Marble Game – Game Design Document

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Rules

-Playing

1. Reach the end of the level as quick as possible

2. Falling off the map will reset you and your timer

3. Movement applied with the mouse is strictly 2d along the x and z axis

-Creating

1. Each map must have a start (marble spawn) and an end (goal square)

2. Maps cannot be built below -50 on the y-axis

Objects

Marble – This is the player character essentially. The player controls the marble by giving it a linear velocity in various directions.

Map Building Blocks – These consist of various straights, curves, ramps, and more. These are the pieces used to create your own map in the game.

Action Building Blocks – These consist of fans, teleporters, a spawn, and a goal block. These are objects that will make things happen in the game. For example, a fan will push the marble a teleporter will teleport it.

Timer – This is an object completely out of the control of the player. It simply tracks the time it has taken them to complete any given level. Plans to implement a scoring system based on the time taken to complete are planned to be implemented.

Stats/ Numbers

The stats for the action blocks in the game that require them are going to be set by the player when they’re making their map. They’ll be able to inspect a fan and change its respective power and range. As for the marble its speed is based on how far you drag the mouse. Marble jumping is a fixed force and it will jump the same height every time.