

DESCRIPTION: Under limited supervision, responsible for all phases of modification and/or programming (coding) and maintenance on assigned computer applications; communicates with system users to determine system needs; researches system enhancements; performs design and analysis of computer systems; performs programming; performs related work as assigned.

DISTINGUISHING CHARACTERISTICS: (A position is assigned to this class based on the scope and level of work performed as outlined below.)

This is the second level in the series of three (I.T. Applications Developer, I.T. Applications Developer/SR, I.T. Applications Developer/Lead). Positions classified to the I.T. Applications Developer/SR level perform at an advanced level to create or modify complex computer applications of a considerable size and scope, and perform a full range of duties while working independently. This classification also trains new staff and serves as mentor to less experienced developers.

EXAMPLES OF WORK: (A position may not be assigned all the duties listed nor do the listed examples include all the duties that may be assigned.)

General duties:

- Assists and mentors peers and subordinates
- Consult with clients on application issues
- Uses application development tools and utilities as appropriate

Systems Analysis:

- Prepares the business problem definition
- Performs the information analysis and organization
- Accomplishes the information collection
- Prepares the economic evaluation
- Prepares the solution development and evaluation

System Design & Implementation:

- Development of the functional design
- Development of the technical design
- Preparation of the system specifications
- Development of the implementation plan
- Preparation of the support material
- Providing on-going support

Logical Database Design (with minimal assistance):

- Gathers requirements to build logical model for design analysis.
- Creates logical views of business function.
- Supports data management by creating and managing test data.
- Supports data structure by creating and managing test data
- Gathers requirements for data definition.

Physical Database Design (with minimal assistance):

- Creates physical model as part of the physical design.

- Create data access methods.
- Creates sub-system facilities.
- Creates IMS databases
- Creates relational databases.

Programming & Testing:

- Develop program code, assemble/compile code, and debug code
- Perform alpha/unit testing and participate in system program testing
- Prepare program documentation

KNOWLEDGE, SKILLS, AND ABILITIES REQUIRED: (These are needed at entry level to perform the work assigned.)

Knowledge of: software development principles and methods; principles and processes involved in business and organizational planning, coordination and execution; design techniques, principles, tools and instruments; instructional methods and training techniques; principles, methods and procedures for designing, developing, optimizing and integrating new and/or reusable systems components; principles and processes for providing customer service; software system testing procedures, programming and documentation; infrastructure requirements; system analysis; logical/physical database design; database management principles and methodologies.

Skill in: analyzing needs and product requirements to create a design; applying systems engineering concepts and factors; using basic math to solve problems; writing computer programs for various purposes; information gathering; troubleshooting; active listening, communicating effectively; active learning; reading comprehension; weighing the relative costs and benefits of a potential action; platform selection; idea evaluation; identification of key causes; visioning; writing, debugging and maintaining code; integrating hardware/software components; determining output media/formats.

Ability to: apply programming languages; read and understand information and ideas presented; reason inductively; communicate information and ideas, so others will understand; reason deductively; recognize a problem; put information in order; develop creative ways to solve a problem; organize different pieces of information into a meaningful pattern; concentrate and not be distracted while performing a task over a period of time; identify or detect a known pattern that is hidden in other distracting material; perceive similarities and differences in pieces of information; think logically; organize, plan and prioritize work; provide guidance to less experienced coworkers in solving programming problems; test, install, implement, document and maintain software; design, code, test and debug large and complex computer applications; apply computer assisted software engineering tools to the design and development process; maintain source code; modify and upgrade code as necessary.

MINIMUM QUALIFICATIONS: (Applicants will be screened for possession of these qualifications. Applicants who need accommodation in the selection process should request this in advance.)

A bachelor's degree or equivalent in computer science, information systems, mathematics, engineering or other related field and two years of experience, education, or training in coding computer applications; programming experience can be substituted for education on a year for year basis.

SPECIAL NOTES:

State agencies are responsible to evaluate each of their positions to determine their individual overtime eligibility status as required by the Fair Labor Standards Act (FLSA).