JOB DESCRIPTION

Job title	Senior Principal Software Engineer	
Job family	Technical Systems & Delivery	Proposed Band: E

Job purpose

Software Engineers are responsible for designing and engineering all of the systems, products and services that power the BBC.

The Senior Principal Software Engineer is the top of the Individual Contributor engineering track at the BBC and leads the engineering approach across a department, setting the standards ensuing excellence in quality of outputs across multiple teams. They are responsible for providing engineering technical leadership and input to a broad range of initiatives. They bring best practice from outside the BBC into our teams.

Key responsibilities and accountabilities

- Leadership of engineering change across a wide technology domain.
- Responsible for department wide design, patterns and code approaches.
- Able to scope and shape a departmental wide technical vision for the future.
- Leads on engagement within the department and to other departments in D+E.
- Develop, own, scope, shape, prototype and lead the implementation of technical approaches to problem solving based on future strategies and longer-term needs.
- Fully knows the department domain and the key parts within it; able to identify areas where historic choices are now a hindrance
- Works closely in partnership with Heads of Software Engineering, Heads of Product, Principal Engineers, Engineering Team Leads and Engineering Managers to shape engineering approaches, share knowledge and experience across multiple areas.
- Responsible for the promotion and adoption of new approaches, technologies and processes. Able to motivate others to implement changes to gain wider results and benefits across multiple teams. Uses change as an opportunity for improvement.
- Able to apply simplification to complex situations and identify the key issues and priorities to be resolved. Manage conflict where variations of approach exist.
- Able to review code output from multiple teams and ensure it can work together.
- Accountable for resolving technical conflict within and between multiple teams.
- Represent the department externally at national conferences, panels and industry events to ensure that the BBC's output is viewed as a leading innovator by the engineering industry and audiences
- Keeps a keen eye on future technologies, their roadmaps and potential for the BBC
- Accountable for bringing external perspectives and fresh thinking into the department from a wide range of partners and network relationships
- Be a thought leader: a senior point of expertise on software engineering issues, industry trends and developing technologies. Be a role model to others in the team
- Accountable for training and staff development within their area of expertise
- Growing and developing senior, mid-weight and junior team members through coaching, mentoring and general guidance of best practices in order to develop world class software engineering teams
- Be responsible for creating a positive working environment for employees from a diversity of backgrounds and experiences

Knowledge, skills, training and experience

Essential

- Highly experienced in the software engineering field, with a keen understanding of digital technologies and the role they can play in the future of the BBC
- Has expert understanding and ability to apply industry knowledge, market awareness, audience research and analytical insights to a product or service's engineering strategy and plan
- Understands, adapts and executes plans to prioritise improving our engineering
- Exceptional communication, networking, influencing and persuading skills in order to form credible and professional working relationships with stakeholders and teams
- A strategic thinker able to make decisions considering the short, medium and long term aims and outcomes
- Has solid understanding of the relevant technologies and working practices in the industry

Job impact

Decision making

- *Reports to a Head of Software Engineering or a Head of Product*
- *Is an active member of the departmental wider leadership team*
- *Is an active participant of multiple project or work stream steering groups*
- *Leads, shapes and continuously improves the quality of work across a department*
- *Leads on the creation and delivery of training and development programmes*
- *Decisions have a substantial impact on the direction and achievement of departmental outcomes and continuing effect on perceived quality of engineering across D+E*
- *Deputises for the Head of Software Engineering as required to represent the strategy and requirements of engineering with senior stakeholders inside and outside of the BBC*
- *Represents the department and the wider BBC at conferences and other industry events*
- *Creates and nurtures strong relationships internally and externally*
- *Determines strategies and approaches for broad engineering problem areas*

Scope

Finance:	*No financial responsibility*
Line management:	*No line management responsibility*
Ad-hoc teams:	*Technology lead for ad hoc teams of 10-20 members, leading on software approaches and solution implementation*

Other information
For Reward team use only

Job Code	
Definition:	Content / Content Support / Support

This job description is a written statement of the essential characteristics of the job, with its principal accountabilities, incorporating a note of the skills, knowledge and experience required for a satisfactory level of performance. This is not intended to be a complete, detailed account of all aspects of the duties involved.

Appendix

Now is a great time to join the BBC News & Weather digital teams. Over the last four years, we have doubled the reach of the News site and apps in both the UK and globally. On an average week, 60% of visitors to BBC online come to News & Weather in the UK, rising to 75% internationally; when big stories hit, we regularly now exceed 100m weekly users. While we're a big product, we're still one-size-fits-all, and over the next two years we must make the leap to a modern, personalised digital service that works for all. We're doubling the size of the product and engineering teams by hiring over 100 new roles to support our aspiration of creating a truly universal personal news service.

We will deliver a mix of universal top stories and curated content tailored to different audience needs, with users experiencing a rich combination of news, live and in-depth journalism in text, photos, graphics, video and audio. We know trust is key, and our teams will focus on experiences with trust and transparency at their heart. We will continue to set the standard in Live coverage online, and build a modern BBC News experience that is important, relevant and useful for everyone, every time they use it.

The BBC offers an inclusive workplace where the principles of fairness, respect, equality, dignity and autonomy are promoted and are part of our everyday goals and behaviour. We select candidates for our positions on the basis of merit and as an equal opportunity employer we value diversity and all of the benefits it brings.

Who will support me?

The BBC is widely known as an organisation that values its staff, a healthy work-life balance and a positive, growth-oriented workplace. BBC News has an excellent reputation as a great place to grow, learn and develop new skills.

We have fantastic people managers that are committed to helping their colleagues advance their careers. As a wider organisation we work to provide you with the opportunities and experiences you need to succeed.

You can spend 10% time of your time learning new skills, playing with new technology and developing yourself, because we understand the need to stay up to date and fresh in a constantly changing technical landscape.

How will I be successful?

- Be a part of improving our great culture by demonstrating the right behaviours and attitudes.
- Be proactive and take opportunities to increase your knowledge and experience.
- Be a great team player and help us achieve great things together.

What is the role?

Software Engineers are responsible for designing and engineering all of the systems, products and services that power the BBC. The Senior Principal Software Engineer helps to set standards for engineering excellence and ensure quality of output across the different teams in our department.

They are responsible for providing technical guidance and input to a broad range of initiatives which span our department and the wider BBC. They bring best practice from their extensive

experience into our teams with the aim of helping us to meet our audience needs and improve ourselves.

As one of the most senior technical voices in the department building some of the BBC's biggest audience facing propositions, this role will be a voice in many internal forums shaping the future direction of BBC Online, as well as at external events. Every day will be about working with and supporting our teams to do their best work, in the best way so we do our best for our audience.

What are the responsibilities?
Technical:

- Develop, own, scope, shape, prototype and lead the implementation of engineering approaches to problem solving based on future strategies and longer-term needs.
- Able to simplify complex situations and identify the key issues and priorities to be resolved. Manage conflict where variations of approach exist.
- Able to review code output from multiple teams and ensure it can integrate well. Able to resolve technical conflict within and between multiple teams.
- Excellent knowledge of our department's domain and the key parts within it; able to identify areas where past choices are now a hindrance
- Keeps a keen eye on future technologies, their roadmaps and potential for the BBC
- Accountable for bringing external perspectives and fresh thinking into the department from a wide range of partners and network relationships

People:

- Represent our department externally at conferences, panels and industry events to ensure that the BBC is viewed as a leading innovator by the engineering industry and audiences
- Be a thought leader: a senior point of expertise on software engineering issues, industry trends and developing technologies. Be a role model to others in our team
- Growing and developing senior, mid-weight and junior team members through coaching, mentoring and general guidance of best practices in order to develop world class software engineering teams
- Assisting with recruiting, mentoring and training new team members.

Delivery:

- Works closely in partnership with Senior Leadership team, Engineering Team Leads and other senior technical people to shape engineering approaches, share knowledge and experience.
- Responsible for the promotion and adoption of new approaches, technologies and processes. Able to motivate others to implement changes to gain wider results and benefits across multiple teams. Uses change as an opportunity for improvement.
- Leadership of engineering change across a wide technology domain.
- Helps to shape department wide design, patterns and development approaches.

Are you the right candidate?
As an organisation we support all of our colleagues in gaining new skills and experience. To be successful in this role you may have experience of some, but not necessarily all, of the following:

- Deep technical expertise in at least one or multiple of: Mobile development (iOS/Android); Web development; backend services/APIs
- Strong experience of hands-on technical leadership across multiple teams and stakeholder management with both technical and business stakeholders
- Experience of driving technical improvements in a wider engineering community and best practice across multiple technologies, teams and locations
- Strong communication, able to explain problems and potential solutions in a way that enables a range of colleagues to understand and engage with the pros and cons of proposed technical choices.
- Proven experience of working collaboratively with people from a range of backgrounds and experience, and being comfortable with a high level of matrix organisation.
- A track record of iterating and driving increased team performance over sustained periods of time, in terms of technical solution quality, velocity and user success.
- Significant experience working in areas with technical debt and operational complexity.
- Strong experience of working with big impact brands such as News with a significant operational landscape.

Tech stack

We use a wide variety of tools and technologies across our teams, and no one is expected to work with or have experience of, all of them. To give you an idea though:

- For our user facing "front end" products we use web technologies, primarily JavaScript, Typescript, React, and NodeJS.
- For our APIs and "back end" services we primarily use Java, Scala, and NodeJS, as well as persistence layers like Redis, Mongo, and PostGres

We create and support reliable and scalable cloud based microservices on Amazon Web Services, use Git and GitHub for version control, and use testing tools and approaches, such as Test Driven Development.