PROGRAMMER/ANALYST IV

CLASS DEFINITION

Under minimal supervision, works closely with departments to determine if work systems are adaptable to computerized data processing: Business Systems, Geographic Information Systems (GIS), the Internet/Intranet Systems, the City's Website, Project Lead; makes recommendations for business process reengineering; develops and/or implements complex computer programs; coordinates installations or other activities with multiple departments and/or other entities.

DISTINGUISHING CHARACTERISTICS

Programmer/Analyst IV is the advanced working/coordinator level class in the Programmer/Analyst series. Incumbents provide professional Information Technology (IT) services through research, analysis, design, development, implementation, training, support, and maintenance, and coordination of these activities with other IT personnel and other departments or external entities. Incumbents work with clients to achieve consensus of problem definitions and solutions. Activities include project management and coordination, process engineering, systems integration, resource requirements determination, and documentation. This class differs from Information Services Manager in that the incumbent of the latter has full supervisory responsibility over Programmer/Analysts and this class exercises no supervision. This class differs from Programmer/Analyst III in that the latter is the advanced working/lead class in which incumbents perform a broad range of duties but do not have on-going responsibility for coordinating activities between departments or other entities.

TYPICAL TASKS

Programmer Analyst IV - General

(This list is neither inclusive nor exclusive. Consequently, this information may not reflect essential functions for this class.)

Provides project leadership and direction to assigned staff, departments and/or entities outside the City; responsible for project management activities, including planning, coordination, and communication.

Serve as a liaison between multiple departments/cross functional teams; initiates contact and meets with user departments; analyzes processes, procedures, and programs to determine the feasibility of conversion to electronic processing.

Analyzes, designs, codes, documents, modifies and tests computer programs in accordance with the City's pre-established standards.

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Researches, initiates contact and evaluates vendor software for potential use in the City.

Identifies and initiates information system projects; determines project needs and available project resources including forecasting, negotiating, monitoring and controlling project schedules; coordinates staff as necessary.

Develops operational and program documentation, prepares written procedures for installation of new or revised applications; trains appropriate personnel; assists in formulating departmental technical standards.

Develops client interfaces for GIS, Internet/Intranet, and business systems applications in various programming languages.

Performs special studies for City departments utilizing GIS spatial analysis or other tools.

Researches and develops ways to improve the effectiveness and efficiency of business processes.

Develops complex computer applications for the Internet or Intranet.

Oversees the installation of new vendor purchased application software; maintains changes and upgrades to the software; monitors software performance; troubleshoots system problems; and interfaces with the vendor when necessary to expedite implementation of needed fixes/changes. Performs related duties as required.

Programmer Analyst IV - Project Lead

In addition to the "Programmer Analyst IV - General" duties listed above, individuals working as Project Lead may also perform the following tasks:

Takes the lead in identifying resource needs, developing project charters and project plans for the implementation of new systems.

Prepares proposals for clients and change orders for existing contracts.

Develops detailed Work Breakdown System's and work plans using project management and time tracking tools.

Performs other duties as required.

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Programmer Analyst IV - Web Master

In addition to the "Programmer Analyst IV - General" duties listed above, individuals working as Web Master may also perform the following tasks:

Analyzes, designs, implements, and maintains websites for the City and associated City Departments and Agencies.

Performs tasks related to the enterprise web presence for the City of Fresno such as architectural design, administration, support, security, documentation and performance management.

Investigates and recommends new methods, procedures, tools and technologies as they apply to content management, search engine placement, and web page development.

Ensure that department standards are followed regarding web page productions, and make suggestions for modifications to those standards as applicable.

Works with the web development team to test, deploy, and troubleshoot applications, including the scripts and utilities used by those applications.

May be involved in tracking, identifying, and repairing data connectivity problems.

Provides regular reports on web page access and web site performance metrics through various reporting tools.

Performs other duties as required.

Knowledge, Abilities, and Skills

Dependent upon the area of assignment, incumbents should possess the following:

Knowledge of the principles and methods used to develop GIS, Internet and/or business systems applications.

Knowledge of work stations, personal computers and other peripheral hardware.

Knowledge of programming languages applicable to systems in use in the City of Fresno.

Knowledge of database analysis and design.

Knowledge of the principles and practices of office automation, work flow design, and business process reengineering.

Knowledge of principles, best practices, and methods used to develop Web based, Internet, Intranet and/or business systems applications.

Knowledge of SDLC – Software Development Life Cycle

Knowledge of Content Management concepts.

Knowledge of basic image manipulation.

Knowledge of principles and methodologies consistent with the standards set forth by the Project Management Institute and the current Project Management Book of Knowledge.

Ability to perform forecast, actual, and variance budget tracking.

Ability to analyze complex business processes, recognize, evaluate and define problems, and prepare effective recommendations based upon findings.

Ability to develop, implement, document and modify complex computer systems and procedures in accordance with City standards.

Ability to prepare clear, concise, and comprehensive records, reports, correspondence, and other written materials.

Ability to make clear and persuasive oral presentations.

Ability to train and provide lead direction to staff, other departments or staff of other entities outside the City of Fresno.

Ability to establish and maintain effective working relationships with others in the performance of assigned duties.

Ability to organize work, set priorities, establish goals and objectives, and exercise sound independent judgment within established guidelines.

Ability to effectively represent the City in meetings with public agencies and others outside the City.

Ability to interpret and apply complex rules, regulations, laws, and ordinances.

Ability to develop work effort estimates using top down and bottom up approaches.

Ability to design web graphics utilizing various tools.

Ability to work with multiple operating systems.

Ability to document, monitor and control project schedules to ensure that implementations occur on time and that details are managed well.

Ability to develop and implement project management documentation standards.

MINIMUM QUALIFICATIONS

Experience:

Two year of experience equivalent to that of a Programmer/Analyst III, Computer Systems Specialist III, or Network Systems Specialist with the City of Fresno.

OR

Experience:

Five years of experience which included the preparation and analysis of business applications, Internet, project management, web design, or GIS programming.

AND

Education:

Graduation from an accredited college or university with a Bachelor's degree with major course work in computer applications and systems, decision science, information management, industrial technology, geography, planning, civil engineering or related field.

Special Requirements:

Possession at time of appointment and continued maintenance of a valid California Driver License may be required.

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Recruitment may be limited to a specific area of expertise as required by operational needs. The specific areas of expertise are listed below:

- 1. Business Application Systems
- 2. Geographic Information Systems
- 3. Internet/Intranet
- 4. Project Lead
- 5. Web Master

APPROVED <u>(Signature on File)</u> Director of Personnel Services DATE: <u>03/17/2006</u>

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