Game 4: "Pint-Sized Pixel Puzzle" Final Evaluation

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Group Members

I worked on this project by myself.

Links

Link to the GitHub repository. GitHub Pages playable link.

Rubric

Updated Rubric

I have decided to keep the same rubric as I originally created, because I feel it captured my goals and learning objectives well.

Rubric

Here is my rubric for this project:

Table 1: Rubric

Criteria	Evaluations			
Levels transition and reset properly	3	2	1	0
Puzzles close off previously inaccessible areas and are solvable	3	2	1	0
Each level has distinct movement physics		2	1	0
Different kinds of platforms have different hitboxes		2	1	0
Swimming has a distinct feel & difficulty from regular movement		2	1	0
Start/end screen properly start and reset game			1	0
Each environment has appropriate and different game juice effects			1	0
Each level's puzzles are distinct and build off of each other in difficulty			1	0

Self-Evaluation

Levels transition and reset properly: 3/3

The player can navigate between each of the levels without trouble, and the coin amounts carry over throughout the game but reset to the previous value if you restart a certain level/"die" in a level, or if you finish and restart the entire game. Overall, the game is cohesive and transitions between levels well.

Puzzles close off previously inaccessible areas and are solvable: 2/3

Some of the puzzles definitely close off areas that aren't accessible, especially in levels 1 and 2, but I struggled to implement this for level 3. Also, many of the puzzles can be bypassed by rushing through the level. I could have put more thought into designing blocked off spaces for this game, but for a player who doesn't immediately speed through the level, the puzzles close off areas enough for them to engage with the puzzle.

Each level has distinct movement physics: 2/2

Although they changed from what I initially wanted to implement, each level has its own movement quirk: in level 1, you can drop through platforms; in level 2, you can double jump; and in level 3, you can swim in water. Thus, each level has a distinct movement mechanic that sets it apart from the others.

Different kinds of platforms have different hitboxes: 2/2

I learned how to implement one-way and pass-through platforms for levels 1 and 2 of this game, and I managed to implement it successfully.

Swimming has a distinct feel & difficulty from regular movement: 2/2

The swimming mechanic changes the entire feel of the player's movement by modifying the actual physics values to feel more watery/buoyant, and thus feels distinct from other movement types.

Start/end screen properly start and reset game: 1/1

The start and end screen convey necessary information and properly restart and start the game.

Each environment has appropriate and different game juice effects 0.5/1

I specifically chose different music to match each level, and tried to find different sound effects for the movement in each level, but I wasn't really able to find anything that worked well for levels 2 and 3, so I stuck with many of the same effects as level 1. So, there is an attempt, but I don't think I quite succeeded at adding distinctive "juice" to each level.

Each level's puzzles are distinct and build off of each other in difficulty: 0.5/1

The puzzle implementation did not go as I thought it would, so this is a bit more difficult to evaluate — I think I definitely made distinct puzzles for each level (blocks for level 1, moving platforms for level 2, and mazes for level 3) but I can't say they build off of each other in difficulty. They are each about as difficult as each other, but this really came down to intention in design and I am simply not very good at designing puzzles yet.

Game Features

As described above, each level has its own movement quirk: for level 1, pressing the 'down' cursor key will drop the player through leaf and branch platforms; for level 2, press the 'up' key twice to double jump; and for level 3, just jump in the water and swim around!