

Name:	
Title: Senior Software Engineer	Department: IDLS
Reporting to: Software Development Manager	Grade: 4

Job Summary:

Ascentis, through its subsidiary IDLS produce educational software for a variety of markets in the UK and overseas. By undertaking tasks assigned from a backlog within an agile framework, you will develop high-quality software and contribute to the development and support of our commercial software titles.

As a Senior Software Engineer, you will play a crucial role in our dynamic engineering team, leading the creation of our brand-new product using Rust and Bevy, assisting in the maintenance our existing JavaScript product, as well as supporting deployment of our cloud infrastructure.

Key Responsibilities:

- 1. Develop and maintain a full stack environment:**
 - a. Use technologies such as HTML5, CSS3, JavaScript, TypeScript, and the Angular framework for frontend development
 - b. Implement RESTful API's and other backend services using technologies such as Node, JavaScript, MySQL, and Rust
 - c. Ensure backend systems are scalable, secure, and performant
 - d. Make optimisations to applications for speed, scalability, and responsiveness
- 2. New product architecture and development:**
 - a. Assist in the architecture of scalable, reliable, and maintainable software systems that meet given product specifications and requirements
 - b. Ensure developed software meets performance and security standards
 - c. Assist in the design and development of a lesson engine in the Rust programming language
- 3. Manage an application deployment pipeline and support infrastructure**
 - a. Provide support and advice to the IT department on architecture for an AKS cluster
 - b. Provide support and advice to the IT department on persistent volumes
 - c. Implement, manage and support the applications containerisation blueprint
 - d. Manage and maintain all docker images and any docker registries
 - e. Configure and maintain a deployment pipeline
 - f. Manage and maintain services and ingress configurations for application exposure
 - g. Implement and maintain rollback strategies on the pipeline
 - h. Work alongside the IT department to ensure that the pipeline securely handles credentials
 - i. Implement monitoring, utilise appropriate tools to track performance and detect issues
- 4. Existing product maintenance:**
 - a. Maintain and improve our existing products, utilising JavaScript, Typescript, Angular, Node and Rust
 - b. Implement updates and improvements based on user feedback and business needs.
- 5. Test driven development:**
 - a. Embrace and apply Test-Driven Development (TDD) principles in daily work, crafting test before writing code to ensure the reliability and stability of software features.

6. Agile working:

- a. Actively participate in agile ceremonies, including daily standup meetings, sprint planning, sprint review, and sprint retrospective.
- b. Collaborate with team members to plan, size, and execute tasks within the agile framework.

7. Security audits:

- a. Conduct and report on regular security audits to identify and address potential security vulnerabilities in the software.
- b. Implement necessary security patches and updates to ensure a robust and secure software environment.

8. Code quality maintenance:

- a. Participate in pull requests, providing constructive feedback to maintain high coding standards.
- b. Collaborate with team members to ensure code quality, readability, and adherence to best practices.

Person Specification:

Key Attributes (E-Essential, D-Desirable, P-Potential)

Qualifications

Bachelor's or master's degree in computer science, Engineering, or related field (E)

Experience in a similar role (E)

Knowledge / experience

1. Intermediate experience as software engineer or similar role (E)
2. HTML (E)
3. CSS (E)
4. TypeScript (E)
5. Angular 15+ (E)
6. GIT(E)
7. Docker(E)
8. MySQL (E)
9. Rust (E)
10. Kubernetes (E)
11. Azure Cloud (E)
12. Unit testing using Jest (D)
13. Component testing using Cypress (D)

Skills

1. Ability to work on own initiative
2. Ability and commitment to work as part of a team and across teams
3. Ability to work under pressure and to deadlines
4. Ability to listen and interpret customer needs
5. Commitment to relevant continuing professional development
6. Attention to detail
7. Ability to manage varied workload