

The Maryland-National Capital Park and Planning Commission

Title: Programmer/Analyst I
Series: Information Technology

Grade: G Code: 2230
Date: 12/15/98 (rev.)

Class Definition

This is entry level professional programming and analysis work. The employee, under general supervision, applies programming and systems analysis methods and techniques to install, maintain, debug, and customize computer software. The work involves: providing support to users including resolving problems and meeting requests for reports and software enhancements; analyzing and documenting requirements; writing code in higher level computer programming languages to fix and enhance software and to generate reports; assisting in data base administration including requests to modify data base structure, add new users, loading new information; and installing and configuring new hardware and software. An employee in this class independently performs less complex assignments such as report generation, customizing existing applications, and data base maintenance. On more complex assignments, the employee works closely with more experienced Information Technology staff and performs work in accordance with detailed instructions and specifications. With experience, the employee performs an increasing range of assignments with more independence.

Examples of Important Duties

1. Provides support to users; resolves software problems; responds to requests for customized reports and enhancements; establishes and implements quality control procedures to ensure accuracy and completeness of work performed.
2. Customizes and assists in designing and developing application software and systems, using standard methodology and practices including using the current technology industry standards for programming languages and packages; prepares test data and tests programs to determine if specified requirements are met; modifies software until requirements are met; prepares documentation to include file relations, system operational assumptions, data flows, accesses and securities, maintenance procedures and user documentation; ensures that all documentation is completed.
3. Conducts analysis of computer-oriented information and data management problems to define automation needs; analyzes available information; participates with others in interviewing users to identify work requirements and processes; documents system and program work through use of flow charts and other standard formats.
4. Assists in data base administration; performs data base maintenance tasks such as adding new users, loading new information, requests to modify the data base structure; maintains a complete log of tasks, contacts, problems and resolutions; monitors data base operations and recommends upgrading or enhancing procedures and tasks or reengineering software codes; tests all changes written in-house or by a software vendor.

5. May assist with system administration of Unix workstations; sets up user accounts; modifies Unix shell scripts to meet users' needs; mounts and unmounts network file systems; shuts down and reboots workstations; creates digital archives on a variety of media to be distributed to other county agencies, consultants or others; install contractors' digital data deliverables; locates and restores archived Unix data files from backup tapes; cancels runaway or locked programs.
6. Maintains existing applications; monitors operations; establishes and implements procedures for submission of jobs, printing, delivery of reports, restarting jobs, and restoring files in the event of abnormal termination of jobs; recommends upgrades and enhancements to the application; prepares reports documenting work activity and projected activities and needs.
7. Installs, configures, and tests PC hardware and software.
8. Trains users in the capabilities and use of systems.
9. Stays abreast of information technology changes and innovations through training programs, journals, and other sources of information.
10. Assists in system administration; performs daily and weekly backup procedures; prepares backup reports.

Important Worker Characteristics

Knowledge of: 1) the principles, procedures, and methods used in information systems analysis, design, development, implementation, testing, evaluation and maintenance; 2) software tools and concepts, methods and techniques used in developing computer applications, including higher level programming languages and report generators; 3) uses and capabilities of computer hardware and software; 4) Commission organization and functions.

Skill in: 1) determining appropriate tools and concepts to apply to different programming and systems analysis situations; 2) collect, analyze, organize, and document information concerning the automation of work processes.

Ability to: 1) analyze and correct system and application problems; 2) develop detailed system specifications and documentation; 3) communicate effectively, both orally and in writing; 4) deal tactfully, effectively, and equitably with people.

Minimum Qualifications:

1. Bachelor's degree in computer science or related field; or
An Associate's degree in computer science or related field supplemented with two years of experience in application development and support.
2. An equivalent combination of education and experience.

Working Conditions

Work is performed in an office setting.

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