

COMMON MISTAKES GAME DEVELOPERS MAKE

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Abstract This article informs us about the most common mistakes made by the game developers and provides some solutions to avoid them. It highlights the importance of project planning and the need of a good game design document. Additionally, it explains the significance of creating prototypes to understand the core mechanics and gameplay before full development. The article, also, shows the importance of player feedback and playtesting in finding and fixing different gaps. It dives into the critical aspect of crafting a good gameplay loop and highlights how the gameplay loop serves as the reason players return to the game repeatedly. Using examples as *No Man's Sky*, it shows how a lack of depth can lead to a big failure. The work also showcases the successful examples, such as: *Doom* and *Mario*, where well-designed core loops keep players hooked. It emphasizes the importance that the foundation mechanics and interactions are enjoyable as they form the repeated gameplay experience.

Keywords: development pitfalls, project planning, prototype and feedback, gameplay loop, core mechanics, player engagement.

Introduction

Game development is a challenging process that requires a lot of skill to make a good product. You need to be creative, to have a good understanding and experience in technical part, and a good attention to finding bugs. Even if you are a professional developer, you can still fall in some mistakes that can destroy your reputation as a developer. In this article I will tell you about some traps that game developers often face with and how to avoid those traps.

Absence of project planning

This is a fundamental mistake that developers face. Skipping this phase can lead to adding and removing mechanics and visual elements, by skipping this part you disorganize your project, and it's even worse if there are more people in the team, the members will have misunderstandings and even conflicts. To avoid this, developers should invest time in the game concept, target auditory, the goal of the game. This is called a game design document which describes the rules of the game, the mechanics, sounds, dynamics, the visual style, reference games etc.

Not making a prototype

Before beginning to develop the game, there is necessary to make a draft of the game, in other words a prototype. The prototype helps determine the starting point of your game. Surprisingly, 90% of beginner developers don't do this [1]. If you want to work faster and better than others and to avoid wasting tons of effort you need to learn how to make a prototype. A good prototype shows all the mechanics and gameplay of the game, demonstrating the core of the game, from which you will build further by adding visual effects sounds and visual part. It uses only primitive shapes, no sounds, no huge locations. The prototype should include the core gameplay elements and mechanics. The goal of the prototype is to understand if the idea of the game is interesting.

Ignoring player feedback

Player feedback is priceless. Ignoring its feedback will lead to failure of the game. Developers should actively listen to players because they can tell how the mechanic can be improved or what elements are missing in the game. Not digging too far from this, there are also play testers whose role is also important for the final result of the game [2]. Play testers find all the glitches, and game design issues that needs to be fixed, for example: in a 2D side scroller game, there is a gap that you need to jump through to the other side, and play tester discovered that you cannot make that jump. So, the issue is in the worst level design. Searching for solutions, there are a few ways to make this problem in your profit. So, the play tester provides some solutions:

- a) In front of the profundity there can be a potion that allows you to jump further.
- b) There can be placed a bridge that you can cross.
- c) The other side can be moved in the player direction, so he can make that jump.

Making a bad gameplay loop

Gameplay loop is the reason players return to your game over and over. There are thousands of interesting games that people are available in online services for digital distribution of computer games, but they don't have a good gameplay loop, and this is why players never return to those games. For example, in No Man's Sky the concept of the game was extraordinary to explore an infinite procedurally generated world, but at the launch of the game players found that the gameplay loop didn't have depth. There was a lack of interaction with objects, limited progression, simple gameplay mechanics that made the game feel repetitive [3]. I will give you two example games that have a good gameplay loop and tell you why do players like it. In "Doom" (1993) you enter in a room with bad guys, shoot them, grab the loot from them and go to the next location. This particular sequence of actions makes the most gameplay. This is the core loop in doom. It's very important to make sure that the games foundation mechanic and interactions are fun to use because you will be going through this motions and actions hundreds of times.

In single player platformer games like Mario, there is a loop of this structure: Approach, execute and recovery. You approach a part of the map with challenges and enemies, you go through them and take a break. Nintendo always was going to make sure that Mario is fun to simply move around, because that's what you will spend 90% of your time doing [4]. The different challenges that Mario meets are just layers on top of the same loop. So, the main idea here is that if the underlying gameplay isn't fun, you will get bored of different mechanics no matter how creative they are.

Short and snappy core loops are what keep players engaged in the short term. The ideal core loop is one that the player rarely thinks about. Action games teach the player to react quickly, in 2d retro space shooter games like R-Type and Zynaps you blast projectiles and lasers in enemies.

Overlooking Accessibility

In the world of game development, it's easy to forget about making games accessible to everyone. When game creators overlook this, they risk leaving out certain players, which can make the game less enjoyable for them. For example, if a game doesn't offer different difficulty levels, or if it lacks subtitles for players who are hard of hearing, or if the controls are too complicated for people with disabilities, it can be really frustrating for those players. To avoid this, game developers need to think about accessibility right from the start. They can include options to adjust the difficulty level, add subtitles or captions for dialogue and sounds, and make sure the controls are easy to use for everyone [5]. It's also important for them to get feedback from a variety of players and follow guidelines for making games accessible to different needs. By doing these things, game developers can ensure that their games are enjoyable for everyone, regardless of their abilities or disabilities. This not only makes the game more inclusive and welcoming, but it also opens up the game to a wider audience, allowing more people to experience and enjoy the game's world and story.

Conclusion

Game development is a complex field, it needs careful planning, attention to detail and the ability to adapt to player feedback. By avoiding some of the big mistakes such as neglecting project planning, skipping prototype creation, not considering player feedback and not making an engaging gameplay loop developers can increase their chances of creating successful games. Project planning sets the foundation of development process checking if the members of the team like the games concept idea. Prototyping provides the opportunity to test the mechanics early on, saving time. Moreover, the gameplay loop is essential for keeping players invested in the game experience.

Listening to what players say is really important for making games. They help game makers know what's good and what needs fixing. Test players are especially helpful because they find problems and suggest new ideas. Whether it's fixing levels or making the game mechanics better, listening to players helps make the game better. When game makers are open to what players say, they make a game that people really like, and it builds a strong community.

Making a fun game that keeps players interested is super important. It's not just about the rules; it's about making an experience that players love. Like how a great musician makes music that people enjoy, game makers make gameplay that keeps players hooked. By making sure the basic parts of the game work well and are fun, game makers create an experience that players really enjoy, making them want to keep playing. So, by learning from past games and always trying to make the game better, game makers can make something amazing that people will remember for a long time.

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