MDA ANALYSIS: LEVEL DESIGN OF JAZZ JACKRABBIT 2

BY KUSHAL SITHLU, 1882078

Introduction

Jazz Jackrabbit 2 is platformer released in 1998 by Epic Games on Windows(later being added to Mac). The game puts the player as either Jazz, or his red counterpart Spaz, into a variety of differently styled levels, with changing enemies and unique level designs. Using the MDA framework we will analyze the game, with a primary focus on the level design.

Aesthetics

The game adopts a retro 2D art style that changes in theme across each level. This comes along with some 90's retro tunes for each level that do well in keeping up the relatively fast and lively pace of the game. The premise of the game follows the character as he travels across time, resulting in techno stages, stages with dinosaurs, and creepy castles with bats.

The game combines the elements of Fantasy, Challenge, Discovery, and a small amount of Narrative. The Fantasy element comes connected to Narrative with the plot of an evil tortoise enemy having stolen a wedding ring for Jazz's wedding, resulting in time travelling through to new levels in the mission to recover it. The Challenge aspect comes closely connected to the Discovery aspect of the game. With rather large levels, packed with hidden areas, the game challenges players to replay and attempt to 100% levels and reach the absolute max score, as breaking virtually anything gains the player points, as does collecting gems and coins.

The UI is relatively simple, sitting at the edges of the screen, respectively showing life points, level lives, special ammo amount, and total score. It cover's all the necessary statistics while keeping the screen uncluttered, which works well with the game's fast moving design. Small, white post signs across maps trigger popup text that provides the player with info or instructions on things like new mechanics or dynamics, and this provides almost all info communicated to the player.

Dynamics

. The game introduces various mechanics throughout the game, and along with these come various dynamics.

The game begins by placing the player in a tutorial stage, which prompts the player through post signs into completing actions. Initially the game instructs you to collect fruit, which drops you into a pit, requiring a jump to exit. Following this the player is introduced to the character's special jump ability(helicopter ears for Jazz and double jump for Spaz), and then into shooting and block breaking. This is followed by the ground slam, and then the introduction of hidden areas behind walls, followed by some pickup info, checkpoints, and lastly, damaging spikes.

The rest of the dynamics are formed through visual interactions from the player. Enemies are basically everything alive, but incase this isn't clear, touching almost any creature produces a hurt animation and results in damage. Most enemies will also gravitate towards the player. Enemies can be killed with ground slams on their heads, a dynamic later introduced to the player.

Dynamics are introduced throughout the game, some specific to certain levels. One of the most prominent is the use of the poles to boost speed, as players can spin around and release with speed. There are also bounce pads which launch the player around the room, and can be ground slammed for extra boosts and such.

 A clear link is also drawn between dynamics using visuals, such as all breakable blocks appearing silver, with special icon indicators to show the element required to break it.

The basic player mechanics also provide the player with dynamics that can be used across the game, such as combining running and jumping on slopes to reach normally unreachable areas.

Mechanics

Jazz has a few basic mechanics, Jump, shoot, run, look, jump hover, and ground slam. These simple mechanics are evolved throughout the game however. The level's also contain a various array of characters, some unique to levels.

The most changing is the shoot function. This mechanic is altered as players collect various bullets that change the gun from firing bullets, to lases, rockets, TNT and more, as well as fire rate modifiers.

The jump function varies, with Jazz having a jump hover and Spaz having a double jump. Each allows easier access than the other to certain areas around the largely massive maps.

The level design of the game is essentially the placement and curation of mechanics around a level. Jazz does this very well, with levels functioning in a way that feels both linear and open world. The game quickly establishes through the tutorial, that right is right, so when lost, go right. However, there are various paths, and the game purposefully makes them easy to miss, and sometimes impossible to go back to without restarting. With this, mechanics often evolve throughout each individual stage as the player progresses, adding enemies, new weapons, and stages with more interactable objects, often more dangerous ones. This adds a brilliant sense of progression throughout each stage, as well as to the progression across each stage in the game.

 The camera covers a large visible area, and this helps with the game's fast pace, allowing the player to see more object on screen at once and make use of mechanics more effectively, especially as the game pushes players into scenarios that force the use of multiple mechanics. T

Conclusion

Jazz Jackrabbit shows brilliant level designs through each stage as well as the game as a whole. With abilities evolving and changing as the game progresses, alongside evolving level mechanics. The game evolves by drawing on the knowledge the player already has from the base abilities, making it easy to adapt to and understand changes as they are added throughout the game. The game succeeds in being a fun and challenging game with a good sense of progression thanks to brilliant level design.

References

Robin Hunicke, M. L. (2004). *MDA: A Formal Approach to Game Design and Game Research .* Robin Hunicke, Marc LeBlanc, Robert Zubek.