Post Title: Lead Front End Software Developer	**Director/Service/Sector** Finance / Information Services		**Office Use**
Band: 11	**Workplace:** County Hall		JE ref:Z319 HRMS ref:
Responsible to: Head of Tech	**Date:** December 2024	**Manager Level**	

Job Purpose:

To be responsible to Head of Tech for:

- Developing and leading the Front End Software Development community in providing high quality programming and software build skills to the Council, including undertaking complex coding and program modification.
- Directly lead the team in providing user focussed solutions to business problems and digital services to the organisation as well as citizens and businesses of Northumberland.
- Ensure a modern standards approach to the delivery of technology solutions is adhered to and to demonstrate leadership in identifying improvement opportunities and the application of these standards
- Identify process optimisation opportunities and contribute to the implementation of proposed solutions.
- Design systems with both business and technical complexity. To select appropriate design standards, methods and tools, and ensure they are applied effectively.
- Coordinate build and deployment activities across systems and undertake integration testing activities
- Collaborate with others in the service to ensure usability, accessibility, security, stability and capacity are embedded in the development of our services
- Design and build solutions and services with security controls embedded, specifically engineered as mitigation against security threats as a core part of the solutions and services.
- Lead and line manage multiple Software Development teams.
- Take a lead role in forming and further developing the council's Software Engineering community of practice.

Manages up to 5 directly managed staff.

Manages up to15 indirectly managed consultancy/contracting staff.

The role is similar to a senior software developer role but a lead software developer exemplifies what good looks like across the software engineering roles. They have experience of leading software engineering teams and they work with and guide cross-functional teams.

Information Services has a council wide remit. The ability to deal with ambiguity, complexity and diversity will be a key requirement of this role.

Resources	Staff	Has direct responsibility for the work of others and for the allocation of resources. This includes managing and leading multiple teams of Software Developers mentoring graduates, internships and apprentices
	Finance	Negotiate, influence or set budgets in complex environments often in excess of £5m. Write or input into business cases and can communicate business-value propositions.
	Physical	Maintain and operate key corporate information systems, ensuring careful use of allocated tools and equipment.
	Clients	Interacts with and influence on immediate colleagues. External contact with customers and suppliers, other NCC employees and partners. May have more influence in own domain.

Duties and key result areas:
You will;

- Lead on the design and development of complex Front End software solutions to meet the needs of the organisation and wider citizen and business needs. This involves working alone on some systems, or with colleagues, on more complex systems and maintaining a focus on user-centred design
- Use open-source, cloud-based, loosely-coupled technologies to make sure our technology remains extensible, nimble and avoids reliance on external providers wherever possible
- Ensure all services and applications are built upon APIs wherever possible allowing future extension and integration.
- Ensure all services and applications built or procured adhere to the Gov.uk Technology Code of Practice
- Use cross-government and other shared platforms wherever possible to meet our needs.
- Lead on the development of best-practice guidelines and continuous improvement of those guidelines
- Follows agreed standards in order to write clean, secure and well-tested code
- Operate the services you build and identify issues in production
- Strong analytical skills are key, including a thorough understanding of how to interpret customer business needs and translate them into application and operational requirements.
- Plan and lead development on sets of related stories
- Detailed understanding of the whole system and take responsibility for teaching this to others
- Work with other disciplines to understand what needs to be built
- Prioritise requests in accordance with agreed criteria and the needs of the organisation.

- Helps to resolve problems (e.g. services not being accessible) and faults (e.g. user interface failure), occurring in the operation of software – especially those requiring greater expertise due to the complexity of the software developed
- Find ways to improve system robustness, resilience and stability
- Conducts investigations of operational problems, makes proposals for improvement and implements them when appropriate. Participates in reviews of digital services and systems performance, provides advice and assists.
- Responsibility for monitoring specifically allocated budgets.
- To take part in professional development and training as identified and to attend relevant conferences/seminars/workshops as and when requested.
- Ensure clear coordination of individual and multiple teams development across area of responsibility as well as Software Developers who report directly to you. Advise and assist less experienced colleagues in the performance of their duties, this includes graduates, internships and apprentices.
- Line-manage, coach and mentor others in the team. Take an active part in the local government digital community.
- Be an agile coach to others; advocate the benefits of software development in agile delivery; build honest relationships to make sure we don't agile-wash traditional practice but are genuinely open-hearted to change.
- Other duties appropriate to the nature, level and grade of the post.

Transport requirements: Working patterns: Working conditions:	Travel to other work sites, area offices or training venues throughout the County and occasionally further a-field. Normal office hours but flexi-hours may apply, if colleagues provide cover. Some standby or call out arrangements may apply. Minimal exposure to working outdoors.

Northumberland County Council

PERSON SPECIFICATION

Post Title: Software Front End Developer – Lead	**Director/Service/Sector:** Finance / Information Services	Ref: Z319
Essential	**Desirable**	**Assess by**

Qualifications and Knowledge		
- An appropriate degree or equivalent - A technical qualification or evidence of competency in IT. - Advanced knowledge of at least one and detailed knowledge of an additional number of specialist computer languages. - Extensively detailed knowledge of programming techniques and methodologies. - Extensively detailed experience of software development using multiple specialist computer languages - Detailed knowledge of devops practices and culture and associated practices like continuous deployment and testing - Knowledge of service orientated architectures, including microservices - Evidence of continuing professional and managerial development.		(a), (i)
Experience		
- Extensive demonstrable record of success in leading Front End software engineering teams to develop, deliver & maintain business solutions in large complex organisations. - Successful track record of leading multidisciplinary teams to deliver digital products using agile methodology in a large and complex organisation, including leading multiple teams concurrently. - Demonstrable record of success of building and run applications as part of a multi-functional agile delivery team - An active desire to provide effective customer centred services. - Be fully accountable for own technical work and/or project/supervisory responsibilities. - Establish own milestones and team objectives and delegates responsibilities.		(a), (i)
Skills and competencies		
- Extensive experience in building and leading multiple teams of front end software developers - Experience of collaborating with others to review complex specifications. - Demonstrable ability to use these agreed specifications to design, code, test and document programs or scripts of medium to high complexity, using the right standards and tools. - Excellent skills in the latest Software Engineer best practices, principles and processes and ability to embed these across the team - Extensive evidence of ability to write clean, secure and well-tested code - Extensive experience in Front End Development and technologies such as Vue.js, Nuxt.js, and Tailwind CSS. - Proficient in building and maintaining responsive, accessible web applications. - Extensive experience of modern frameworks - Extensive experience of open source technologies like JavaScript, Node.js - A history of developing on cloud-based environments like AWS and Azure		(a), (i), (t)

• Have a good understanding of TDD and BDD • Deep understanding of accessibility best practices and WCAG standards. • Experience in creating reusable, accessible design systems for multi-platform projects, ensuring compliance with accessibility guidelines. • Experience in creating user-centred designs, ensuring applications are intuitive, accessible and meet diverse user needs. • Evidence of collaboration with user researchers and end users. • Detailed understanding of the difference between user needs and the desires of the user. • Able to prioritise and define approaches to understand the user story, guiding others in doing so. • Experienced in making recommendations on the best tools and methods to be used. • Performs a broad range of work, including develop complex software to meet user needs • Demonstrable commitment to a modern standards approach and experienced in guiding others in this approach. • History of championing technical evolution within an organisation, find, test, agree and adopt emerging technologies. • Experienced in following best-practice guidelines and in helping to improve those guidelines • Experience with distributed version control systems such as Git • Evidence of being able to identify process optimisation opportunities. • Experienced in design and leading the strategies for building reusable libraries and services. • Evidence of the design of systems characterised by medium levels of risk, impact, and business or technical complexity. • A history of being able to select appropriate design standards, methods and tools, and ensure they are applied effectively. • Extensive knowledge of how to review the systems designs of others to ensure the selection of appropriate technology, efficient use of resources and integration of multiple systems and technology. • Ability to actively solicit prototypes and carry out testing with others. • Able to establish design patterns and iterate them. You know a variety of methods of prototyping and can choose the most appropriate ones. • Excellent skills to build up a useful, robust automated test suite to support a continuous deployment environment • You can identify, locate and fix faults. • Experience of providing 3rd line support on products developed, including out of hours support as and when required. • Experienced in operation of the services built and identification of issues in production • Experienced in defining the integration build.		

• Ability to coordinate build activities across systems and can undertake and support integration testing activities. • History of managing service components to ensure they meet business needs and performance targets. • Evidence of collaboration with the Software Engineering community to ensure usability, accessibility, security, stability and capacity are embedded in the development of our citizen services. • Understanding of information security and ability to design solutions and services with security controls embedded, specifically engineered as mitigation against security threats as a core part of the solutions and services.		
Physical, mental and emotional demands		
• Commitment to high standards of professional performance. • Generally works from a seated position with regular need to walk, bend or carry items. • Need to maintain high levels of intense general awareness and enhanced concentration across a multitude of projects or services running at the same time for lengthy periods. • Works under general supervision. Uses discretion in identifying and resolving complex problems and assignments. • Contact with public/clients/ partners and internal employees • Ability to work to strict deadlines, dealing with conflicting demands, prioritising workload effectively. Plans own work to meet given objectives and processes • Exercises substantial personal responsibility and autonomy. • Ability to support staff, resolving conflict, motivating and managing change.		(a), (i)
Motivation		
• What really excites the successful candidate is problem-solving and the opportunity to deliver innovative technology that carries real value for users. • Draw value from collaboration with others, actively seek input from colleagues and value a multidisciplinary team over hierarchy. • Dependable, reliable, a good timekeeper and effective guide/mentor to subordinate staff. • Demonstrates and encourages high standards of honesty, integrity, openness and respect for others. • Helps to create and encourages a positive work culture, in which diverse, individual contributions and perspectives are valued. • Facilitates collaboration between stakeholders who share common objectives. • Plans, schedules and monitors work to meet time and quality targets and in accordance with relevant legislation and procedures. • Rapidly absorbs new technical information and applies it effectively. • Proactive and achievement orientated • Able to work with minimum supervision.		(a), (i)

• Takes the initiative in identifying and negotiating appropriate development opportunities. • Demonstrates effective communication skills. • Contributes fully to the work of teams. • Plans, schedules and monitors own work (and that of others, where applicable), competently within limited deadlines and according to relevant legislation and procedures. • Understands and uses appropriate methods, tools and applications. • Appreciates the wider form of information systems and how own role relates to other roles and to the business of the employer or client. Understands the relevance of own area of responsibility/specialism to the employing organisation.		
Other		
• Able to work outside of normal office hours including weekends, evenings and some early mornings.		

Key to assessment methods; (a) application form, (i) interview, (r) references, (t) ability tests (q) personality questionnaire (g) assessed group work, (p) presentation, (o) others e.g. case studies/visit