This paper will be an analysis of the video game *Spelunky* (Yu, 2009) using the MDA framework in respect to communication design. In this game players explore caves that are procedurally generated, making each experience of the game unique (Yu, 2021), and collect as much treasure as they can. The player can make the avatar move left and right, run, jump, whip enemies and knock out enemies by jumping on their head, these actions that the player can perform as per the MDA framework, are mechanics (Hunicke, LeBlanc & Zubek, 2004).

To communicate the processes of these mechanics so that the player understands what is happening at any given time, the game makes use of sound design and UI as a means of communication. Under UI the game uses a board of text in the tutorial room level to tell player what they can do and how they can do it, it makes of use of art assets such as a heart and numbers on that heart to represent how much health is left to form part of the UI, the same applies to the communication of number of bombs and ropes the player can carry.

Sound design is used heavily in some of the game's core mechanics like jumping, when the player avatar jumps and lands a sound is played on both occasions to communicate to the player that they have jumped, the same applies to the whipping mechanic and the knock-out mechanic whenever they are used. The game continues to make use of layered feedback to communicate an important process to the player, player damage. When the player is damaged by an enemy, firstly the UI is affected:

- The number of hearts decreases and that already tells the player they have been harmed.
- A damage sound is played when player is harmed by enemy.
- The avatar flashes twice.

All of this together forms a layered feedback system that communicates a single important thing, that the player has taken damage.

The main mechanics of Spelunky (Yu, 2009), moving and jumping allow the player to traverse the procedurally generated layout thus bringing about the games' dynamic of exploration, this being the behaviour that is triggered when the mechanics of a game are used or applied (Hunicke, et al., 2004). This dynamic leads to the aesthetic experience of discovery, under the MDA framework aesthetic is defined as the intended emotional responses the player experiences when they interact with a game (Hunicke, et al., 2004).

Reference List

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