

Job title	Software Engineer		
Job family	Technology, Systems & Delivery	Grade	7

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	
<i>Decision Making</i>	
<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 	
<i>Scope</i>	
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	BBC Design & Engineering
Reports to (title)	Software Engineering Manager
Location base	White City, London W12

Organisation structure	
<p>OTG Media Analytics is a team of data engineers that designs and develops software services that provide insights into the quality of service our audience is receiving when watching or listening to BBC content across our range of products.</p> <p>This includes a data pipeline that provides near real-time operational views on how phones, tablets, computers and TVs consume BBC audio and video. Alongside this is a service that measures the effectiveness of BIDI, our in-house CDN (Content Delivery Network), compared against third party CDNs.</p> <p>As a software engineer in the team, you will design and implement resilient and performant solutions for these services. You are keen to learn new data engineering skills and technologies. You will also be excited about solving difficult problems such as those that arise from the size and cardinality of very large data sets.</p> <p>We are a motivated group of software engineers with a supportive engineering culture. We embrace open source technologies and are passionate about performance and reliability.</p>	

Additional job specific responsibilities and accountabilities
<p>The successful candidate must have:</p> <ul style="list-style-type: none"> • Excellent communication skills and a collaborative attitude. • Proficient in Java development with a willingness to learn Python. • A strong command of SQL. <p>and at least one of the following:</p> <ul style="list-style-type: none"> • Practical experience of collecting, cleaning, enriching and querying large data sets using tools such as Hive and Spark. • Industry experience with streaming technologies such as Apache Flink or Google Dataflow. • Familiarity with AWS infrastructure including some of: Kinesis, Lambda, Elastic MapReduce, CloudWatch and S3. • Practical experience with statistical techniques and methods such as regression analysis and distributions.

Approval

Manager	Name and job title
HR Business Partner	Name
Date	