

<b>Job title</b>	<b>Senior Software Engineer</b>		
<b>Job family</b>	<b>Technical Systems &amp; Delivery</b>	<b>Grade</b>	<b>8</b>

**Job purpose**

Responsible for the design of software, and for implementation and operation of effective software and tools.

**Key responsibilities and accountabilities**

- Lead the design and development of effective software that meets complex product and business needs
- Review and give constructive feedback on others' code
- Drive work to successful completion across the immediate team
- Write appropriate tests using automated test driven techniques for ensuring code quality and coverage
- Integrate the software with monitoring and support tools
- Ensure the teams software works in its operating environment
- Write, review and take responsibility for technical documentation
- Lead troubleshooting and resolution of issues throughout the product life cycle, including out of hours support for incident resolution
- Participate in and lead as required, the team's agile planning and delivery process
- Effectively participate in and help improve the teams software development methodologies, such as pairing, code and documentation reviewing and continuous delivery
- Work with project, product and technical leads to design software and create implementable specifications and tasks at feature and component level
- Work with 3rd Party ("Indies") where necessary offering direction, support and documentation
- Mentor and coach more junior staff. Provide technical leadership and direction to peers and colleagues. Line Management of 1-2 software engineers (if appropriate)
- Learn new technologies and keep abreast of existing technologies and help introduce them where appropriate

**Knowledge, skills, training and experience**

**Essential**

- Extensive experience writing and maintaining large scale robust production software in a fast changing environment with rapid release cycles
- Expertise in one or more mainstream development language/frameworks
- Expertise with one or more mainstream development and deployment tool chains (IDE, SCCS, CI)
- Competence in database design and use in software applications
- Expertise in web architecture and key technologies (HTTP, DNS, distributed design)

- Expertise in test driven development and broader testing and QA concerns
- Expertise in developing for operational and non functional concerns (monitoring integration, performance testing, scale, availability and resilience, security considerations)
- Extensive experience of project working and professional software development processes, including agile
- Competence in translating product requirements into technical solutions
- Demonstrable experience in using design patterns
- Effective leadership and collaboration inside and beyond the team. The ability to influence diverse stakeholders effectively
- Takes responsibility for driving work to completion across the team
- Technical Lead on at least 1 Medium/Large sized project (3 months +)

**Desirable**

- Worked on multiple projects or codebases concurrently
- Software Engineering or computer science degree or equivalent
- Experience of mentoring and supporting less experienced members of the team

**Job impact**

**Decision making**

- *Write, review and take responsibility for technical documentation*
- *Collaborating with stakeholders and product managers to understand business requirements and influence product requirements*
- *Design and communicate the design of software features or components that meet business and product requirements*
- *Leads and implements software to meet business and product requirements independently*
- *Review others' work and give constructive feedback for improvement*
- *Resolve operational incidents, deciding on immediate and follow up actions and improvement plans*

**Scope**

*Finance: Responsible for headcount budget of £125k*

*Line Management: Mentoring of more junior staff. Line management of 1-2 staff*

*Ad-hoc Teams: Participates in ad-hoc teams with up to 30 members  
Participation in process or technology strategy working groups as SME or to represent their team/division  
Participation in cross divisional forums for improvement of share tools and practices  
Occasional participation as temporary member in another unit or department as SME*

<b>Other information</b>	
<b>For Reward team use only</b>	
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**

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.

<b>Division</b>	<b>News Labs</b>
<b>Reports to (title)</b>	<b>Head of News Labs</b>
<b>Location base</b>	<b>One Euston Square</b>

<b>Organisation structure</b>	
<b>News Products &amp; Systems</b>	

<b>Additional job specific responsibilities and accountabilities</b>
<p>This is a chance for you to shape innovation at the heart of BBC news.</p> <p>News Labs is a small team experimenting with new approaches to news and prototyping new tools – from exploring the potential of Virtual Realty to social media bots or tools helping journalists make cutting edge videos in multiple languages</p> <p>We are looking for an imaginative, flexible and Full Stack Developer to lead News Labs’ work discovering the ways in which we can power new tools for our journalists and fresh digital formats for our audience.</p> <p>Please visit our blog to see some of the projects we have been working on:  <a href="http://bbcnewslabs.co.uk/projects/">http://bbcnewslabs.co.uk/projects/</a></p> <p><b>KEY RESPONSIBILITIES</b></p> <ul style="list-style-type: none"> <li>• An enthusiasm for News with a willingness to experiment and try new solutions to problems faced by editorial and technical teams.</li> <li>• Flexibility to deal with changing projects and priorities in a short space of time.</li> <li>• Strong knowledge of software architecture principles.</li> <li>• Excellent development skills and experience building applications: Node.js ideally</li> <li>• Proven experience of test driven development: unit and integration</li> </ul>

- Experience of Agile Programming, pairing and working within a collaborative team
- Understanding of Service Oriented Architectures and consuming RESTful web services via HTTP.
- Experience of deploying and supporting applications deployed to AWS
- Experience with front end development.
- Experience of database and document store technologies
- Interest in emerging platform level technologies – queues, micro services, caches etc.
- Experience building deployment pipelines with CI systems

<b>Approval</b>	
<b>Manager</b>	Miles Bernie (Head of News Labs)
<b>HR Business Partner</b>	Tim Burden
<b>Date</b>	<b>13/01/17</b>