## DATABASE ANALYST

DISTINGUISHING FEATURES OF THE CLASS: This is advanced technical computer and systems related work which evaluates complex data structures, access and use requirements for established and requested computer applications, then designs, maintains and monitors appropriate database structures to meet these needs. Work is performed under the general supervision of a higher ranking professional staff employee. Supervision is not a regular responsibility of the position, however supervision may be exercised over lower level technical staff. Does related work as required.

## TYPICAL WORK ACTIVITIES:

- Confirms project requirements by studying user requirements and conferring with others on project team;
- Determines changes in physical database by studying project requirements; identifying database characteristics, such as location, amount of space, and access method;
- Monitors databases for usage, response, breach of privacy, and potential re-structuring;
- Assign data names in a manner that assures uniqueness;
- Coordinates activities with System Administrators for providing back-up and recovery;
- Reorganizes and/or restructures the database to accommodate physical or logical changes;
- Makes changes as necessary, to elements existing in the database;
- Reviews both new systems and proposed or requested changes to existing applications which may effect the established database, and makes recommendations for change or modification.

## FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

- Thorough knowledge of database management systems, structures and techniques, including Database Performance Tuning;
- Thorough knowledge of electronic data processing systems, principles, practices and procedures of systems and applications programming;
- Thorough knowledge of electronic data processing hardware and software, their capabilities and application;
- Good knowledge of the current literature, sources of information and technological developments in the field of database management and the ability to stay current with the technological developments in various database platforms such as, but not limited to, MySQL, MSSQL, Oracle;
- Working knowledge of the fundamentals of software development and best practices for software development;
- Working knowledge of the best practices for database maintenance and Database Security;
- Ability to analyze the database requirements of a variety of computer applications and to design appropriateness database structures;

Ability to prepare comprehensive reports and diagrams relative to data management;

Excellent problem-solving skills, documentation skills, and verbal communication skills;

Sound judgement;

Initiative and resourcefulness.

## MINIMUM QUALIFICATIONS:

- A) Seven years of experience in Computer systems software programming, or systems analysis of which one year must have been in database management and design; or
- B) Graduation from a regionally accredited or New York State registered college or university with a bachelor's degree in computer science or closely related field and three years of experience in computer systems software programming or systems analysis, of which one year must have been in database management and design; or
- C) An equivalent combination of training and experience as indicated in A) and B) above.

 ${\underline{\rm NOTE}}\colon$  Education beyond a Bachelor's Degree in the field of computer science may be substituted for the programming or systems analysis experience on a year for year basis. One year of experience in database management is required.

SPECIAL NOTE: Because of the radical evolution of technology in this field, qualifying experience must have been gained within the last five years.

R493 2/3/93

Revised 8/15/18