

IT Applications Developer Lead

Purpose of Class: Serves as lead worker for the development, maintenance, and enhancement of computer applications; performs logical and physical database design; responsible for managing assigned projects utilizing comprehensive project management practices; spends majority of time as a project leader.

Distinguishing Characteristics

Level: Third in a series of three

Work Direction Received: Works under limited supervision

Direction of Others: Leads; provides direction to the work of lower-level employees

Scope/nature of Discretion: General/delegated discretion; performs duties with moderate opportunity to exercise independence within broadly-defined policies and procedures; has authority to take required actions

Examples of Duties

Leadership

- Acts as project/team leader a majority of the time
- Coordinates work efforts; makes assignments
- Prepares project/work plan
- Monitors work progress
- Prepares project progress reports

General Duties

- Assists and mentors peers and subordinates
- Consults with clients regarding application issues
- Uses application development tools and utilities as appropriate
- Participates on cross-functional teams to represent IT issues and needs

Programming and Testing

- Develops, debugs, and assembles/compiles code
- Tests programs
- Documents programs

Independently accomplishes the following tasks of typical complexity with minimal assistance in a competent manner:

Systems Design and Implementation

- Functional design
- Technical design
- System specifications
- Develops implementation plan

Examples of Duties (continued)

Systems Design and Implementation (continued)

- Training
- Support material
- On-going support

Systems Analysis

- Business problem definition
- Information analysis and organization
- Information collection
- Economic evaluation
- Solution development and evaluation

Logical Database Design (may work in conjunction with IT Data/Database Analyst)

- Data analysis
- Logical views
- Data management
- Data structure
- Data definition

Communicates with peers, clients, and management.

Maintains regular and reliable attendance.

Physical Database Design (may work in conjunction with IT Data/Database Analyst)

- Physical design
- Access methods
- Sub-system facilities
- Relational databases

Minimum Qualifications

Bachelor's degree in a related area such as computer science, computer engineering, or management information systems and three years of experience in programming. Any equivalent education and/or work experience may be substituted in order to meet the minimum qualifications of the position.

Optional: Some positions may require coursework, training or work experience in certain programming languages.

Knowledge and Abilities

Knowledge

- Basic math
- Software development principles and methods
- Design techniques, principles, tools and instruments
- Principles, methods and procedures for designing, developing, optimizing and integrating new/reusable systems components

Knowledge (continued)

- Software system testing procedures, programming and documentation Infrastructure requirements
- Systems engineering concepts and factors
- Principles and processes involved in business and organizational planning, coordination and execution
- Instructional methods and training techniques
- Principles and processes for providing customer service
- Infrastructure requirements; system analysis
- Logical/physical database design
- Database management principles and methodologies including data structures, data modeling, data warehousing and transaction processing
- Systems analysis

Abilities

- Use basic math to solve problems
- Write various computer programs
- Apply programming languages
- Read, listen, and understand written/oral communication from others
- Communicate, both orally and in writing, information/ideas to others
- Apply general rules to specific problems to arrive at logical conclusions; decide if an answer makes sense; identify discrepancies
- Order information; organize different pieces of information into a meaningful pattern
- Concentrate without distraction while performing tasks over a period of time
- Organize, plan and prioritize work
- Test, install, implement, document, and maintain software
- Maintain source code; modify and upgrade code as necessary
- Actively learn/work with new material/information to grasp its implications
- Write, debug and maintain code
- Integrate hardware/software components
- Determine output media/formats
- Design, code, test, and debug large and complex programs
- Develop creative ways to solve a problem
- Identify or detect a known pattern hidden in other distracting material
- Perceive similarities and differences in pieces of information
- Provide guidance to less experienced co-workers in solving programming problems
- Apply computer assisted software engineering tools to the design and development process
- Analyze needs and product requirements to create a design
- Troubleshoot
- Weigh relative costs and benefits of potential actions
- Platform selection
- Identification of key causes
- Visioning
- Idea evaluation
- Information gathering
- Determine when important changes have occurred in a system or are likely to occur
- Identify long-term outcomes of a change in operations

Abilities (continued)

- Instruct others
- Develop objectives and strategies
- Coordinate work efforts
- Make assignments
- Prepare project/work plans
- Monitor work progress
- Prepare progress reports
- Provide guidance to less experienced co-workers in solving programming problems
- Translate and interpret functional requirements
- Coordinate efforts to enhance software reliability
- Lead a multi-functional development project in software analysis, design, development, and implementation for new system or major enhancement to existing system
- Investigate, evaluate, and select tools and methods for improving productivity and software quality throughout the life cycle
- Assess feasibility of adopting new software design technologies within the current systems environment
- Coordinate demonstration of new and enhanced applications to customers and management
- Identify and correct variances in achieving cost, schedule and performance goals
- Identify resource requirements
- Lead teams conducting independent validation and verification of Agency-wide or multi-agency applications software prior to final acceptance