

PROGRAMMER ANALYST

DEFINITION

Under department supervision, perform system analysis to determine system requirements; design, code, test, modify, and implement appropriate database and software solutions including web-based solutions using advanced programming languages; provide technical support to District office staff for computer software applications; act as a liaison with software and other vendors to resolve operation problems; review, analyze, and modify existing systems/programs as necessary.

EXAMPLES OF DUTIES

The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

1. Develop solutions to user-related problems. An example of this would be to develop a data structure to address user needs with the goal of providing a user-friendly interface that assists employees with their tasks and increases productivity.
2. Prepare program documentation, write operational instructions, and prepare end-user manuals.
3. Provide training modules to end-users.
4. Analyze, modify, and implement student information, business, and similar systems and applications.
5. Test, apply, and implement regular system updates and maintenance as well as analyze, test, and implement vendor software upgrades.
6. Design the data structure and presentation of applications based on user needs using advanced programming languages.
7. Design databases and related reports; may develop applications and complex queries that support instructional and operational needs of the District.
8. Assist in designing, developing, maintaining, and controlling standards for database information and its usage.
9. Review and evaluate software and make recommendations.
10. Create and maintain database security, integrity, reliability, and availability.
11. Analyze and evaluate data and design reports relative to system and program needs.
12. Maintain quality control.
13. Prepare, create, and present clear and concise data reports.
14. Communicate with vendors as well as other school districts' personnel to resolve technical issues.
15. Create, automate, and manage file transfers and data conversions.
16. Performs other related duties as required.

QUALIFICATIONS

Knowledge of:

Principles, techniques, methods and procedures pertaining to the various aspects of database structures, computer programming, system design, and system management, including, but not limited to current versions of Microsoft SQL, Access, and ASP; appropriate computer hardware, software, and network systems knowledge; principles of designing software solutions from design through implementation; current advanced programming languages; knowledge of several database development techniques and software used to implement them; testing and debugging computer programs.

Ability to:

Program, code, test, and maintain existing and new systems and programs; analyze data and situations, reason logically and creatively identify problems, draw valid conclusions and develop effective solutions; Interview District personnel and translate their needs into a computer program; adapt to changing technologies and learn functionality of new equipment, systems, and technologies; apply creative thinking in design and development of methods of processing data; review and detect errors in data, logic, coding, and program structure; speak and write effectively; use tact, patience, and courtesy with all stakeholders; help non-technology staff understand technological concepts; coordinate work with activities of other technical personnel; understand and carry out oral and written instructions; establish and maintain cooperative working relationships; prioritize and schedule work; communicate effectively in written and oral communication; interpersonal skills using tact, patience, and courtesy; collaborate with staff to coordinate work and develop solutions; work independently and meet deadlines.

Education/Experience:

Coursework in computer science or a related field; three years of progressively more responsible and challenging roles in programming and/or database positions. Bachelor's Degree in computer science or a related field preferred. Programming experience is desired.