MADERA UNIFIED SCHOOL DISTRICT PERSONNEL COMMISSION APPROVED MOTION NO. 16-2017/18 DATED: 09/25/17 DOCUMENT NO. 27-2017/18

# Madera Unified School District Classified Job Description

## **Software Developer**

### **Purpose Statement**

Under general supervision, perform a variety of specialized duties in the development, implementation and maintenance of district developed or manufacturer developed system software packages to provide timely delivery of IT related services to District customers. Additionally engage in research, design, development and implementation of new system applications and features as appropriate.

This job reports to Executive Director of Accountability and Communication.

#### **Essential Functions**

- Analyze the feasibility of software development and integration projects; analyze request for application additions and revisions; confer with users to determine application requirements and desired functionality; resolve problems and provide support and assistance..
- Communicate with Madera Unified School District personnel and outside agencies to exchange information, coordinate activities and resolve issues or concerns.
- Design test plans; develop test data; execute test scenarios; analyze new and revised applications for effectiveness and compliance with established goals, standards, and procedures; run test data in actual computer operations; diagnose, document, and resolve programming defects and erroneous data.
- Facilitate the collection, management, manipulation, reporting, and distribution of computerized data used for analysis; design, upgrade and configure software applications to assure smooth running of assigned computer systems; develop and modify existing applications and procedures to improve and resolve problems with computerized reporting and record maintenance.
- Perform a variety of specialized duties in the development, maintenance, and analysis of complex business applications and databases to resolve software defects, meet district needs, enhance system and job performance and provide for system enhancements; develop and maintain source code for new and existing systems and applications.

- Provide technical support to users and other support staff; assure support team and user understanding of new and modified system applications; receive, troubleshoot, and provide feedback to user requests and inquiries regarding system performance, defects, and usability; assist users with maintaining automated records and generating computerized reports as directed.
- Reengineer existing business applications; develop software in a multitiered, multi-platform, client-server environment. Develop and maintain legacy software.
- Develop web and database applications.
- Develop and use reporting software tools; write and execute database queries; develop and maintain data and performance dashboards.
- Research, design, develop and implement new system applications and features as appropriate; modify existing software to enchance database operations and functions; integrate new software and revise existing appplications and features as necessary to assure compatibility with existing computer systems.

#### **Other Functions**

 Performs other related duties as assigned for the purpose of ensuring the efficient and effective functioning of the work unit.

#### Job Requirements:

#### **Knowledge and Abilities**

KNOWLEDGE of: Principles, practices and techniques of computer programming and system design; software programming systems, applications and languages, policies and procedures utilized by Madera Unified School District; modern development languages and tools such as Visual Studio, NET, C#, ASP, SQL, Java, EJB, Python, C++ and/or other comparable technologies; policies and objectives of assigned tasks, stories, and applications; principles, practices and techniques in the development, maintenance and analysis of computer systems, databases and applications; multi-platform, client-server applications; web-based application development; Microsoft Office Suite, (Word, Excel, Power Point & Access) techniques for testing and debugging software applications; database structures, web-based applications and system capabilities of the district office's computer systems; record-keeping and report preparation techniques; applicable sections of the State Education Code, Local, State and Federal laws, codes, regulations and requirements as related to assigned activities and/or instructional area; correct English usage, grammar, spelling, punctuation and vocabulary in all forms of communication; district operations, policies and objectives; interpersonal skills such as tact, patience, flexibility, and courtesy; operation of a variety of office equipment, including but not

limited to a computer and assigned software applications; theoretical and technical aspects of field of specialty; create iinnovative solutions; apply knowledge of fundamental computer programming concepts; write and maintain documentation for systems and applications.

ABILITY to: Perform a variety of specialized duties in programming, development, maintenance and analysis of computer applications, databases. and systems in support of assigned systems, programs and functions; prepare organize, document, and control source code revisions to new and existing applications and features using standard source control systems such as Team Foundation; research, design, develop and implement new system applications as appropriate; design applications to meet district needs, enhance job performance and provide for system enhancements; develop and maintain source code for new and existing software applications; understand legacy code sufficiently to reengineer new applications; modify existing programs to enhance database operations and functions; design programming solutions for application defects; facilitate the computerized collection, management, manipulation, and distribution of data used for analysis; design programming solutions, troubleshoot, and resolve application defects; meet schedules and time lines; establish and maintain cooperative and effective working relationships with others; maintain and prepare reports; interpret, apply, and explain rules, regulations, policies and procedures; maintain consistent, punctual and regular attendance; serve as a liaison between the assigned department, administrators, district personnel. outside organizations and/ or the public concerning assigned program.

### **Working Environment**

The usual and customary methods of performing the job's functions require the following physical demands: some lifting, carrying, pushing, and/or pulling; and significant fine finger dexterity. Generally the job requires 70% sitting, 10% walking, and 20% standing. This job is performed in a generally clean and healthy environment.

### Minimum Qualifications

# **Education and Experience**

- 1. High school diploma or GED. Bachelor's degree in Computer Science or related field is highly desirable.
- A combination of education and experience that will sufficiently demonstrate
  proficiency in software development. This proficiency would be demonstrated
  by participation in as a project leader or significant contributor in the
  development of software from concept, testing, implementation and
  evaluation.

Required Testing

Pre-employment Proficiency Test

Continuing Educ./Training

None Specified

Certificates

Valid CDL

Clearances

Criminal Justice

Fingerprint/Background Clearance

TB Clearance

FLSA Status

**Approval Date** 

Non exempt

<u>Salary</u> <u>Range</u> Classified Salary Schedule – Range 65