



Job Description
Prepared/Revised: **April 2021**

Job Title: **Solution Architect**
 Job Family: **Non-Certified**
 Pay Program: **Administrative**
 Typical Work Year: **12 months**

Job Code: **090535**
 FLSA Status: **Ex – A**
 Pay Range: **L10**

SUMMARY: Analyze current technologies and vendor systems used within the district to determine ways to improve the existing system(s) or integrate with other informational systems. Propose and establish software framework/initiatives for necessary contributions from various departments. Work closely with IT professionals within the department to ensure proper architecture and security of assigned software systems. Perform complex product development in areas including design, systems analysis, implementation, and maintenance of several projects. Design, program, test, implement, troubleshoot and maintain multiple highly complex products. Provide detailed specifications for proposed solutions. Account for source code/script review to ensure best practice in code migration and that continuous integration is maintained.

ESSENTIAL DUTIES AND RESPONSIBILITIES: *To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

Job Tasks Descriptions	Frequency	% of Time
1. Analyze, design and create software solutions/prototypes for initiatives or integrations across informational systems to meet the business’s needs.	D	45%
2. Design, program, test and implement highly complex programs and relational databases assuring product quality and effectiveness.	D	20%
3. Account for source code/script review to ensure best practice in code migration and that continuous integration is maintained.	D	10%
4. Researching current and emerging technologies and proposing changes to existing systems based on this research	D	5%
5. Responsible for assisting in the establishment of an IT Architecture practice, and the adoption of an architecture and standards methodology.	D	5%
6. Collaborate with departments and clients in project design and development from start to finish. Develop and coordinate production processing schedules.	M	5%
7. Responsible for securing enterprise level web applications and ensuring digital security for district data.	M	5%
8. Document program, code and special instructions on procedural, modular and database level.	Q	4%
9. Other duties as assigned.	Ongoing	1%

EDUCATION AND RELATED WORK EXPERIENCE:

- Bachelor’s degree in computer science or related major. Four (4) additional years of similar and relevant experience may be substituted for this requirement.
- Minimum of five (5) years of experience architecture, design and build enterprise applications.
- Minimum of seven (7) years of experience in full-stack software development across multiple technologies, language and frameworks.

LICENSES, REGISTRATIONS or CERTIFICATIONS:

- Criminal background check required for hire.

TECHNICAL SKILLS, KNOWLEDGE & ABILITIES:

- Professional experience developing IT and cloud infrastructure;
- Professional experience in software engineering and design architecture.
- Advanced knowledge of best practices in developing and securing enterprise level applications.
- Advanced knowledge of database design and development as well as user interface design and development.
- Strong object-oriented/based programming skills.
- Expertise in debugging the Legacy Code.

- Proficiency in Visual Basic, C#, .Net, REST APIs, JavaScript and JavaScript based frameworks (such as Vue), scripting languages (such as google app script, PowerShell).
- Ability and willingness to learn new computer languages and technologies quickly.
- Ability to work under a formal software development lifecycle.
- High level of analytical and design skills for requirements development and technical specifications.
- Experienced trainer, facilitator, and course developer.
- Good communication, interpersonal skills and documentation skills.
- Ability to maintain confidentiality in all aspects of the job.
- Ability to keep up-to-date technically and apply new knowledge to your job. Includes adapting to and mastering new system applications and processes as implemented by the district or department
- Ability to promote and follow Board of Education policies, District policies, building and department procedures.
- Ability to stay current with district policy, standards and training in the areas of data quality, data privacy, and cyber-security with respect to student and staff data, and related information systems.
- Ability to communicate, interact and work effectively and cooperatively with all people, including those from diverse ethnic and educational backgrounds. Willingness to contribute to cultural diversity for educational enrichment.
- Ability to recognize the importance of safety in the workplace, follow safety rules, practice safe work habits, utilize appropriate safety equipment and report unsafe conditions to the appropriate administrator.

MATERIALS AND EQUIPMENT OPERATING KNOWLEDGE:

- PC and related software applications.
- Operating knowledge of district information technology systems and any other department specific software and equipment required within 2 months after entering position.
- Advanced knowledge of servers, mainframes and networks.
- Familiarity with general office equipment.

REPORTING RELATIONSHIPS & DIRECTION/GUIDANCE:

	POSITION TITLE	JOB CODE
Reports to:	Administrative Data Services Executive Director	090529

	POSITION TITLE	# of EMPLOYEES	JOB CODE
Direct reports:	This job has no supervisory responsibilities.		

BUDGET AND/OR RESOURCE RESPONSIBILITY:

- None

PHYSICAL REQUIREMENTS & WORKING CONDITIONS: *The physical demands, work environment factors and mental functions described below are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

PHYSICAL ACTIVITIES:	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Stand		X		
Walk		X		
Sit				X
Use hands to finger, handle or feed				X
Reach with hands and arms	X			
Climb or balance	X			
Stoop, kneel, crouch, or crawl	X			
Talk		X		
Hear		X		
Taste	X			
Smell	X			

WEIGHT and FORCE DEMANDS:	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Up to 10 pounds		X		
Up to 25 pounds	X			
Up to 50 pounds	X			
Up to 100 pounds	X			

WEIGHT and FORCE DEMANDS:	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
More than 100 pounds	X			

MENTAL FUNCTIONS:	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Compare				X
Analyze				X
Communicate			X	
Copy		X		
Coordinate			X	
Instruct		X		
Compute				X
Synthesize				X
Evaluate				X
Interpersonal Skills			X	
Compile			X	
Negotiate		X		

WORK ENVIRONMENT:	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Wet or humid conditions (non-weather)	X			
Work near moving mechanical parts	X			
Work in high, precarious places	X			
Fumes or airborne particles	X			
Toxic or caustic chemicals	X			
Outdoor weather conditions	X			
Extreme cold (non-weather)	X			
Extreme heat (non-weather)	X			
Risk of electrical shock	X			
Work with explosives	X			
Risk of radiation	X			
Vibration	X			

VISION DEMANDS:	Required
No special vision requirements.	
Close vision (clear vision at 20 inches or less)	X
Distance vision (clear vision at 20 feet or more)	
Color vision (ability to identify and distinguish colors)	
Peripheral vision	
Depth perception	
Ability to adjust focus	X

NOISE LEVEL:	Exposure Level
Very quiet	
Quiet	X
Moderate	
Loud	
Very Loud	