

Job title	Software Engineer		
Job family	Technology, Systems & Delivery	Proposed band	C

Job purpose

Responsible for implementing effective software and tools for given designs.

Key responsibilities and accountabilities

- Develop effective software that meets given specifications
- Review and give feedback on others' code
- Write appropriate tests using automated test driven techniques for ensure code quality
- Integrate the software with monitoring and support tools
- Support system integration in its operating environment
- Write and review technical documentation
- Help to troubleshoot and resolve issues throughout the product life cycle, including out of hours support for incident resolution
- Participate in the team's agile planning and delivery process
- Effectively participate in the teams software development methodologies, such as pairing, code and documentation reviewing and continuous delivery
- Learn new technologies and keep abreast of existing technologies

Knowledge, skills, training and experience

Essential

- Demonstrable experience writing and maintaining robust production software
- Competence in one or more mainstream development languages and frameworks
- Competence with one or more mainstream development and deployment tool chains (IDE, SCCS, CI)
- Knowledge of the web architecture and key technologies (HTTP, DNS, distributed design)
- Competence in test driven development and broader testing & QA concerns
- Competence in developing for operational concerns (monitoring integration, performance testing, security considerations)
- Experience of project working and professional software development processes, including agile
- Effective collaboration within a team – ability to speak up, challenge, agree and commit

Desirable

- Experience of database design and use in software applications
- Takes responsibility for driving tasks to completion
- Understanding of designing & implementing for non-functional concerns
- Worked in a professional software development environment on several projects (including experience in testing, design and release)
- Experience of releasing their software to a production use case

- Participated in reviews and inspections of code (sat with a peer or someone more senior reviewing your code)
- Software Engineering or Computer Science Degree or equivalent

Job impact	
Decision Making	
<ul style="list-style-type: none"> • Reports to Principal Software Engineer or Software Engineering Manager • Tasks are allocated to the job holder by the team lead • Undertakes tasks independently • Independently writes tests to check quality of code • Assesses feedback from reviews and incorporates as appropriate • Troubleshoots independently or with the support of others where necessary • Contributes to the teams iterative and collaborative design and implementation decisions 	
Scope	
Finance:	No financial responsibility
Line Management:	No line management responsibility
Ad-hoc Teams:	Participates in departmental hack days and external ad-hoc events (typically 5 to 20 members)

Other information	
For Reward team use only	
Job Code	
Definition:	Content

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

There may be sub-sets of the generic job described above which require additional technical skills. This appendix to the generic job description can be developed to cover such situations.

Division	D+E Content Production Workflows
Reports to (title)	Software Engineering Manager
Location base	London W1, New Broadcasting House

Organisation structure
<p>About BBC News Labs</p> <p>News Labs is an innovation team that sits between BBC R&D and BBC News. We work to influence the future direction of audience experiences for News. BBC News hopes to reach 500 million people worldwide by 2022 each week, and we need people who will help make that ambition a reality through delivering innovation into news.</p> <p>Right now, we're particularly interested in the possibilities of:</p> <ul style="list-style-type: none"> • Developing structured journalism, and journalism as data • Creating and testing personalised experiences of BBC News • Creating and testing new formats for BBC News • Making BBC News more accessible for our audiences • Exploring opportunities for automation in journalism <p>We collaborate with editorial and product teams across the BBC as well as academic partners, and external research and design agencies.</p>

Additional job specific responsibilities and accountabilities
<p>Role responsibility</p> <p>News Labs is unique within BBC Design + Engineering in that we produce rapid prototypes without the formal structure of a product team.</p> <p>We work in short project cycles to create prototypes, demonstrate proofs of concept, test assumptions and gain early feedback. We're always looking for ways to improve and grow, through training, participation in industry hackathons, knowledge sharing and enabling a flexible working environment.</p> <p>Members of the News Labs team contribute to all aspects of the design, execution and delivery process. Beyond software engineering, this can include user research, interface design, collaborating with stakeholders and project management. We want you to help us in shaping all of these areas, so we're particularly interested in hearing how you've contributed in these areas in the past.</p> <p>Much of our work on previous projects has been built on full stack Javascript with some Python and deployed via AWS, but we have the freedom to experiment with whichever technology works best for a project.</p>

About you

When writing your application please tell us about:

- Your experience of designing and developing software using different programming languages
- Your experience of working with RESTful web services; both developing and consuming
- Your ability to work flexibly within a team, taking on different roles as the project requires
- How you've contributed to a project from planning through to execution and delivery
- Your experience using Agile practices for software development and your understanding of software testing methods
- Your interest in news and/or innovation

In addition, you might also be able to tell us about one or more of these:

- Your experience writing Javascript, Python or Java
- Designing better user experiences (this could be research or purely design based)
- Working in a Unix/Linux based environment
- Using a version control system (such as Git)
- Deploying to a cloud infrastructure such as Amazon Web Services or Google Cloud Platform
- Your experience of following good security practices while developing cloud-based services

If you are shortlisted for this role, we will ask you to complete an at-home coding test, allowing at least a week for submission and aiming to take no longer than 2-3 hours of your time. We will assess this anonymously and follow up by inviting you for an on-site interview lasting 60-90 minutes, where we'll discuss your code and ask a number of technical and behavioural evidence-based questions.