

## SENIOR PROGRAMMER ANALYST, VISUAL BASIC

### DEFINITION

Analyzes work procedures of business processes and coordinates the work of a project group engaged in analyzing, designing, developing, and implementing information systems. Programming responsibilities span a range of platforms and application development languages/tools.

### TYPICAL DUTIES

Conducts feasibility studies of highly specialized or unusually complex work processes and procedures to determine their adaptability to information technology.

Designs information systems that require innovative and/or diversified approaches to the resolution of problems in the areas of data collection, data reduction and coding, systems controls, auditing, processing cycles, and inquiry and reporting.

Uses full capability of client/server computing to assist in the design of information systems.

Confers with management, operating unit personnel, and customers to define the scope of the information requirements, and evaluate alternative approaches to improving information systems.

Formulates logical statements of business problems and develops systems designs detailing sequences of operation, systems block diagrams, flowcharts and instructions, and computer programming standards and specifications.

Writes and maintains batch and on-line computer programs including reports and interfaces.

Prepares tests for programs, audits results, and corrects errors in program logic.

Analyzes existing systems and programming logic difficulties and takes corrective action.

Creates job control language for batch operations.

Supervises assigned programming personnel.

Instructs assigned programming personnel in applying innovative and advanced analytical and programming techniques to the resolution of problems.

May design, develop, and maintain web applications.

May participate in the evaluation of new information technology equipment and software.

Performs related duties as assigned.

### DISTINGUISHING CHARACTERISTICS AMONG RELATED CLASSES

A Senior Programmer Analyst, working independently or as a project leader, applies advanced technical proficiency in systems design and programming to the analysis of unusually complex management information problems and requirements and the design of improved information systems.

A Systems and Programming Manager is responsible for supervising and coordinating multiple units of systems and programming staff and reviews system analysis, design, and programming activities in a broad area of EDP applications.

A Technical Project Manager directs some of the activities involved in planning, development, and implementation of a major software applications system or directs all activities for a small software applications project.

A Programmer Analyst performs responsible systems analysis and programming on complex projects, assists higher-level programmer analysts on the most complex projects, and may provide work direction and technical assistance to assigned programming personnel.

## SUPERVISION

General supervision is received from a Systems and Programming Manager or a Technical Project Manager. Supervision is exercised over assigned programming personnel.

## CLASS QUALIFICATIONS

### Knowledge of:

- Principles of client/server computing, local area networks, and personal computers
- Programming languages such as VB.Net, VBscript, C#, ASP.NET, etc.
- Fourth generation programming tools such as Visual Studio
- Report development tools such as Crystal Reports, Oracle Reports, etc.
- Visual Basic Rrelational database systems
- Web application design and development
- Quality control practices for application development
- Principles of report, form, and screen design
- Information technology concepts and capabilities
- New trends in the field of information technology
- Principles of program documentation
- Systems analysis and applications design and data modeling techniques
- Principles of training and supervision
- Principles and practices of system administration and configuration management
- English usage, punctuation, and spelling

### Ability to:

- Analyze problems in information systems
- Analyze and adapt new information technology techniques
- Write and code difficult and complex programs or interfaces
- Perform quality control analysis of previously written code
- Troubleshoot application problems and identify cost-effective solutions
- Prepare clear and logical systems design
- Write clear and logical system documentation
- Supervise and train personnel assigned to projects
- Manage the workload and resources for a small team of developers, analysts, or engineers
- Communicate complex technical concepts both orally and in writing
- Work effectively and cooperatively with District personnel
- Learn the characteristics of new systems and update skills to adapt to changing technology
- Establish effective relationship with vendors and providers of commercial support
- Communicate effectively orally and in writing
- Conduct surveys and feasibility studies

## ENTRANCE QUALIFICATIONS

### Education and Experience:

Graduation from a recognized college or university with a bachelor's degree in computer information systems, computer science, or a closely related field, and four years of experience in a client server environment with extensive experience in software development, programming, and systems analysis and design for complex business applications utilizing Visual Basic 6.0, VB.Net, VBscript, C#, or ASP.net. A Masters degree in Computer Science or closely related field may substitute for two years of the experience requirement.

OR

Completion of a 30-semester unit certificate program or equivalent in computer information systems, computer science, or a closely related field, and seven years of experience in a client server environment with extensive experience in software development, programming, and systems analysis and design for complex business applications utilizing Visual Basic 6.0, VB.Net, VBscript, C#, or ASP.net.

OR

Four years of experience as a LAUSD Programmer Analyst, Visual Basic programming in a Microsoft .NET-based environment utilizing Oracle and/or SQL Server databases.

Experience with project/personnel management in a team environment and distributed systems is desirable. Experience with Crystal Reports is also highly desirable.

### Special:

A valid California Driver License.

Use of an automobile.

Employees in this class are subject to call at any hour.

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 to change typical duties of a position at any time.

Revised  
10-10-12  
SJ