CITY OF SANTA CRUZ
PROGRAMMER ANALYST I/II

Reports to: Information Technology Operations Administrator
Supervises: Non-Supervisory
Bargaining Unit: Service

BASIC FUNCTION

Under general supervision, is responsible for systems analysis, design, and programming in close cooperation with user departments and project development teams; revises and maintains existing automated systems; provides training and technical support for computer systems; and performs other duties as assigned.

DISTINGUISHING CHARACTERISTICS

Programmer Analyst I is the entry level position in the programmer analyst series. Initially under supervision, incumbents maintain, develop and enhance computer systems applications; code, test and debug programs; and prepare documentation and operations instructions. As experience is gained, there is greater independence of action. Programmer Analyst I's generally assist Programmer Analyst II's in specific and defined aspects of a large project or assume responsibility for projects that are of limited complexity and routine in nature. This classification is alternately staffed with Programmer Analyst II and incumbents may advance to the higher level after gaining experience and demonstrating a level of proficiency that meets the qualifications of the higher level classification.

Programmer Analyst II is the journey level position in the programmer analyst series. Incumbents work under general direction and are expected to demonstrate thorough knowledge of software design, state-of-the-art programming techniques, and systems analysis. Incumbents perform programming, analysis and/or data base administration assignments on a wide range of highly complex municipal projects. This classification differs from the lower classification of Programmer Analyst in that the latter is responsible for programming and analysis assignments of limited scope and complexity. Incumbents may provide work direction and training to Programmer Analyst I.

TYPICAL DUTIES *(May include, but are not limited to the following):*

- Analyzes program specifications to develop logic and requirements for detailed programming.
- Writes programs using structured programming techniques, standard languages, and third party software packages.
- Extracts data from business systems and prepares reports in requested format.
- Maintains existing systems by making necessary program changes or enhancements.
- Designs, creates, and tests new systems of varying scope and complexity.
- Develops detailed program test cases and debugs all aspects of programs assigned.

- Develops and implements comprehensive system test cases to ensure accurate and viable results.
- Documents and prepares flow charts, input documents, report layouts, dictionaries, libraries, decision tables, and other associated documentation according to standards.
- Assists in development of operations procedures manuals and trains staff in the use of new or enhanced systems.
- Analyzes user needs and requests to determine appropriate program, system or procedure changes.
- Develops and conducts in-house training for computer users in the use of new or enhanced applications.
- Provides system support for users, using various in-house and third party applications as needed.
- Assists with daily administrative duties as related to the SQL network.
- Analyzes and evaluates new software packages and provides detailed recommendations concerning acquisition.
- Operates a general-purpose business minicomputer as back-up for operations.
- Acts as a back-up to webmaster for posting new documents and making changes to the City's Internet Web site.

WORKING CONDITIONS

Position requires prolonged sitting, standing, walking, kneeling, squatting and stooping in the performance of daily activities. The position also requires repetitive hand movement and fine motor coordination in using a computer keyboard. Additionally, the position requires both near and far vision in using a computer monitor and conducting training sessions, color vision is required to accurately interpret visual displays. Acute hearing is required when communicating by phone and in person. The need to lift, drag and push equipment and materials weighing up to 25 pounds is also required. Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodation.

MINIMUM QUALIFICATIONS

Knowledge, Skills and Abilities

Programmer Analyst I

Working knowledge of:

- Fourth generation programming languages.
- Structured programming methods.
- Microcomputer database software tools.
- Client/server methodology.
- Standard program documentation formats such as code and decision tables, input and output layouts, screen formats, flow charts and application dictionaries.
- User interface and relational data designs.
- Network applications and system analysis.
- Uses and limitations of software applications.

Programmer Analyst II

Thorough knowledge of the above, plus working knowledge of:

- Programming languages used by the City, such as; Powerhouse, MS Access, Crystal Reports, and Visual Basic.
- The programming of integrated database and on-line systems.

Programmer Analyst I and Programmer Analyst II

Ability to:

- Effectively analyze available data and program code, and develop logical solutions to programming problems.
- Develop and implement new systems of varying scope and complexity.
- Learn and recall programming details and appropriately apply these details to new programming needs.
- Develop effective test and debugging procedures.
- Develop clear and concise layout for output reports.
- Effectively explain computer procedures to system users both orally and in writing.
- Interpret a variety of instructions provided in written, oral, diagrammatic or schedule form.
- Maintain the security of confidential data.
- Establish and maintain cooperative and effective relationships with those contacted in the course of work.
- Observe safety principles and work in a safe manner.
- Prepare clear and concise written reports.
- Follow written and oral instructions.

Education and Experience

Any combination of education and experience that provides the knowledge, skills and abilities shown above is qualifying. A typical way to obtain these qualifications would be:

Programmer Analyst I

An Associate of Science degree in Computer science and two (2) years experience in business systems programming and programming using microcomputer software tools.

Programmer Analyst II

An Associate of Science degree in Computer Science and four (4) years of increasingly responsible experience in business systems programming and programming using microcomputer software tools.

Licenses:

Possession at time of hire and continued maintenance of a valid California driver's license and a safe driving record, or the ability to provide alternate transportation which is approved by the appointing authority.

DESIRABLE QUALIFICATIONS

- Work experience in the public sector.

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