



SENIOR COMPUTER PROGRAMMER ANALYST

DEFINITION

The ~~position occupants~~ assigned to this classification ~~is~~ are in the classified service. This skilled level classification analyzes, plans, designs, develops, tests, and documents various computer programs software applications. This classification works on computer programs software applications requiring an in depth knowledge of operating procedures. ~~E~~evaluates end user requests for more automation and/or upgrading of business systems and designs, develops and coordinates the implementation and support of automated information systems for permitting activities. Projects assigned to individuals in this classification are of a moderate to difficult level of complexity.

SUPERVISION RECEIVED AND EXERCISED

The position assigned to this classification reports to the Chief Information Officer or his/her designee. ~~Systems Development Manager~~.

ESSENTIAL JOB DUTIES

The following tasks are essential for this position. Incumbents in this classification may not perform all of these tasks, and/or may perform similar related tasks not listed here.

1. Analyzes, designs, and implements computer applications based on system design specifications ~~for the network, web, and microcomputer in a client-server/distributed computing environment~~.
2. Implements, administers and maintains permitting web based data collection and reporting systems.
- ~~1.3.~~ Tests, debugs, documents and implements permitting software code, panels, reports, tables, stored database procedures and application program interface (API) to meet user requirements.
4. Maintains, installs, and upgrades operating systems and software applications ~~on the microcomputer and~~ in the client-server environment.
- ~~2.~~ Analyzes users' business processing and reporting requirements and develops permitting, document management and web based procedures and systems using permitting software

November 1998

April 1999

Revised March 2001

Revised April 2016

~~and other programming/reporting tools such as Structured Query Language (SQL) and Crystal SQL (Structured Query Language) Server Reporting Services (SSRS).~~

~~3.5.~~ Performs preliminary troubleshooting for application databases (relational database management) and software applications. ~~on the microcomputer, network, and web.~~

~~4.~~ ~~Develops and/or implements computer programs based on system requirements and/or specifications. Performs complex analysis and design of computer software systems using system development techniques.~~

~~5.6.~~ Works with Subject Matter Experts (SME) in the operational areas to design ~~d~~Designs and prepares test data for proper testing of computer programs and modifies ~~corrects~~ software ~~computer~~ programs to eliminate errors and ~~or~~ inconsistencies.

~~6.7.~~ Incorporates complex analysis and problem solving skills to resolve operational software problems with existing production computer programs.

~~7.~~ Takes lead role and serves as primary contact in the review and definition of problems with particular emphasis on computer programs and operating systems for the network, web, and microcomputer.

8. Documents, reviews, and verifies computer programs including update of all enhancements, modifications, user's manuals, flowcharts, system flow, and file definitions.

~~9.~~ Systematically checks computer coded programs to ascertain if other combinations of instructions would achieve greater flexibility, better machine utilization, or more dependable results. Configures, maintains and updates databases, imaging systems, mapping systems and other related hardware and software systems.

~~10.~~ Provides technical supervision and training to assigned staff, as required by the needs of specific projects, new releases, and updates.

~~9.11.~~ Determines and documents system/user requirements.

~~10.12.~~ Trains users in the operation of computer hardware and software applications for the network, web, and microcomputer. Facilitates and conducts end-user training.

~~11.13.~~ Develops and monitors project schedules and participates in project task definition.

~~14.~~ Provides project management for system development, implementation and maintenance activities.

~~15.~~ Manages vendor and consultant activities; evaluates vendors/products', prepares feasibility studies; recommends and establishes program objectives, priorities and schedules.

~~12.16.~~ Recommends policy and procedural changes, as required.

~~13.17.~~ May provide direction and technical guidance to the Computer Programmer and Senior Computer Programmer.

~~14.18.~~ Performs other duties as assigned.

MARGINAL JOB DUTIES

November 1998

April 1999

Revised March 2001

Revised April 2016

1. Performs database administration tasks and functions as a backup to the Database Administrator or equivalent position.

MINIMUM KNOWLEDGE, SKILL AND ABILITY

Knowledge of:

- Principles and techniques of system development, programming, implementation, and maintenance.
- Systems analysis methods, procedures and practices.
- ~~Industry standard computing languages and databases.~~ Municipal permitting software and database tables.
- Database access tools including Structured Query Language (SQL).
- Client-server technology, network systems, web-based applications, and peripheral equipment.
- Statistical methods and procedures.
- ~~Microcomputers (PC's) hardware and software.~~
- Software development life cycle.

Skill and Ability to:

- ~~Operate microcomputers, network devices, server hardware, and computing software including web-based tools.~~
- Operate mobile devices (iPads, tablets, etc) that will be used by permitting inspectors during field inspections.
- Provide technical support for permitting software systems in a client server local and wide area network environment.
- Develop, install, test, and maintain computer programs and software applications.
- Understand user stated requirements, questions and problems and translate into software terms and actions.
- Train system users in database software applications.
- ~~Interpret program logic.~~
- ~~Flowchart and detail all computer programs within a system using structured programming techniques. Document technical information and user procedures in writing.~~
- ~~Translate coded computer language program system into easily understood terms for using departments.~~
- Prepare complex reports using SQL.
- Analyze data and draw sound conclusions.
- Express oneself clearly and concisely in both verbal and written form.
- Effectively follow both verbal and written instructions.

November 1998

April 1999

Revised March 2001

Revised April 2016

- Complete assignments in an accurate and timely manner.
- ~~Exercise higher level of responsibility with planning and scheduling assigned tasks than the Computer Programmer and Senior Computer Programmer classifications.~~
- Prioritize and manage multiple tasks.
- Use independent judgment and initiative in making recommendations regarding software applications.
- Work well and effectively with fellow employees and supervisors.
- Work in a team environment or independently as needed.
- Influence others to achieve project goals without official authority.

TRAINING AND EXPERIENCE

A combination of experience and education would qualify for this position. A typical path to qualifying would be a Bachelor's degree plus four years' experience in programming, computer systems analysis, and project leadership. Requires knowledge of at least one programming language, as well as scripting and SQL statements. Knowledge of ~~JDE Enterprise Resource Planning (ERP) system,~~ relational database administration, World Wide Web development languages such as Javascript, and Microsoft .Net framework Hypertext Markup Language (HTML) and Common Gateway Interface (CGI) ~~Microsoft software development and database administration tools~~ is highly desirable.

PHYSICAL REQUIREMENTS AND WORKING CONDITIONS

- Require vision (which may be corrected) to read small print.
- Require the mobility to stand, stoop, reach, and bend. Require mobility of arms to reach and dexterity of hands to grasp and manipulate small objects.
- Require the ability to stand for long periods.
- Require the ability to walk long distances.
- Perform work which involves the frequent lifting, pushing and/or pulling of objects which may approximate 50 pounds and may occasionally weigh up to 100 pounds.
- Is subject to office environmental conditions.
- May be required to drive inside and outside City boundaries.

LICENSES AND CERTIFICATES

Possession of a valid California Class C driver's license.