Project 3 Research & Analysis

For this project I decided to try out a perspective based puzzle game—not wholly unlike Monument Valley, but with my own take. The idea is that there is a ball rolling down a level and the player must guide it to the goal by moving objects in the world (which is a smaller 20x20 box) and moving around this world to show different perspectives, thus allowing them to progress in the level. With this in mind I decided to research *Monument Valley*, *Roll the ball*, and as an aside the Hacking portion of *Bioshock.*

The first, and without a doubt the most relevant for my game, is *Monument Valley. Monument Valley* is a puzzle game developed by the indie studio Ustwo and features mazes of optical illusions. The main focus of the game is that the player is trying to navigate through seemingly impossible landscapes, using tricks of an orthographic would in order to reach a goal at the end of the level. It contains a focus on moving objects in the world in order to progress and features guidance based on colors, shapes and conventions developed with the player on what kind of object (or shape) achieves a particular end.

There are many things to learn from the game that could be used to improve my game. One thing that is both interesting and to some degree controversial is its casual appeal. It seems to be more focused on visuals than being a true “puzzle game”. I’m not sure if this is a bad thing or a good thing but some things it lacks is a possibility of failure. This doesn’t give the player the experience that their actions, or lack thereof, have immediate importance. It is simply a relaxing game. I would like take example from the use of orthographic projection and changes of perspective to affect how the puzzle is solved, (and latterly changing the player’s location in the level). One thing that I hope to do better is create a faster paced experience for the player. By having a ball that is moving most of the time, it might keep the levels interesting—but obviously shorter. One other flaw in *Monument Valley* is that it doesn’t force you to do too much “puzzle solving” but instead leaves you to fiddle with the environment until you have reached the goal. I hope to rectify this issue, mostly by having a fail state (namely falling off of the screen) in order to encourage further ahead planning.

The second related game that I am going to analyze is *Roll the Ball*. *Roll the Ball* is a relatively simple puzzle game that features a set of wooden tiles that you drag your finger across in order to create a path that covers all of the tiles. At first the game starts off rather simple—just swipe your hand across all of the tiles, but it then increases in difficulty, becoming more of labyrinth of ball rolling. It continually added mechanics as the player progresses, including Portals, metal tiles that you cannot flip, and arrows in the tiles that force the ball in a given direction.

There are many things to take away from *Roll the Ball*. It is, similarly, a game whose focus is getting a ball from point A to point B. No while the methods of achieving this are quite different, there are many mechanics that could be adapted into my ball rolling game. I plan on implementing, for example arrows that force the ball in a certain direction, to add a bit of excitement, and make decisions in the game a little more interesting for the player. I also like how the levels in roll the ball are shorter. They are definitely geared to a more casual audience, but on top of that, they allow there to be more exciting and interesting puzzles in a smaller package. One idea, though only tangentially related by the idea of there being different kinds of tiles, is having certain colored platforms that signify something or that you can only access after reaching another part of the level. Maybe you need some kind of power up to progress through that part of the level. That is an idea, though not fully formed, I am going to explore as I move forward developing this prototype.

Finally, I briefly address Bioshock. In the game there are small minigames that allow you to “hack” machines, and gain more health and/or weapons, or a cheaper or free price. These mini-hacking-games are relatively similar to my game in that it has liquid flowing through a pipe moving from one end to the next. The player must avoid tubes that house bombs or dead ends, while trying to create a path with tubes to allow the liquid to move from one end of the machine to the next. One thing I like about this gameplay is that there is a time constraint on the liquid, if you are not fast enough your hacking attempt is thwarted and you must try again (though you have also been damaged). This adds a sense of urgency to the task, and it is something I would like to capture in the game. I would like to add time related pressure to the game—I was thinking in the form of walls that close in on the player, or explosive platforms (or both).