

# Midpeninsula Regional Open Space District

#### APPLICATIONS SUPPORT ENGINEER

# **DEFINITION**

Under general supervision, performs applications system support, maintenance, and modification of departmental and District-wide enterprise software application(s); identifies end user system requirements and evaluates software packages; designs, codes, tests, and documents software applications; trains and assists end users in implementing new applications; and performs related work as required.

#### SUPERVISION RECEIVED AND EXERCISED

Receives direction and supervision from the Information Services and Technology Manager or assigned GIS or IT Program Administrator. Exercises no supervision over staff but may provide technical and functional direction and provides training to lower-level staff.

#### **CLASS CHARACTERISTICS**

This professional classification is responsible for the maintenance, modification, implementation, development, and process customization of and training for a variety of software application(s), as well as participating in or providing technical direction for assigned initiatives or projects. Responsibilities require the use of tact, discretion, and independent judgment and to have full and thorough knowledge of the concepts, practices, procedures, and policies of assigned function.

# **EXAMPLES OF TYPICAL JOB FUNCTIONS** (Illustrative Only)

Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the functions of the job.

- Individually or as a team member, works on and is responsible for software applications research, development, conversion, installation, and maintenance projects, including planning, organizing, and defining project requirements, methods, and end objectives in consultation with end users; coordinates project activities with team members, other section staff, user representatives, and outside vendors.
- Interviews, analyzes, and documents end user work processes and systems requirements; conducts systems walk-throughs and technical reviews; develops or refines system specifications, including evaluating and testing vendor software packages for conformance with user requirements and priorities.
- ➤ Prepares feasibility studies, cost and benefits analyses, product evaluation, requirement specifications, designs, and other analyses and documentation.
- > Designs business processes and work flow strategies for the management, access, and retrieval of data, defines data rules and relationships, and develops methods for quality control of databases.
- ➤ Reviews, analyzes, streamlines, and documents business processes and relates them to application software; prepares recommendations for procedural and operational modifications to optimize internal and customer workflows.
- > Prepares project proposals, reviews and meets with prospective vendors, and assists in product selection; monitors vendor invoices and verifies purchase orders for payment.
- > Develops and implements automated processes, scripts, triggers, specialized views, and reports in response to user needs.

- > Designs methods to import/export data for analysis and performs comparative analysis of data from dissimilar applications.
- ➤ Utilizes existing systems and programs to design and code new and modified programs for data processing.
- > Develops and executes system test plans for user acceptance, stress, unit, and system testing to ensure application performance conforms to specifications; modifies programs to correct errors and optimize system performance and cost-effectiveness.
- Participates in designing and implementing application enhancements while ensuring adherence to standards and procedures for client/server system development, database access, web-based development, change control, and reporting.
- Assists in developing software and systems to optimize performance of relational database systems, client/server application access, and enhance and support of web applications accessing relational databases.
- > Prepares training materials and conducts formal and informal training programs on the use and operation of the application system software.
- > Develops and recommends comprehensive standards, policies, procedures, and technical documentation.
- Consults with users regarding information technology related issues, needs, and services; conducts special research assignments, gathers data, and prepares reports for consideration by management or special committees.
- > Stays abreast of new trends and innovations in technology related to District operations; researches, recommends, and evaluates vendor solutions and technologies; implements improvements; works with staff to maintain, revise, or improve operations and systems.
- > Performs other duties as assigned.

#### **QUALIFICATIONS**

#### **Knowledge of:**

- ➤ Various software packages including word processing, spreadsheet, SQL database and database management, and reporting tools.
- Modern and complex principles and practices of computer systems management, analysis, design, and maintenance.
- > Data processing management and general administration practices and techniques.
- ➤ Data management theory, principles, and practices and their application to a wide variety of services and programs.
- Principles and practices of project management.
- > Techniques and methods of system evaluation, implementation, and documentation.
- ➤ Applicable Federal and State laws, regulatory codes and procedures relevant to assigned area of responsibility.
- ➤ Recent and on-going developments, current literature, and sources of information related to the operations of the assigned programs.
- ➤ Principles and procedures of record keeping, including but not limited to public disclosure requirements such as The Brown Act and The California Public Records Act.
- Modern office practices, methods, and computer equipment and applications related to the work.
- English usage, spelling, vocabulary, grammar, and punctuation.
- Techniques for providing a high level of customer service by effectively dealing with vendors and District staff.

# **Ability to:**

- ➤ Code, configure, manage, and maintain assigned system(s) and integrate to meet business needs independently without vendor support.
- Code/script in one or more languages relevant to computer operations such as Javascript, Java, Python, NET, and HTML5.
- ➤ Conduct complex research projects on a wide variety of software issues, evaluate alternatives, make sound recommendations, and prepare effective technical staff reports.
- ➤ Code, test, debug, document and install, and modify new or existing programs.
- > Use coding methods for specific programming language to enhance or initiate efficient program execution and performance and to reach optimum hardware use or application performance.
- > Take independent action to correct problems encountered during systems operations within authority level
- ➤ Maintain integrity of program logic and coding, and establishes required checks and balances for operational controls.
- Lead focus groups or working sessions to establish new processes or technical design for improvement.
- > Coordinate and plan applications development, enhancement, and maintenance projects.
- Research, develop, and recommend cost-effective technical system improvements.
- > Implement comprehensive computer operations-related projects and training programs.
- ➤ Interpret, apply, explain, and ensure compliance with Federal, State, and local policies, procedures, laws, rules, and regulations.
- ➤ Prepare clear and concise program documentation, user procedures, reports of work performed, and other written materials.
- Analyze and troubleshoot any software issues and use logic to solve the problem.
- Establish and maintain a software system update and maintenance schedule.
- ➤ Write system procedures.
- ➤ Deal tactfully with the customers and staff in providing information, answering questions, and providing customer service.
- Operate modern office equipment including computer equipment and specialized software applications programs.
- Establish and maintain a variety of filing, record keeping, and tracking systems.
- > Organize own work, set priorities, and meet critical time deadlines.
- > Use English effectively to communicate in person, over the telephone, and in writing.
- ➤ Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

# **Education and Experience:**

Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:

Equivalent to graduation from an accredited four-year college or university with major coursework in management information systems, computer science, engineering, or a related technical field and three (3) years of progressively responsible experience in applications analysis, design, and development.

#### **Licenses and Certifications:**

Possession of a valid California Driver's License.

### PHYSICAL DEMANDS

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; to operate a motor vehicle and to visit various District and meeting sites; vision to read printed materials and a computer screen, as well as interpret colored warning and alarm lights on computer equipment; and hearing and speech to communicate in person, before groups, and over the telephone. This is primarily a sedentary office classification although standing in work areas and walking between work areas is often required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification frequently bend, stoop, kneel, and reach to perform assigned duties, as well as push and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects up to 25 pounds with the use of proper equipment.

#### **ENVIRONMENTAL ELEMENTS**

Employees work in an office environment with moderate levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may interact with upset staff when providing applications system support.

EFFECTIVE: August 2016

REVISED: N/A FLSA: Exempt