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EECS 494 – p2\_postmortem

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Space Cube is 2d platformer, puzzle, game where players can run, jump, change gravity, and teleport to an x number of alternate dimensions with the objective to get the golden cube. But remember where you’re going and watch for the spikes, cause one wrong move can lead to your “death”

Initially, my idea was to make a side scrolling platformer with a larger “side scrolling” map and add in fighting/action. On top of this, instead of a cube, I was going to have a player that can teleport through dimensions, switch gravity, and assassinate enemies with the objective reach the goal block, the golden cube. I can not exactly say where this idea came from, as I took a long time to come up with it. I watched through over a dozen games made from previous semesters of EECS 494, and was probably inspired by a lot of it, but, I think I was heavily inspired by this one particular game called “Space-Ninja” made by a student in a previous semester, and I found this game on YouTube under this link <https://www.youtube.com/watch?v=Ry_gk5rLFSs&t=6855s>, at a rough time around 1:10:00.

My intended player impact with this idea was to have them feel a sense of uniqueness, and a bit more freedom to do a lot of things. I also wanted the game to be a bit on the difficult side, as a lot of platformers/puzzle games nowadays feel a bit too easy, which I feel makes the game a bit dull. I believe that a moderately difficult game can give the players a sense of accomplishment when completing it.

I spent around 90% of my 2-week process trying to figure out what kind of game I wanted to make. The spent the first 5-6 days trying to come up with an original idea, but I felt as if any idea I came up with had already been taken by somebody, which wouldn’t make the overall game “novel.” This part of the 2 week process was most likely the hardest for me, as I am not too much of a creative guy. I spent a few days only watching gameplay of old games to get inspiration, and in the end, I came up with “Space Cube.” My original idea described in the last section was scrapped as a result of this, as I had spent too much time thinking about what to make, instead of making the game itself. I didn’t think I would have enough time to make all the animations, sound effects, movements, all different types of enemies, etc. as I only had roughly 2 days to complete it. But, I don’t even think I could have finished all of this in 2 weeks as well. So in the end I came up with a cube that can teleport through dimensions and change gravity, trying to collect the golden cube. And I build on this by making more levels and adding the spike obstacle.

I used the Analyze -> design -> implement -> playtest pattern in many ways. One way I used it was to change my original idea into the resulted platformer-puzzle game. I had initially tried to implement my original game, but with the A->D->I->P pattern, I gradually changed my game into the game you see today. Another way I used the A->D->I->P pattern was to build each of the levels. I started by designing a bit of a level, implement it, playtest it, then analyze what I can add and change, in order to balance it, make it solvable, and have it be interesting.

I performed playtesting with friends, family, classmates outside of EECS494, and from the 6 assigned classmates from EECS494. I got a lot of feedback, but the one feedback I got most was about the camera. Some said that the players should be able to see the entire map, others said we should have the camera centered, so that we can see where we are jumping towards. Other feedbacks I got was an indicator to show that you died and won. I thought these were extremely valid feedbacks, as I didn’t consider the unknown information since I designed the map and knew where everything was. I made it so that the players can change the x and y offsets of the fixed camera angle with wasd, and have r reset the offset to be centered around the player. Other changes I made from feedback was adding spacebar to jump, death and winning particles and sounds, and destroying player gameObject when dead, so that players can tell when you’re dead and when you won the game. I also fixed the hitbox of the spikes, as it was a cube instead of a rectangle. There were also other feedbacks that I did not decide to change. One was to be able to switch gravity and teleport mid-air. I did not want this, as it would make the levels much easier since players can basically fly with constant gravity change. On top of it, players can skip some puzzles with mid-air teleport change. Another feedback I did not decide to put in was a direction of gravity indicator. I thought it might have been a good feature to add but did not add it as I did not have much time, and thought it was a low priority task, since players can just see where the player is standing on, underneath a block or on top of a block, to decipher the state of gravity.

My predictions on my tasks where off most of the time, in the sense that I overestimated the time I needed for each task. Everything I did was much faster than I expected. I believe that this is so since, I estimated based on project 1, when I had to learn how to implement things in unity, whereas in Project 2, most of what I had coded were already learned, and I did not have to relearn.

What went right in this project was probably the structure organization of everything. From project 1, I learned the importance of organization and structure, as it would save a lot of time when coding. So, because of this, I had planned how I would design everything before implementing it. This made building and implementation go by much smoother, and as a result I had spent a short amount of time making the game, roughly a collective of 15-20hrs of work, and spent most of my time working and designing levels.

What went wrong during this project was the fact that I had spent so much time thinking about what kind of game I wanted to make. I believe that I had a bunch of great ideas, but scrapped them, because I thought that it was too generic, takes too much time, or overcomplicated, and in the end, I overcomplicated the creative process. This really put a dent in my time management, and I could have allocated this time into making my current game, much better, and build on the levels, making more and more interesting and harder levels. I made it so that the cube can teleport to an x number of dimensions, depending on the number of rooms in the game, or game objects named “Room.” With this, I could have made a bunch of cool and complicated levels/puzzles where you’d have to remember 4, 5, 6, etc. dimensions you must teleport to, to get the golden cube.

One important measure I will take to ensure a better result for my final project is time management. Instead of constantly thinking what I should make, I should pour my creative ideas onto a piece of paper and just work out what I want, need, and don’t want. Another important measure I will take is to talk to people and get their feedback on my ideas before implementation. This, I believe, will ensure a better result for my final project.