Gravity Well

Zakary Olyarnik and Mark Takakjy

Description

Twin black holes have erupted just outside your space station!

Try to avoid them for as long as possible!

Collect Moon Rocks when gravity is up! Collect Rocket Fuel Canisters when gravity is down!

Shoot the Switches to switch the Blast Doors! Avoid Alien attacks!

Use A/D or arrow keys to move and space to shoot.

Gameplay / Controls

Move back and forth to collect items and avoid obstacles using a/d or left/right arrow keys. An ever-increasing gravity force is being applied to all objects in the scene, with its direction depending on how the blast doors are currently set. Depending on your mass, this force will either not affect you or send you flying with the other debris. Collecting moon rocks and fuel canisters will affect your mass, but whether they raise or lower it depends on the direction of gravity. The level includes platforms which continuously spawn and move with gravity. While riding them takes you closer to the danger of the open black hole, a “higher” vantage point will make it easier to see the collectibles and move into their path as you leave the platform back to safety. There are also special satellite collectibles which grant a large mass bonus, but only spawn near the edges of the screen. Eventually alien enemies will spawn, and they can be shot (in the direction the player is facing) by using the mouse or spacebar. These enemies can shoot the player from wherever they are, but since the player can only shoot directly left or right, you must ride the platforms to the correct height to take them out as well. Buttons next to the blast doors can be shot to switch them, reversing gravity if you are about to die. The objective is to survive as long as possible, while the black holes get stronger and everything around you moves faster. You can track how strong your mass and gravity are relative to each other by using the bars on the sides of the screen.

Win/Loss / Progression

The game is lost when the player is sucked into either black hole. There is no win condition, just trying to stay alive as long as possible. This is achieved by collecting moon rocks and fuel canisters, which will, depending on the direction of gravity, affect the player’s mass. As time goes on, the game’s artificial gravity will increase in strength, causing all of the items moving around the player to move faster and making it harder for the player to maneuver and collect more objects. After a certain time, alien enemies (unaffected by gravity) will appear and try to steal mass from the player. The player must avoid these enemies, choose whether or not to ride the platforms, and only collect the items which increase their mass at the current time. If the game’s gravity becomes stronger than the player’s mass factor, they will be pulled towards the black hole and lose.

Asset List

-GameController script

-PlayerController script

-Gravity script

-EnemyController script

-Collectible script

-Menu script

-BlackHole script

-Button script

-DoorController script

-SatelliteController script

-Background music

-Collision sound effects

-Spaceman (Animated Run, Hover, and Fall)

-Space Station Platform

-Satellite

-Black Hole

-Space Station Walls

-Fuel Canisters

-Moon Rocks

-Aliens

-Buttons

-Score UI

Concept Art

