

Leigh Joiner - On The Flipside

Concept:

The primary mechanic of my game is the reversed controls and mirrored puzzle solving. While the puzzles may seem straightforward and simple, the player has to readjust their thinking to the backwards controls in order to solve them.

Target Audience:

The target audience is children and teens who enjoy puzzle games such as Pico Park, with a challenge that can be comparable to Mario Maker.

Construction Guide:

Main Mechanic:

The main mechanic is the reversed controls.

Level Design:

Levels should have the green Normal world assets at the bottom, where the grass faces up. Other world assets should be upside down and at the top of the screen, with the purple grass facing down. All assets on the Other world plane should be upside down. In between should be a “buffer” platform material using the Brick platform assets.

Camera:

The camera should fit the entire level and remain static. Size of the camera should expand or shrink to accommodate the level size.

Player Character(s):

Controls are reversed:

Left:

D or > or Right on gamepad

Right:

A or < or Left on gamepad

Jump:

W or ^ or SPACE or Bottom button on gamepad

Characters should move in tandem with each other and in opposite directions to each other. For example, if Character A is moving to the right of the screen, Character B should move to the left of the screen.

Objects:

Door:

The door's Open condition will change each level. The level begins with the door shown Closed. If the level's conditions are met, the door will appear Open. Going near/moving in front of the open door will cause the Player to fade into it (to appear to be going through it).

Both characters need to complete the win condition to open their respective doors. If the condition for a level is to obtain a key, the door should only open for whoever has the key (if obtained at different times).

Buttons:

Buttons appear Unpressed at the start of level, unless otherwise altered for the level. Crates can be used to press a button as long as it remains there. Players standing on the button will also press it. Some levels may require an object or Player remain on the button to keep it Pressed, while some only require an object or Player to interact with it once.

Buttons can activate any number of effects as needed, such as: Unlocking doors, revealing platforms, dropping items, etc.

Levers:

Levers may appear Straight, Left, or Right, depending on the requirements of the level. Straight (when the lever points directly up) may be used when it needs to be pulled in one direction or the other to change platform direction, control physics object(s), etc. Left or Right may be used if the lever requires it to be activated only once (at which case it switches positions (Left to Right, Right to Left)).

Keys:

Keys can be collected and used to unlock doors in some levels. To collect a key, the Player must collide with it. It hovers over the Player until they collide with a door. The key then hovers above the door and it Opens.

Crates:

Crates are physics objects that can be pushed by the Player as needed to solve puzzles. Crates can be pushed on top of buttons. When there, the button will remain pressed until it is pushed off.

Water/Lava:

Water and Lava have largely the same mechanics and so will be discussed as one. The Player cannot swim. If the Player jumps or falls into the water/lava and does not get out within a couple seconds (~2 seconds), the Player loses health. For every second they remain in the water/lava, another tick of health is lost. If they jump out and back into the water/lava, the 2 second timer resets. If the Player's health reaches 0, the level resets.

Enemies may appear in the water/lava.

Enemies:

All collisions with enemies cause damage to Player.

Fish:

Fish appear in water or lava, swimming back and forth within a designated area.

Slime/Snail:

Slime and Snail enemies walk within a designated area in levels. Slime enemies only appear in the Normal world. Snail enemies only appear in on Other world territories (purple ground assets).

Fly:

Fly enemies hover in the air within a designated area.

User Interface:

Controls:

Controls are displayed at the top of the screen.

Hearts:

Hearts appear in the top right. Health is shared between both characters.

Scope of Demo:

The demo will include 1-2 levels, guiding the player through a tutorial. They will be able to interact with the environment (keys and doors) and solve puzzles to progress to other levels. Controls will be keyboard and controller compatible.

Resources:

Kenney game assets from <https://opengameart.org/>

