Poudre School District

HUMAN RESOURCES DEPARTMENT

JOB DESCRIPTION

Job Title:	**Software Engineer II**	FLSA Status:	**Exempt**
Job Family:	**Information Technology**	Pay Range:	**IT99Y**
Prepared/Revised Date:	**January 17, 2025**	Job Code:	**38103**

SUMMARY: Responsible for designing, developing, testing, troubleshooting, and maintaining custom software applications and integrations with third-party systems in a relational database environment using industry-standard tools. This role includes developing and maintaining district software, websites, data visualizations, and system integrations while adhering to established software development lifecycle methodologies.

The position involves collaborating with cross-functional teams and stakeholders to align technical requirements, foster communication, and deliver projects that meet organizational goals within scope and timelines. The Software Engineer II also provides technical leadership, guides project goals and schedules, and addresses significant technical challenges to ensure successful implementation of new applications and integrations.

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. Frequency of duties, percent of time and work year may vary based on department or building assignment. This job description is not intended to be all inclusive and the employee will also perform other reasonably related duties as assigned by the supervisor.*

1. Design, develop, implement, and maintain system integrations for internal applications and third-party tools, ensuring alignment with business needs, rostering requirements, and quality standards through routine testing and continuous maintenance. Collaborate with vendors to perform ETL functions, deploy software and applications, develop data delivery mechanisms, and design seamless integrations between district systems and third-party software.
2. Complete full-stack software development by designing, coding, testing, and deploying frontend and backend solutions, along with APIs, to deliver robust, scalable, and user-friendly applications. Responsibilities include creating responsive user interfaces, developing secure backend systems, managing seamless integrations, and maintaining streamlined workflows with version control and deployment pipelines. Collaborate with stakeholders to design solutions that optimize processes, track impact, and drive measurable results.
3. Customize out-of-the-box solutions to meet unique business needs, ensuring alignment with organizational objectives and user requirements. Drive process improvement by analyzing workflows, identifying inefficiencies, implementing automation strategies, and adopting new technologies to enhance accuracy and efficiency.

4. Provide mentorship to Level 1 developers in creating and maintaining integrations, focusing on bug fixing, coding standards, and development best practices. Support other Software Engineers while contributing to the improvement of team development processes and standards. Additionally, create comprehensive documentation and training materials to enhance knowledge sharing and team efficiency.
5. Work closely with district teams to streamline data integration processes and complete problem analysis to enhance internal application development. Regularly meet with users to gather requirements for both new and existing applications prepare detailed specifications for integration and program implementation.
6. Collaborate with the senior technical staff members to research, propose and implement architectural changes, and explore emerging technologies for incorporation into the district's infrastructure.
   Work closely with the Database Administrator and development team to design, coordinate, and implement database schemas. Serve as a backup for the Database Administrator, assisting in monitoring SQL performance and database activity, maintaining the SQL security model, and optimizing databases for improved performance.
7. Oversee the maintenance of school and district websites by leading monthly patching processes, assigning tasks to Level 1 engineers, and ensuring successful patch implementation. Set up new websites by providing all necessary files and databases for Level 1 engineers to complete site builds. Approve and assist in the creation of new templates, ensuring alignment with requirements and quality standards including accessibility.
8. Enable reporting and data analysis by designing, building, and maintaining data objects, views, extracts, and data models. Create new data objects, provide support to data analysts with view modifications, and ensure the accuracy and reliability of application extracts to support robust data visualization and aggregation.
9. Collaborate with team members to prioritize assigned projects, ensuring the timely delivery of high-quality deliverables that meet requirements. Adhere to established standards and best practices throughout the project lifecycle. Actively contribute to project teams to achieve overall objectives. Adapt to evolving district goals and shifting organizational priorities. Provide ongoing maintenance and post-implementation support to sustain the functionality and success of projects.
10. Consistently update assigned tickets and tasks, recording progress and key details in tracking tools to uphold transparency and accountability. Proactively create and manage tasks in tracking systems as needed to maintain organization, prioritize workloads, and meet deadlines. Actively address issues as they arise, working collaboratively with team members to overcome challenges and achieve project objectives effectively.
11. Utilize strong problem-solving and analytical abilities to identify, troubleshoot, and resolve technical issues. Analyze complex systems, determine root causes, and implement effective solutions to improve performance and efficiency.
12. Communicate effectively by translating technical concepts for non-technical audiences, collaborating across teams, and aligning solutions with business goals.
13. Deliver consistent, quality, user support by providing consultative customer service, resolving issues efficiently, and translating technical concepts into clear, user-friendly solutions.

14. Pursue continuous professional development by staying updated on district technology standards, industry trends, and emerging skills, while embracing challenges and maintaining a growth mindset.
15. Perform other duties as assigned.

EDUCATION AND RELATED WORK EXPERIENCE:

- Bachelor's degree in computer science or computer information systems
- Seven years or more experience in application development
- In-depth experience in developing applications in a relational database environment
- Equivalent combination of education and experience acceptable

LICENSES, REGISTRATIONS or CERTIFICATIONS:

- Criminal background check required for hire

TECHNICAL SKILLS, KNOWLEDGE & ABILITIES:

- Proficient in C#, HTML, CSS, JavaScript, and SQL databases/queries
- Experienced with GIT, Azure DevOps, Windows, and Linux environments
- Familiarity with Visual Studio including SQL Server Data Tools (SSDT)
- Experienced with Microsoft Suite and Power BI (or equivalent data visualization tools)
- Experience in Drupal or equivalent content management software
- Extensive experience in developing applications within a relational database environment, including designing, implementing, and optimizing complex database schemas, writing efficient SQL queries, and integrating databases with software applications to ensure high performance, scalability, and reliability
- Understand user requirements and adapt to a rapidly changing environment, acquiring and implementing new technologies
- Conduct research, read technical publications, and apply acquired skills
- Demonstrate strong oral, written, and English language communication skills
- Possess advanced math, organizational, and time management skills
- Provide excellent customer service in-person and over the phone
- Collaborate effectively in a team environment and work with diverse backgrounds
- Prioritize tasks, multi-task, meet deadlines, and apply new technologies as needed
- Write clear, accurate documentation for both end-users and technical audiences
- Ability to maintain honesty and integrity in all aspects of the job
- Ability and willingness to adhere to attendance requirements, including regular and punctual employee presence
- Ability to promote and follow Board of Education policies, District policies, administrative guidelines and building and department procedures
- Ability to communicate, interact and work effectively and cooperatively with people from diverse ethnic and educational backgrounds
- 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:

- Advanced operating knowledge of and experience with personal computers, peripherals, and media equipment
- Advanced operating knowledge of and experience with office software and equipment
- Operating knowledge of and experience with standard office equipment, such as telephones, copier, fax machine, E-mail, etc.

REPORTING RELATIONSHIPS & DIRECTION/GUIDANCE:

	POSITION TITLE	# of EMPLOYEES
Reports to:	Director of IT Software Development & Support	
Direct reports:	This job has no direct supervisory responsibilities.	

- Responsible for providing guidance, direction, and training to Software Engineer I colleagues.

STANDARD PHYSICAL DEMANDS & WORKING CONDITIONS: *Poudre School District is committed to the full inclusion of all qualified individuals. As part of this commitment, Poudre School District will ensure that qualified individuals with disabilities are provided reasonable accommodations. If reasonable accommodation is needed to participate in the job application or interview process, to perform essential job functions, and/or to receive other benefits and privileges of employment, please contact ada@psdschools.org.*

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	

VISION DEMANDS:	Required
Depth perception	
Ability to adjust focus	X

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