

Applications Development

Job Code	Job Title	Pay Grade
1604P2	Applications Support Technician	21
1600P2	Applications Developer I	27
1601P2	Applications Developer II	29
1602P2	Applications Developer III	31
1603P2	Applications Development Supervisor	33

CONCEPT:

Develop, create, and modify general computer applications software or specialized utility programs and application documentation. Analyze user needs and develop or customize software solutions with the aim of optimizing operational efficiency. Convert project specifications and statements of problems and procedures to detailed logical flow charts for coding into computer language. Develop and write computer programs to store, locate, and retrieve specific documents, data, and information. Provide web site design, development, and programming.

TASKS

- Analyze user needs and software/system requirements to determine feasibility of design within time and cost constraints.
- Design, develop, and modify software systems, using scientific analysis and mathematical models to predict and measure outcome and consequences of design.
- Determine system performance standards.
- Define the goals of the system and devise flow charts and diagrams describing logical operational steps of programs.
- Modify existing software to correct errors, allow it to adapt to new hardware, or to improve performance.
- Store, retrieve, and manipulate data for analysis of system capabilities and requirements.
- Compile and write documentation of program development and subsequent revisions, inserting comments in the coded instructions to facilitate maintenance.
- Conduct trial runs of programs and software applications to be sure they will produce the desired information and that the instructions are correct.
- Consult with managerial personnel to clarify program intent, identify problems, and suggest changes.
- Investigate whether networks, workstations, the central processing unit of the system, and /or peripheral equipment are responding to program instructions.
- Perform systems analysis and programming tasks to maintain and control the use of computer systems software as a systems programmer.
- Prepare detailed workflow charts and diagrams that describe input, output, and logical operation, and convert them into a series of instructions coded in a computer language.
- Write, analyze, review, and rewrite programs or software packages to meet the specific needs of the agency.
- Writes technical articles, reports, brochures and/or manuals for documentation
- Coordinates the display of graphics and the production of documents.
- May perform program management activities on short-term IT projects with limited scope.
- Provides documentation on large projects to programmers and systems analyst ensuring adherence to documentation standards.

LEVELS OF WORK

Applications Support Technician: This is entry level technical work assisting in coding, testing, and debugging application programs by developing routine program diagrams and flow charts and assisting with maintenance and documentation of programs. May assist in the design of programs and/or provide technical input on preliminary phases of applications programming and/or writing of technical articles, reports, brochures, and/or manuals for documentation. May coordinate the display of graphics and the production of documents. Work is of a structured nature involving simple analysis of data and performed under immediate supervision.

Minimum Requirements: Successful completion of 6 hours in computer science coursework or certification and six months experience coding, testing, and debugging application programs. Education may be substituted for experience as determined relevant by the agency.

Applications Developer I: This is structured technical work in information systems analysis, application development and related documentation. Work includes initial research and fact-finding to develop and modify an information system. Under the direction of a higher level application developer, documents requirements, prepares detailed specifications for writing programs, develops less complex operational software, and assists with maintenance and documentation of applications. Employees at this level work under general supervision, receiving some instructions with respect to the details of most assignments and within established procedures, methods and policies. Involves no supervisory or leadership responsibility.

Minimum Requirements: Successful completion of 12 hours in computer science coursework or certification and six months experience coding, testing, and debugging application programs or one year experience coding, testing, and debugging application programs. Education may be substituted for experience as determined relevant by the agency.

Applications Developer II: This is full performance technical work in information systems analysis and application development. Work includes developing and modifying application software, identifying and documenting application requirements, preparing system designs and detailed specifications from which application software will be written. Codes, tests, debugs, maintains, and documents software. Work may involve several information systems, technologies or products. May perform all aspects of complex web application development and maintenance. Analytical thought becomes more important at this level due to increased data and changing situations. Incumbents usually receive a general outline of the work to be performed and are free to develop their own sequences and methods within the scope of established policies and requirements.

Minimum Requirements: Successful completion of 18 hours in computer science coursework or certification and one year experience coding, testing, and debugging application programs or two years experience coding, testing, debugging, and documenting application programs. Education may be substituted for experience as determined relevant by the agency.

Applications Developer III: This is advanced technical work in information systems analysis and application development. Serves as senior consultant and/or subject matter expert providing consultation to users and staff for the most complex problems. Work involves identifying complex problems and reviewing related information to develop and evaluate options and implement solutions. Functions as the top technical consultant for the organization in one or more highly specialized areas of application analysis, design, and programming by providing guidance, technical expertise and/or research services to others. Assignments are given in terms of expected results and are subject to occasional review. Work involves leadership as a senior consultant or project leader, or supervision of a small staff, performing the same or similar work as those overseen.

Minimum Requirements: Successful completion of 24 hours in computer science coursework or certification and three years experience coding, testing, and debugging application programs or four years experience coding, testing, and debugging application programs. Education may be substituted for experience as determined relevant by the agency.

Applications Development Supervisor: This is supervisory work in information systems analysis and application development. Work involves reviewing and evaluating the work of subordinates, implementing policies regarding budget, staffing levels, and quality standards. Ensures work standards are maintained. Defines and plans applications to meet project objectives. Performs as a first line supervisor responsible for the performance of subordinate employees and provides status reports on the activities of the assigned unit.

Minimum Requirements: Successful completion of 24 hours in computer science coursework or certification and four years experience coding, testing, and debugging application programs or five years experience coding, testing, and debugging application programs. Education may be substituted for experience as determined relevant by the agency.

Necessary Special Requirements

Some positions in this class series may require a security clearance at the time of appointment.

NC: 0805