessary; prioritize and respond
  to requests concerning existing computer systems and programs; compile and edit programs and
  make necessary adjustments.
- Troubleshoot and resolve issues as assigned in call logging and defect tracking systems.
- Design, develop and implement new system applications as appropriate; consult with users to provide technical support and to determine systems and program requirements and objectives.
- Assist users with operating computer systems and related applications; provide training to District
  personnel in proper use of computer systems and programs; respond to inquiries and provide
  technical information and consultation.
- Provide telephone and email support to end-users for problems that cannot be resolved by the application support staff.
- Communicate with personnel and outside agencies to exchange information, coordinate activities
  and resolve issues or concerns; collaborate with other Information Technology team members in
  the development of test plans and to deliver end-user applications.
- Prepare and maintain a variety of records and reports related to assigned activities including documentation for software applications to aid in maintenance and code reuse.

#### **OTHER DUTIES:**

Perform related duties as assigned.

## **REQUIRED QUALIFICATIONS:**

Education and Experience:

Programmer Analyst

 Any combination equivalent to: bachelor's degree in computer science, information systems or other related field and two years increasingly responsible programming, database and program analysis experience in a .NET programming environment.

## Knowledge of:

- Principles and methods of programming and software development.
- Common data management tools and paradigms.
- C# and/or other high-level programming language.
- Principles, practices and techniques of data base structures, computer programming and system design.
- Relational database concepts and query languages.
- Computer programming systems, utilities and applications utilized.
- Methods and procedures of operating computers and peripheral equipment.
- Principles and techniques of systems analysis.
- Technical aspects of field of specialty.
- Techniques of testing and debugging computer programs.
- Record-keeping and report preparation techniques.
- Interpersonal skills using tact, patience and courtesy.
- Oral and written communication skills.

#### Ability to:

- Program, code, test and maintain assigned computer systems and programs.
- Review, analyze and modify existing systems and programs as necessary.
- Design and construct complex processes and systems.
- Identify and correct systems and programming issues.
- Design, develop and implement new system applications as appropriate.
- Provide technical assistance to computer systems users.
- Detect errors in data and program structure, logic and coding.
- Function well in a team environment.
- Test and de-bug programs for accuracy and reliability.
- Communicate effectively both orally and in writing.
- Establish and maintain cooperative and effective working relationships with others.
- Maintain records and prepare reports.
- Understand and follow oral and written instructions.
- Meet schedules and timelines.
- Work independently with little direction.
- Prioritize and schedule work.

## **WORKING CONDITIONS:**

# Work Environment:

- Indoor/Office environment.
- Constant interruptions.

<u>Physical Demands:</u> The physical demands described here 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 functions.

- Hearing and speaking to exchange information in person or on the telephone.
- Seeing to view a computer monitor.
- Dexterity of hands and fingers to operate a computer keyboard.

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Sitting for extended periods of time.

The information contained in this job description is for compliance with the Americans with Disabilities Act (A.D.A.) and is not an exhaustive list of the duties performed.

Cabinet Approved: 11/27/07

Board Approved: 10/31/94, 12/17/07

**FLSA Status: Exempt** 



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