

## **SOFTWARE DEVELOPER**

The Associate Software Developer assists in designing, building, and supporting custom application development and 3rd party product integrations. Additionally, the Associate Software Developer provides specific 3rd tier support for custom applications. Essential functions include:

- Develop, test, document, and implement high quality applications on time that perform according to specifications and requirements documents
- Develop and adhere to development standards that allow for the maintainability of code in a manner that supports team development
- Work with Systems Architect and Senior Developers to assist with the preparation of design documents for future features
- Participate in the modification of software applications or architecture to resolve issues and plan for future growth
- Assist with production incidents as they arise and document the resolutions
- Participate in code reviews and status meetings as necessary

### ***Education/Licensure/Certification:***

- Associate Degree in Computer Science or Information Systems; or equivalent combination of education and relevant experience; Bachelor's Degree preferred
- Industry certifications in software, systems, network or project management disciplines, preferred

### ***Experience (Minimum Required):***

- 1-3 years' developing enterprise-wide software solutions
- 1-3 years' developing in Node.js (TypeScript and Express )
- 1-3 years' developing with Angular or React
- 1-3 years' MS-SQL writing stored procedures and database schema design
- 1-3 years' NoSQL databases (MongoDB, Azure Cosmos DB, other)
- 1-3 years' Microsoft operating systems experience preferred
- 1-3 years' developing and delivering custom business computer applications preferred

### ***Experience (Preferred):***

- 1-3 years' Experience in command line usage (Bash, zsh, etc), preferred
- 3-5 years' developing in Node.js (TypeScript and Express )
- 3-5 years' developing with Angular or React
- 3-5 years' MySQL and/or other relational database experience
- 3-5 years' MongoDB and/or other NoSQL database experience
- 3-5 years' Unix experience, RedHat Linux (or derivatives), preferred
- 3-5 years' developing enterprise-wide software solutions, preferred
- 3-5 years' developing and delivering custom business computer applications, preferred
- Experience in web servers (Apache and IIS), preferred
- Experience in Business Intelligence, Big Data, or analytics, preferred
- Experience with AI technologies (LLM, Agentic, ML, etc.), preferred
- Experience with git version control
- Experience in Perl, preferred
- Experience with .NET technologies, (C#/ASP.NET/ ASP.NET Core), preferred
- Experience in Education industry or with education data (FERPA and PII), preferred

## **SENIOR SOFTWARE DEVELOPER**

The Software Developer designs, builds and supports custom application development and 3rd party product integrations. Additionally, the Software Developer provides specific 3rd tier support for custom applications. Essential functions include:

- Develops, tests, documents, and implements high quality applications on time that perform according to specifications and requirements documents.
- Analyzes performance of programs and takes action to correct deficiencies.
- Develops and adheres to development standards that allow for the maintainability of code in a manner that supports team development.
- Participates in the modification of software applications or architecture to resolve issues and plan for future growth.
- Interact with other developers, infrastructure, application services, and other technical leaders to understand subsystem and component specifications and recommend changes to facilitate efficient and effective development
- Perform Build Master duties, schedule and manage code reviews, and prepare deployment packages for multiple environments
- Participates in code reviews and status meetings, as necessary.

### ***Education/Licensure/Certification:***

- Bachelor's Degree in Computer Science or Information Systems, or equivalent combination of education and relevant experience; Master's degree preferred
- Industry certifications in software, systems, network or project management disciplines, preferred
- Microsoft Azure Fundamentals or Azure Developer Associate certification, preferred
- Experience with cloud based development; micro services architecture/front end preferred

### ***Experience (Minimum Required):***

- 5-7 years' developing in Node.js (TypeScript and Express ).
- 5-7 years' developing with Angular or React.
- 5-7 years' MySQL and/or other relational database experience.
- 5-7 years' MongoDB and/or other NoSQL database experience.
- Experience with git version control.

### ***Experience (Preferred):***

- 5-7 years' MySQL and/or other relational database experience
- 5-7 years' MongoDB and/or other NoSQL database experience
- 5-7 years' Unix experience, RedHat Linux (or derivatives)
- 5-7 years' developing enterprise-wide software solutions
- 5-7 years' developing and delivering custom business computer applications
- Experience in web servers (Apache and IIS)
- 3-5 years' Experience in command line usage (Bash, zsh, etc)
- Experience in Business Intelligence, Big Data, or analytics
- Experience with AI technologies (LLM, Agentic, ML, etc.)
- Experience with git version control
- Experience in the Education industry or with education data (FERPA and PII)

## **SOFTWARE ARCHITECT**

The Software Architect defines business system architectures and the subsequent designing, building, modifying, upgrading, extending, and supporting of custom applications and third-party product integrations. Essential functions include:

Provide technical direction and leadership for internal software development efforts

- Conducts regular code reviews to ensure that the application code is of high quality and meets code standards.
- Identify and implement technology solutions to support Research & Development initiatives including data interchange systems, security frameworks, and business intelligence systems
- Plan and architect integration layers between internal applications that manage school and student information and external partner systems, including Learning Management Systems (LMS), Student Information System (SIS), Curriculum Services/Courses, and Physical School based systems
- Design and develop new software products or major enhancements to existing software
- Acts as highest-level technical expert, addressing problems of systems integration, compatibility, and multiple platforms
- Produce architectural documentation as required by the Software Development Life Cycle (SDLC) using industry standards; maintain and evolve software architecture documents based on evolving system requirements and industry trends and technologies

### ***Education/Licensure/Certification:***

- Bachelor's Degree in Computer Science or Information Systems; or equivalent combination of education and relevant experience
- Industry certifications in software, systems, network, or project management disciplines, preferred

### ***Experience (Minimum Required):***

- Eight (8) years of software and systems architecture/development experience
- Ability to design large scale, enterprise-wide systems, optimized for performance utilizing appropriate industry technologies and best practices
- Open-source & Backend Architecture
  - Deep expertise in Node.js and TypeScript, including the Express framework.
  - Proficient in comprehensive tests using Jest.
  - Experience with messages brokers like RabbitMQ
- Frontend Architecture
  - Strong architectural experience with React, including state management, component design, and performance optimization.
  - Mastery of modern frontend fundamentals: JavaScript (ES6+), HTML5, & CSS3.
  - Experience with other frameworks like Angular (2+) or Vue.js is a plus.
- Development Methodologies & Tools
  - Solid understanding and application of common software design patterns (e.g., Singleton, Factory, Adapter).
  - Proficiency with Git for version control
  - Experience working in an Agile/Scrum environment using tools such as Azure DevOps (preferred), Jira, or Trello.
- Service Oriented Architectures
  - High -traffic and -volume Distributed System Design
- Data Storage and Persistence
  - Experience with MySQL SQL Server, or PostgreSQL
  - Experience with MongoDB at scale

***Experience (Preferred):***

- AI and Machine Learning with tools like Azure Cognitive Search, Azure Machine Learning, Azure Cognitive Services or Azure Bot Services,
- 5-7 years' Microsoft operating systems experience
- 5-7 years' developing and delivering custom business computer applications
- Container-based Architectures like OpenShift, Kubernetes, or Docker
- Experience with analytics and business intelligence tools, including Azure Data Lake, Databricks, Open Datasets, or comparable Big Data platforms
- Experience with Microservices or Service Bus Technologies
- Education industry or with education data
- Advanced experience with client-side technologies such as JavaScript, CSS, DHTML and others
- Experience with database and storage technologies, including Azure SQL, Cosmos DB, Blob/Object Storage (Azure Storage, Amazon S3), and related development tools such as RedGate SQL Toolbelt and Visual Studio for Database Developers
- Thorough knowledge of technology solutions for the Internet, handheld devices, personal computers and networks

### **USER EXPERIENCE/USER INTERFACE (UX/UI) DESIGNER**

The User Experience/User Interface (UX/UI) Designer translates business requirements, and other considerations as well as user research and stakeholder feedback into site maps, user flows, customer journey maps, wireframes, mockups and prototypes for both consumer-facing and internal-facing applications. Creates dev-ready designs and interactive user interfaces that meet the organization's vision and bring the application to life. Essential functions include:

- Gather and evaluate both business and user requirements in collaboration with the marketing team, subject-matter experts, and the broader organization to create engaging UX/UI designs that achieve the desired user actions
- Collaborate with the project team in prioritizing functional requirements and developing design solutions with a focus on usability and engagement
- Make deliberate design decisions to translate user needs and business requirements into thoughtful user journeys, site maps, storyboards, process flows, interactive prototypes, and wireframes that effectively achieve the stated goals and product vision Perform resizing and manipulation of images
- Keep up with industry trends and maintain a competitive edge against competitor products
- Present design concepts and deliverables to internal and external stakeholders
- Incorporate changes recommended by stakeholders or Art Manager into final UX/UI design
- Proactively identify design problems or opportunities for improvement
- Ensure that all designs meet WCAG accessibility standards
- Define and adhere to digital design system, including fonts, colors, design elements and images
- Assist Art Manager and Graphic Designers with layout and design tasks as needed

#### ***Education/Licensure/Certification:***

- Associate's Degree or equivalent combination of education and relevant experience
- Technical certification in related subject, preferred

#### ***Experience (Minimum Required):***

- Three (3) years of experience as a UI/UX Designer or similar role
- Strong portfolio showcasing UX and UI skillsets and front-end web design
- Excellent visual design skills with sensitivity to user-system interaction
- Hands-on experience creating site maps, wireframes, prototypes, storyboards, user flows
- Experience using tools such as Sketch, Photoshop, Illustrator, InDesign, Invision, or similar visual design and wireframing tools
- Knowledgeable of accessibility best practices including WCAG
- Understanding of basic front-end languages: HTML5, CSS3, Javascript

## **BUSINESS ANALYST**

The Business Analyst translates business and system needs into requirements for Designers, developers and Testers to consume and Engagements in work efforts at various scales ranging from minor defects fixes and enhancements to assistance with development of new applications, various types of solution approaches (custom development, page implementation, etc.) and solution domains (business applications, data warehouses, web services, infrastructure, etc.). Knowledge of the software development lifecycle and AGILE methodology preferred. Essential functions include:

- Develops requirement documentation translating business needs into requirements that can be understood by the solution development team
- Participate in IT design reviews ensuring compatibility and interoperability of computing systems
- Develop a knowledge of system capabilities and functions of assigned application software
- Recommend optimal solutions to business requirements that best leverages the product
- Manage special projects as assigned by IT management
- Provide advice and recommendations on emerging IT trends
- Ensure that proposed system features and requirements meet user needs and satisfy business objectives and initiatives
- May assist in creation and implementation of test plans that are mapped to documented requirements
- Perform and coordinate User Acceptance Testing (UAT) and/or BETA presentations as required on department related projects Create training and system documentation, conduct training sessions as necessary

### ***Education/Licensure/Certification:***

- Bachelor's Degree in Business Administration, Computer Science, Finance, Education, or Information Systems; or equivalent combination of education and relevant experience
- Industry certifications in business analysis, software systems, network or project management disciplines, preferred
- CBAP® (Certified Business Analysis Professional) Certification, preferred

### ***Experience (Minimum Required):***

- 3 years' experience as a business analyst or similar system/business support role and/or Five years' experience with internal systems, such as VSA Suite and LMS
- 1 year experience and proficiency with knowledgebase, defect tracking, and requirements related software systems (such as ServiceNow, IBM Rational RequisitePro, JIRA, etc.)
- Three years' experience and proficient with core software applications, including Microsoft applications (Word, Excel, PowerPoint, Visio).
- Some experience with design and implementation of technical environments using various technologies and languages.
- Knowledge of importing data for use in report software, spreadsheets, graphs, and flow charts
- Experience with business and technical requirements analysis, modeling, verification and methodology development
- Knowledge of system testing and software quality assurance best practices and methodologies
- Proven analytical, mathematical, communication, and creative problem-solving skills
- Ability to utilize solution modeling to represent requirements information in graphical forms that augment textual representations in natural language

### **Quality Assurance Engineer**

Quality Assurance Engineer ensures that Information Technology (IT) products and services are delivered in a manner that meets expectations and achieves the highest level of customer satisfaction and value possible. Provides support throughout the entire Product Development department for software, networking, reporting, and security. Required to take ownership of projects and keeps abreast of new technologies and industry trends and incorporates as appropriate. Provides internal updates to co-workers, team leads, and management within the IT department. Essential functions include:

- Create and execute test strategies for FLVS products that verify enhancements meet business requirements and user expectations
- Identify and effectively communicate quality risks and mitigation strategies so the appropriate measures can be taken by the product team
- Detect and catalog defects with appropriate detail so they can be resolved quickly and effectively
- Create and run manual tests on our product to assure any new functionality does not negatively impact the end user experience
- Create and execute tests to assure adherence to new and existing Web Standards, Web Content Accessibility Guidelines(WCAG), Section 508 compliance, responsive design, and/or mobile design, and browser compatibility among the various FLVS related applications
- Execute automated tests that have been created by the development and automation teams
- Provide feedback on existing automated tests, as well as requests for the creation of new tests, as part of the automation plan for development and QA
- Test validation and data analysis for non-UI elements utilizing SQL queries, API testing tools, and more
- Collaborate with the QA team in developing a QA testing strategy for the FLVS product suite, determining the appropriate balance of manual and automated tests, as well as the types of tests (end-to-end, UI, API, integration, and performance)
- Review software documentation and user stories for testability and to ensure consistency with software features and performance
- Participate and actively contribute to daily agile meetings, requirements review meetings and design reviews
- Proactively engage in professional learning regarding the QA and Software Testing industry, FLVS tools and user base to strengthen individual contribution to the team
- Collaborate with Software Development, Business Analysts, Project Management, and support teams to verify FLVS products retain a high-quality standard among our users
- Review and provide meaningful feedback on work products from the SDLC including product design specifications and project requirements
- Document and communicate test results to project team and management to facilitate a decision for release

#### ***Education/Licensure/Certification:***

- Bachelor's Degree in Liberal Arts and Sciences or Computer Science; or equivalent combination of education and relevant experience

#### ***Experience (Minimum Required):***

- Three to Five years of quality assurance experience, preferably testing web or desktop applications, or equivalent experience with data warehouses, student information systems, learning management systems, or other education related applications
- Three years of experience using test case management and defect tracking tools (JIRA, ServiceNow, Azure DevOps, etc.)
- Two years of direct hands-on experience using database tools, such as Microsoft SQL Server 2014 or higher
- Three plus years' experience with QA documentation, developing and executing test cases and/or user acceptance testing in an Agile environment
- Experience working with virtual machines (VMs) as part of a test/integration infrastructure, preferred
- Two plus years of hands-on experience in at least one of the following: API testing tools, such as Postman, Automation testing tools, such as Selenium Performance testing tools, such as JMeter, Report building and visualization tools, such as Power BI

#### ***Experience (preferred)***

- Understanding of cloud-based services (AWS, GCP, or Azure)
- Direct hands-on experience in supporting mobile platforms (iOS and Android)
- Understanding of contemporary quality management principles and practices and the ability to apply them to a wide variety of projects in a fast-paced business environment
- Knowledge of software development methodologies, such as Agile or Waterfall

- Knowledge of functionality, compatibility, usability, and exploratory testing practices
- Ability to create and execute QA and testing processes on software applications
- Ability to perform quantitative data analysis to gauge effectiveness and efficiency of processes, customer satisfaction and product/service quality
- Experience with defect tracking tools
- Understanding of database concepts and good knowledge of SQL and relational databases required
- Familiarity with industry standard version control tools (i.e. TFS, Git, VSO, Sourcesafe, etc.)
- Familiarity with CI/CD development and deployment processes
- Familiarity with a mix of the following (required skillset would be project dependent):  
API testing (SOAP and/or REST) and UI testing, Executing, and/or providing insight on automation/regression scripts, automation tools (Selenium, TestCafe, etc.), and concepts Data Warehousing concepts and tools SSIS, SSRS, SSAS (ETL)

## **PROJECT MANAGER**

The Project Manager is responsible for managing projects and deliverables against a timeline, budget, and scope to recognize and mitigate risks. The Project Manager manages resources, schedules, and financials and adheres to the EPMO best practice processes throughout the life of the project. The Project Manager manages the tasks on a day-to-day basis to verify that the project produces the required deliverables of quality, within the specified constraints of time and cost to achieve the potential benefits defined in the business case. Essential functions include:

- Develop and manage all aspects of project engagement from planning, external vendor relationships, communications, resources, budget, change, risks, and issues
- Analyze and synthesize business requirements, including recognizing patterns and conceptualizing processes
- Own project life cycle: successful project delivery will include full implementation from initiation to deployment
- Prepare estimates and a detailed project plan for all phases of the project
- Procure adequate resources to achieve project objectives in planned timeframes
- Provide status reporting by communicating across leadership levels regarding project milestones, deliverables, dependencies, risks, and issues
- Demonstrate a functional acumen to support how solutions will address client goals while maintaining alignment with industry best practices
- Manage project scope and changes against the project's timeline and budget requirements; ensure project milestones are met
- Define the Statement of Work and Specifications for the requested goods and services
- Monitor, track, and control outcomes to identify risks and resolve issues, conflicts, dependencies, and critical path deliverables
- Define and report on project success criteria and key performance indicators (KPIs) and communicate results to all relevant stakeholders throughout the project life cycle.

### ***Education/Licensure/Certification:***

- Bachelor's Degree in appropriate field of study or equivalent work experience
- Industry certification in project management practice (preferred)

### ***Experience (Minimum Required):***

- Five years of project management or related experience
- Five years of experience working with business stakeholders