
THE ROLE OF A GAMEPLAY PROGRAMMER

Description

The development cycle of a game contains many aspects and many different stages in order to have a fully complete and fleshed out end product. Particularly in larger development teams, these aspects will be distributed amongst different roles in the programmers. Some may develop the UI, or work on networking for multiplayer games, while others may work entirely on the audio. While all of these add to the content the game presents to the player, the role of gameplay programmer is pivotal as it entails the implementation of the games mechanics and logic – for example creating the movement system for the playable character – which is highly influential in the ‘feel’ of the game. The users experience is a huge factor when developing a game, and the users that play the final release will form their opinions largely from the mechanics implemented by the gameplay programmers.

Gameplay programmers are required to be versatile, as their area of work is usually very broad covering a multitude of possible systems, from artificial intelligence within the game to combat systems or tweaking inputs/factors that effect the game drastically. This role varies so much due to the different goals and strategies implemented when developing different projects, it is important to be efficient and effective when coding as well as communicating well with fellow programmers as the systems will be co-dependent and intertwined, as shown in figure 1. The freedom granted to gameplay programmers also can change depending on factors such as the size of the dev team, or the scope of the project, as such time may be spent working with designers to help come up with a viable system for the game, or implementing a previously designed system in a specific requested way, as efficiently and bug-free as possible.



Figure 1. A Ubisoft promotional image for Rainbow Six: Siege, wherein a gameplay programmer is clearly seen reviewing designs to implement within code.

In an interview with *intogames*, Tiffany Wild said “I bring to life ideas, contribute to make the game a fun, engaging experience.” A quote which encapsulates the importance and passion of the role perfectly, a gameplay programmer plays an essential part in taking a game from a design board, or even just an idea floated by a designer, to a fully playable and fleshed out experience.

Job Listings

The following are quotes from the descriptions of jobs listed as gameplay programmers:

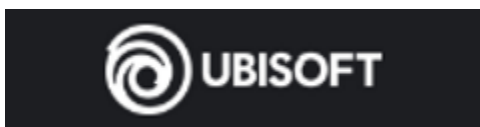
SEGA Europe:



"You'll be able to turn your hand to lots of different areas - game logic, AI, interface... a bit of everything. The kinds of games we make call for someone creative but with a good understanding of how complex systems can create emergent behaviour."

The listing also states that the successful candidate will be responsible for both working with art and design to implement and test their features, and creating elegant, maintainable and robust code.

Ubisoft:



The job listed by Ubisoft is titled as a gameplay programmer and has a multitude of responsibilities listed for the successful applicant. Included in these are:

- *"Implement gameplay systems, and player interactions in close collaboration with designers to ensure player comfort."*
- *"Use practical solutions to implement feature requests, taking into account performance, maintainability and resource usage."*
- *"Ensure coding standards are followed in their own and others code."*
- *"Write clear and well-structured code using the appropriate data structure and algorithms while bearing in mind performance, maintenance and architectural requirements."*

Warner Bros.:



The listing for a gameplay programmer at Warner Bros is looking for someone who is passionate about their craft and is ready for the challenge of AAA game development, this would definitely entail working in a particularly large team. The responsibilities outlined include:

- *"To be responsible for driving and implementing new core gameplay features through all stages of production: design, scheduling, implementation and polish."*
- *"Give constructive and proactive input into the design of new features and the iteration of existing ones."*
- *"Collaborating closely with other team members from all disciplines; communicating technical concepts and requirements and facilitating smooth workflow"*

This description of the responsibilities seems to imply a far more varied role in the projects development, with the successful applicant having input in the design and also working in all stages of the dev process.

References

- Wild, T (28th May 2020) *What does a Gameplay Programmer in games do?*[article]: <https://intogames.org/news/what-does-a-games-gameplay-programmer-do-tiffany-wild>
- Moore, Michael E.; Novak, Jeannie (2010) *Game Industry Career Guide*[book] Delmar: Cengage Learning.
- SEGA Europe (22nd Feb 2021) *Senior Gameplay Programmer*[online ad] available at: https://the-dots.com/jobs/senior-gameplay-programmer-152010?utm_campaign=google_jobs_apply&utm_source=google_jobs_apply&utm_medium=organic
- Ubisoft (Feb 2021) *Gameplay Programmer [Unannounced Project]*[online ad] available at: https://www.cv-library.co.uk/job/213243593/Gameplay-Programmer-Unannounced-Project-386?utm_campaign=google_jobs_apply&utm_source=google_jobs_apply&utm_medium=organic
- Waner Bros.(Feb 2021) *Senior Gameplay Programmer*[online ad] available at: https://the-dots.com/jobs/senior-gameplay-programmer-152008?utm_campaign=google_jobs_apply&utm_source=google_jobs_apply&utm_medium=organic
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