

## TECHNICAL SPECIALIST

### DEFINITION

Directs, plans, manages and administers the development and support of web-based transactional, business intelligence, and/or data warehousing enterprise systems for the District by providing expert technical advice to customers and the Information Technology Division (ITD) for the development and implementation of the best technology solutions compatible with District standards, policies and infrastructure.

### TYPICAL DUTIES

Determines the appropriate computer technology, establishes strategies, prepares technical proposals, and develops project plans for the development and support of web-based transactional, business intelligence, and/or data warehousing enterprise systems.  
Conducts functional and technical design reviews for customer and ITD approval.  
Designs and implements the best suited architecture and infrastructure for achieving system desired goals.  
Assists in designing, and implementing web-based transactional, business intelligence, and/or data warehousing enterprise systems.  
Prepares proposals based on the architecture of the applications to be developed.  
Facilitates customer focused Joint Application Development sessions to determine the feasibility of applying new technologies to procedures and to identify problems and establish systems requirements, parameters, and objectives.  
Plans and coordinates technical training of staff to enable them to use current technology.  
Enforce guidelines to assure the integrity and security of computing operations of ITD and its projects.  
Keeps current on developments and "best practices" in the field.  
Prepares reports detailing technical feasibility and cost of implementing web-based transactional, business intelligence, and/or data warehousing enterprise systems or alternatives.  
Develops policies that facilitates the timely and cost-effective development of web-based transactional, business intelligence, and/or data warehousing enterprise systems.  
Provides leadership and direction to technical personnel.  
Meets with vendor representatives to evaluate and negotiate the timely and cost effective delivery of products and/or services.  
Provides technical expertise and formulates concepts for existing and proposed automation activities and makes recommendations regarding short-range and long-range goals.  
Participates in the development of specifications and negotiation, administration, and evaluation of contracts for equipment and services.  
Makes presentations to District management staff.  
Performs related duties as assigned.

### DISTINGUISHING CHARACTERISTICS AMONG RELATED CLASSES

A Technical Specialist designs the global architecture for web-based transactional, business intelligence, and/or data warehousing enterprise systems by gathering client requirements and conceiving the technical infrastructure to support the applications.

A Web Architect designs the architecture for Web applications meeting enhanced performance and security criteria. Analyzes existing business practices and develops workflow improvements, makes feasibility studies for the development and maintenance of Web applications. A Web Architect supervises Web Developers.

## SUPERVISION

General supervision is received from the Chief Information Systems Director or other higher level management personnel. Technical and functional supervision may be exercised over software engineering performed by other ITD personnel.

## CLASS QUALIFICATIONS

### Knowledge of:

- Systems Development Life Cycle
- Principles of program documentation, including preparation of manuals, systems analysis, configuration, and testing and practices
- Principles of web-based transactions, business intelligence, and/or data warehousing concepts emphasizing enterprise-wide performance management
- Structured programming and design techniques
- Project Management Methodologies
- Modeling, prototyping, simulation, and performance analysis
- Limitations of information technology hardware, software and services
- Relational Database Management Systems concepts and tools
- Database design and modeling
- Oracle database and development toolsets and programming languages such as OBIEE, OWB, Designer, and PL/SQL
- Microsoft .NET software development toolset
- Java application development toolset
- Open source languages such as PHP, HTML, and XML
- Procurement policies and procedures
- Personnel policies and procedures
- Administrative organization of a District

### Ability to:

- Analyze problem situations, define problems, identify relevant factors and relationships, formulate solutions, and recognize the implications of those solutions
- Develop, monitor schedules, priorities, projects status, project budget, project variances
- List resources required to complete projects based on limited definitions and budgets
- Express difficult concepts orally and in writing in a clear and concise manner that is understandable to data-processing and non-data-processing personnel
- Schedule and lead a project team through to successful project completion
- Coordinate systems design with user needs, data, regulations, and other factors
- Work independently with a minimum of supervision
- Communicate with all levels of users and personnel
- Think creatively in developing new procedures, methods, or approaches
- Reengineer work flow for users
- Train subordinates and others
- Resolve conflicts and promote cooperation
- Plan work assignments and estimate needs for staff and time
- Manage multiple concurrent projects
- Work under the pressure of deadlines in a fast-paced environment
- Maintain a positive customer service attitude
- Work well at all levels in the organization as either a team member or independently

Recommend improvements to the system platforms processes and/or technically within functional and budgetary constraints

Prepare, negotiate, and document professional services, supplies, equipment, and/or general services contracts as needed to meet project goals and timelines

## ENTRANCE QUALIFICATIONS

### Education:

Graduation from a recognized college or university, with a major in Computer Science, Information Systems, Mathematics or a related field. An advanced degree in Computer Science is desirable. Additional experience in developing web-based business intelligence, data warehousing, and/or business applications may be substituted for the required education on a year-for-year basis.

### Experience:

Six years of experience at an organization with at least 5,000 employees in architecting and developing large, scalable, distributed systems using tools and languages. At least two years of the experience must be in managing large object oriented software projects. Supervisory experience is desirable.

### Special:

A valid California Driver License.

Use of an automobile.

Certification or completion of courses in Project Management Professional (PMP), Information Technology Infrastructure Library (ITIL), or the District's School Business Management is highly preferable.

## SPECIAL NOTES

1. Management class.
2. Exempt from FLSA.
3. An employee in this class may be subject to the reporting requirements of the District's Conflict of Interest Code.

This class description is not a complete statement of essential functions, responsibilities, or requirements. Requirements are representative of the minimum level of knowledge, skill, and/or abilities. Management retains the discretion to add or change typical duties of a position at any time.

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