

## **SYSTEMS ANALYST**

### **DISTINGUISHING FEATURES OF THE CLASS:**

This is a high level position responsible for the technical development of a project. Responsibilities may include system design, technology evaluations, applications development, database specifications, user output specifications, documentation, and the determination of the necessary programming tools to meet user needs. Incumbents have a great deal of contact with users in identifying and designing system requirements. The class differs from Programmer/Analyst in that the work focuses on complex systems analysis and application design rather than a balance of systems analysis and programming. In smaller data centers the incumbent functions as a project leader while in larger centers work would be performed under the general supervision of a Project Leader or other higher level technical supervisor. Supervision of others is normally a function of the position.

### **TYPICAL WORK ACTIVITIES:**

Typical work activities for incumbents in this title include those listed below in addition to those work activities performed by lower level titles in this series. They are indicative of the level and types of activities performed by incumbents in this title. They are not meant to be all inclusive and do not preclude a supervisor from assigning activities not listed which could reasonably be expected to be performed by an employee in this title.

1. Confers with client departments to ascertain system requirements such as functional and data specifications, format of reports, and methods of data transfer between user departments and processing units;
2. Researches new technologies to determine how they can be incorporated into systems;
3. Analyzes data in order to develop and modify programs and system flow;
4. Designs, develops and tests applications;
5. Specifies logic to client departments to be incorporated into a system;
6. Provides technical assistance and direction to project staff including network issues and platform dependent technical issues;
7. Assists subordinate staff in overall system design and programming techniques;
8. Evaluates operational systems; recommends improvements and modifications;
9. Consults with client departments in all phases of system development;
10. Evaluates, configures and integrates software into the technology environment and client business processes;
11. Develops programs and integrates desktop tools to meet client needs;
12. Applies current technology including network and platform dependent issues to problem solution;
13. Functions as user liaison during project development.

### **FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES:**

Knowledge of the principles and practices of systems analysis, organization and management analysis, project management governance, forms and records management and methods sufficient to lead in the design, testing and maintenance of programs on a variety of platforms to meet client needs;

Knowledge of the current principles, practices, methods, techniques and capabilities of various computer technologies, including networking, security, storage, and database and memory management;

Knowledge of the current principles, practices, methods, capabilities and techniques of high speed electronic data processing in order to develop and maintain programs in a client / server or web

## SYSTEMS ANALYST (Cont'd)

### FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (Cont'd)

environment;  
Knowledge of windows and browser-based object oriented programming languages sufficient to analyze existing programs, design new applications and integrate applications within the system;  
Knowledge of integrated development environments, such as Visual Studio and related tools;  
Knowledge of relational database concepts and programming languages, including SQL;  
Ability to keep current with technological advances and other changes in the field;  
Ability to present ideas clearly and concisely, both orally and in writing;  
Ability to establish and maintain effective working relationships with departmental staff and user departments, including the ability to understand and meet the user's needs;  
Personal characteristics necessary to perform the duties of the position;  
Physical condition commensurate with the demands of the position.

### MINIMUM QUALIFICATIONS:

- EITHER: (A) Bachelor's degree in computer science, information systems, information technology, or a closely related field AND four (4) years of recent full-time paid work experience directly developing business or governmental software applications, which primarily involved software development for Microsoft Windows or web-based environments using an object-oriented programming language;
- OR: (B) Associate's degree in computer science, information systems, information technology, or a closely related field described in (A) above AND six (6) years of recent full-time paid work experience as described in (A) above;
- OR: (C) Bachelor's degree in any field AND six (6) years of recent full-time paid work experience as described in (A) above;
- OR: (D) Associate's degree in any field AND eight (8) years of recent full-time paid work experience as described in (A) above;
- OR: (E) An equivalent combination of education, training and experience between the limits of (A) and (D) above.

NOTE: Recent work experience is defined as work occurring within the ten (10) years immediately prior to the date of application.

NOTE: Qualifying work experience developing software applications includes activities related to analyzing and developing the user-interface, data model, logic, and writing application code for software systems. Developing static web page content, utility scripts, spreadsheet macros, Microsoft Access databases, or personal projects will NOT be considered as qualifying experience.

NOTE: Your degree or college credit must have been awarded by a college or university accredited by a regional, national, or specialized agency recognized as an accrediting agency by the U.S. Department of Education/U.S. Secretary of Education.

**SYSTEMS ANALYST** (Cont'd)

**MINIMUM QUALIFICATIONS:** (Cont'd)

NOTE: A certification from an accredited educational institution in the subject of software development may be substituted for up to a maximum of one (1) year of required work experience.

**SPECIAL REQUIREMENT:**

Possession of a valid Driver License to operate a motor vehicle in New York State at time of application and to maintain the position.

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