Project 2: Progress Report

CART 253 with Professor Pippin Barr
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Since the prototype submission I have made significant progress with Project 2. The original idea was to create a playable maze with interactive elements, such as moving walls, and checkpoints to advance to different stages of the game. The prototype contained a coloured square that could move on a grid by pressing the arrow keys. The walls of the grid were also growing, though not in a controlled fashion.

At the current stage of development there are many functional features that have been successfully integrated. The player now has a score tracker and a health bar. The "game over" state can also be triggered if the health bar empties. Furthermore, there are checkpoints which can be collected. Currently they are represented by red squares.

There are also moving walls which detect the distance to the player and they can inflict damage if the player gets too close to them. However, integrating the wall growth effect appears to be a large undertaking. Therefore, the wall growth may ultimately be represented by an effect that emerges out of the wall, like a toxic gas or protruding spike. Currently this effect is represented by the white squares that expand and contract. I should also note that the walls are appearing above the fog of war. This is something I can probably solve by adjusting the hierarchy of the code.

I have also added a basic illustration to the title screen, however, there is still much work to do in regards to visual design. For example, I need to style the game with more engaging colours, shapes, and textures. Furthermore, these elements should work well together thematically. I also would like to differentiate the checkpoints, most likely by associating images to them. The player sprite also needs to be better detailed.

The sound could also use some variety. I plan to add more chimes and unique sounds when different elements of the game are triggered. Furthermore, I may add some generic music to the title and end states.

In regards to game mechanics there is still a lot of work to do. For example, the level changing needs to be finalized. Currently I have the framework setup for different levels, however, I need to finish figuring out how to reset all the necessary elements of code from one level to the next so that they do not clash or begin overlapping. Furthermore, some time needs to be dedicated to make certain game elements inactive during the end states of the game. For example, sound can still be triggered by key presses at the end screen.

I also would like to finalize a door interaction for the level changes. Currently I can get a green square, which will eventually look like a door, to appear next to the player if they collected enough checkpoints. However, the door continues to appear if the player keeps moving. I have commented this section out for now and will rework it.

Overall though the structure of the game has finally materialized. The next steps will involve tweaking and improving that structure and adding more gameplay features to improve the user experience. Improvements for the audio-visual design will also be pursued.