

## COUNTY OF SOLANO

### PROGRAMMER

#### **DEFINITION**

Designs and maintains computer software programs, develops, writes code, tests, documents and implements software to enhance and support user departments; maintains and enhances software as needed to the specifications of the end user.

#### **CLASS CHARACTERISTICS**

This is the journey level classification in the Programmer series characterized by the responsibility to analyze and code software programs pursuant to a predetermined system design. This class is distinguished from the Programmer Analyst in that the latter performs systems analysis and design.

#### **SUPERVISION RECEIVED AND EXERCISED**

Receives general supervision from the assigned supervisor.

Exercises no supervision.

#### **EXAMPLES OF DUTIES** *-Duties may include but are not limited to the following:*

Develops and codes new applications and programs; tests, maintains and debugs new and existing software; provides end user support by analyzing user procedures and system design.

Analyzes all/portions of data flow charts; confers with systems design personnel to confirm/clarify intent of design steps; applies knowledge of computer capabilities, subject matter and symbolic logic to develop sequence of program steps.

Converts detailed logic flow chart to applicable computer language; records symbols on worksheet for transfer to machine input medium; analyzes, reviews and recodes programs to increase operating efficiency and/or adapt to new requirements.

Devises sample input data to provide tests of program adequacy; reviews test results for conformance with desired output; alters program steps and sequences to correct programming errors.

Prepares written instructions to guide operating personnel during production runs; confers with operations personnel to verify sufficiency and accuracy of operating instructions; provides user training.

Compiles documentation of program development, user instructions and subsequent revisions; marks code sheet to indicate relationship of code to program steps to simplify debugging.

### **JOB RELATED AND ESSENTIAL QUALIFICATIONS**

#### **Knowledge of:**

Programming language applicable to specific assignment.

Principles and practices of electronic data processing and programming methods including problem and functional analysis of computer software applications.

Program development, implementation, testing, and debugging.

#### **Skills to:**

Utilize basic office equipment and various software related equipment and machinery.

#### **Ability to:**

Collect and analyze data and draw logical conclusions.

Analyze, design, code and/or alter programs.

Research and interpret technical reference materials and apply concepts to programming solutions.

Prepares test data.

Writes customer/user documentation for assigned systems.

Identifies and resolves software application problems.

Writes and interprets job coding language.

Develops application documentation.

Makes decisions and independent judgments.

Establishes and maintains cooperative working relationships.

Understands program objectives in relation to departmental goals and procedures.

Demonstrates tact and diplomacy.

Maintains accurate records and documents actions taken.

Proofreads and/or edits for errors in program coding.

Project consequences of decisions.

Maintains confidentiality of information.

### **Experience and Education/Training**

#### **Experience:**

One year of computer programming experience which includes problem and functional analysis of computer software applications. Additional programming experience may substitute on a year for year basis for the educational requirement.

#### **Education/Training:**

Associates degree is required, preferably in programming, data structures, database design or related field.

### **SPECIAL REQUIREMENTS**

There are no special requirements.

### **SUPPLEMENTAL INFORMATION**

Candidates for positions in this class may be required to pass a background investigation in accordance with applicable laws, regulations and/or policies.

Incumbents are required to work outside normal business hours.

This class may be used to under fill positions allocated to other classes in the series for training, budgetary or staffing purposes.

### **ADA COMPLIANCE**

**Physical Ability:** Tasks involve the ability to exert light physical effort in sedentary to light work, but which may involve some lifting, carrying, pushing and/or pulling of objects and materials of lightweight (5-10 pounds). Tasks may involve extended periods of time at a keyboard or workstation.

**Sensory Requirements:** Some tasks require visual perception and discrimination. Some tasks require oral communications ability.

**Environmental Factors:** Tasks are regularly performed without exposure to adverse environmental conditions.

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Director of Human Resources

**Revised Date:** November 2002

**BOS Date:** June 30, 2003

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