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# Example of Principal Software Engineer Job Description

Our innovative and growing company is looking for a principal software engineer. Please review the list of responsibilities and qualifications. While this is our ideal list, we will consider candidates that do not necessarily have all of the qualifications, but have sufficient experience and talent.

## Responsibilities for principal software engineer

* Work closely with other departments on optimizing performance of gaming platforms as required by Scientific Games business units
* Maintain up to date knowledge on new programming methods, best coding practices, and new software technologies in 2D and 3D graphics
* Work closely with 3rd party software providers representing Scientific Games best interest
* Able to lead projects from inception to completion with limited supervision
* Help direct the technology of the gaming platform
* Actively work with scientists in the scientific group to understand their needs
* Define proper solution(s) to meet their scientific needs
* Perform rapid prototyping to refine the requirements with proper documentation
* Work with internal and external software teams, where appropriate to design solutions to meet scientists’ needs
* Implement the solutions to support the scientists’ work

## Qualifications for principal software engineer

* 7+ years of experience building scalable, distributed services
* Experience in building event-driven distributed systems
* Knowledge and understanding of Reactive Programming
* NoSQL and big data technology experience is a plus
* Experience with data caching technologies and in-memory databases such as MemCached and Redis
* Knowledge of rule/event and workflow engines (Drools, Activiti, Graph)