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CART 253

5 November 2020

Project 02: Proposal

I want to use this project as a way to recapitulate what we have learned throughout the semester. To do so, I imagined a way to have different minigames in a single simulation. My idea is to have the player go through a maze where each room holds a minigame and must be completed to go to the next room through a portal. When the player interacts with the portal, they are moved towards the direction the portal is pointing at (ex: if the portal is at the top of the room, the user will be moved to the room above their current location). Rooms may have a single portal, making the room a dead-end; or have 2 different portals for the player to choose which way to go. The player must reach the exit of the maze to clear the game. There is a live count for the whole simulation, so the player cannot fail inside all minigames more than five times in total. If all lives are lost, it is game over and the player must restart from the beginning.

I plan to set up 9 rooms (3x3, in the shape of a block). There are 3 different layouts with the entrance and exit in different coordinates. If overwhelmed, I may reduce the number of rooms to 6 or the number of different layouts by 1. In every layout, there is one dead-end and the player will at least go through 4 rooms before reaching the exit. The player can always backtrack, even when finding the exit room (if they do not enter the exit portal), and explore the entire maze to play all the minigames. (I may include a bonus room as an easter egg for fun). There might be a minimap to tracks the user's coordinate and the rooms that have previously cleared.

The game perspective is from a bird's eye view and all visuals self-drawn. I plan to have a simple 2D flat character and map design. The different rooms might have unique features such as the decor, colors, and ambient sound, but not too diverse to ensure the entire labyrinth is still cohesive in ambiance and style.

I believe the main challenge of this simulation will be to program the maze on top of the small mini-games and link everything correctly and have the whole simulation run smoothly.

I am worried about:

A. Having the maze work properly (user traveling the rooms through a portal that leads to the correct destination, randomize the layouts, functioning live count system, live minimap, portals)

B. Have the minigames function properly with the maze (user is able to enter the room, clear the minigame, go to the next room, come back to the cleared room without the game restarting, being able to continue the maze after the mini-game is clear, restarting if the user lost all lives)

C. Fluidity of the game (smoothly object and user movement, smooth interactions)

PLAN

The mini-games will likely be a copy of the simulations built this semester, but obviously with some corrections and tweaks so the overall aesthetic of the game remains cohesive.

Some notes I made to plan out the simulation:

9 rooms: 3 special rooms, 6 regular minigame rooms
- **Special rooms (3):**
    - entrance (instructions, start)
    - dead-end (resting spot)
    - exit (game clear)

- **Minigames (6):**
    - **catch and expand (exercise 2)**
    Interact with the object so it fills up the room

    - **run to safety (exercise 4)**
    Avoid interacting with the object and reach the safety zone

    - **score a goal (exercise 5)**

Bounce the object to the goal

- **catch before the hit (project 1)**

  Collect the objects that are running away and reach the cap before getting hit

- **collect everything**

  Collect all the objects inside the room

- **find the switch**

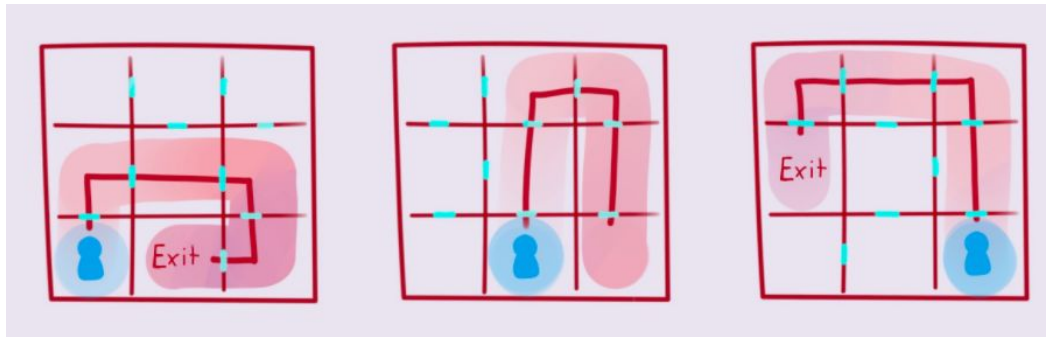 Explore the room to find the object, user will have limited vision until the object is found

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Maze

Right Bottom	Left Right Bottom	Left Bottom
A 1	B 2	C 3
Top Right Bottom	Left Top Right Bottom	Left top Bottom
D 4	E 5	F 6
Top Right	Left Top Right	Left top
G 7	H 8	I 9

Layouts
Three maze layouts

Avatar
Dark Ghost. (Color subject to change)
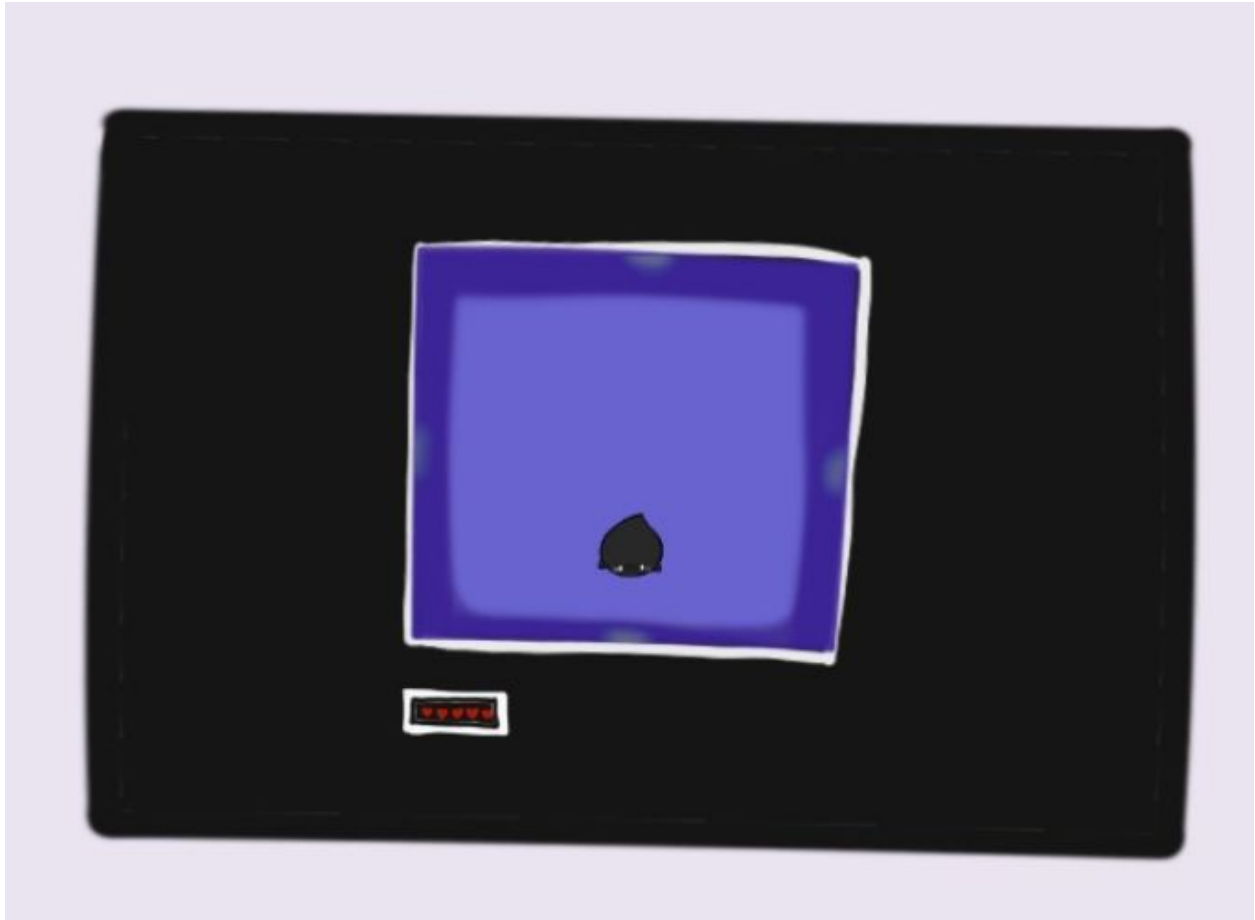

Maze
Each room are of different colors that plays with thones of purple/blue/red.
Elements from the minigames will also be flat 2d colors

Interface

Simple centered square with a total live count at the bottom.
The "portals" to move from room to room are dim the lights on sides of the room.

Title / End screen

Undecided
(might draw a illustration similar to my first project)