

Analysis of Spelunky HD relating to Level Design using MDA framework.

Spelunky is a platformer roguelike where the player must traverse through multiple areas and biomes, as they do this, they can find treasure and items that will help them along the way. The goal of the game is to try and reach the end and defeat the final boss, however, this is quite difficult to do due to the innate difficulty of the game.

Spelunky utilises randomly generated levels and death permanence, which means that if you die, you will have to start from the beginning of the game. This mechanic of death permanence coupled with each run having randomly generated levels allows for true engagement between players and the designed system.

Spelunky gameplay and core mechanics

In Spelunky you start each game with a whip, some ropes, and some bombs. The whip is used to fight any potential threats, ropes can be used to climb up or down giving you a safe path and bombs can be used to clear our obstacles or find hidden treasure hidden in the walls. Using these items, and any you find along the way, you must gather as much treasure as possible and make it to the end. This, however, is deceptively hard to do as any wrong move or miscalculation will probably end up in your death.

Each level has a shopkeeper who will sell you consumables or useful items in exchange for the treasure you have found thus far. However, if you try to steal from or attack the shopkeeper, they will attack you without rest until you are dead, and this carries over from level to level with every shopkeeper actively attempting to kill you until you start a new run. Skilled players can beat the shopkeeper and acquire their shotgun which is one of the strongest offensive items in the game which adds a risk and reward element.

The death mechanic also increases the tension of any playthrough because at any moment your run could be over. Even if you were having the perfect run with every item and consumable, if you make a mistake that run could be over, and you will have to restart. However, when you die in Spelunky it does not seem unfair, every death is due to an error you made as the player with each death being a learning experience, so you do not make the same mistakes in the future. This learning experience (or player improvement) and challenge are used effectively to create immense replayability.

Spelunky's biomes, levels, and difficulty

There are multiple biomes within the game, with four being main biomes and a few secret bonus biomes available. It is a difficult game, but the difficulty is standard from the beginning whether it is your first playthrough or your hundredth. As you progress through the multiple biomes it will get slightly more difficult with varying enemies or surroundings. However, once you learn the enemies' patterns or how the environment reacts to you and your actions, you begin to adapt accordingly to the current situation.

Each biome contains a set number of levels and the way these levels are designed are what gives the game its immense replayability. Every level is randomly generated which ensures no playthrough will ever be the same. This is especially true once you have had multiple runs and begin to understand the levels and the systems within each one creating a sense of excitement for every new run.

The levels are designed with exploration in mind as the player must make use of all at their disposal if they want to find and reach the end safely. Not only does each biome have unique enemies and level layouts, each biome and its levels have unique structures or gameplay elements that are also randomly generated once the level begins. This ranges from altars where you can sacrifice an enemy for a reward depending on the sacrifice, to special 'feelings' the player gets when a level begins. These feelings change how the level plays. For example, in the first biome, if it begins by saying "My skin is crawling" it means that this level will have much more spiders than usual. Every breakable pot will be replaced with spider webs and there will be larger and stronger spiders roaming around than usual. Every biome has unique 'feelings' attributed to it which further solidifies the link between the level design, the death mechanic, and replayability.

One last thing each level has is a way to stop players from remaining in one area for too long which accelerates the momentum of the player forward. Should a player decide to explore a level for too long (trying to find all the secrets or acquire all the items and treasure) a ghost will spawn that will chase the player indefinitely until they proceed to the next level. This ghost cannot be harmed in any way, can phase through any terrain, and will kill the player instantly on contact. This mechanic is interesting as even though the levels are so well designed and promote exploration. You are pressured to not excessively explore. Skilled players can bypass the ghost momentarily but will eventually be forced to proceed as the ghost gets closer.

Conclusion

Knowing that each run will not last an extreme amount of time and learning the game systems with each attempt, players are urged to keep on replaying the game even if they manage to complete it. With a wide variety of secrets and a random level generation, each experience is different and provides the same excitement between each playthrough.

By the clever design of the game's mechanics, players can use them effectively to explore these well-designed, and sometimes brutal levels, always coming back for more.

References

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