For the past 6 weeks of this semester, our group has been working on a digital adaptation of the game Cube Quest, made by Gamewright. In the game, two players take control of an army of dice and take turns flicking their dice to the opponent’s side of the field in an attempt to knock their king die off the board. Our version currently doesn’t have a proper title (we just refer to it as Cube War), and we are not in full production mode yet, but we have narrowed down several elements of the game and chosen a main theme (space explorers versus aliens). At this point in time, I have looked at our current project through six of Jesse Schell’s game lenses.

The first lens I observed our game through is the Lens of Fun. A sense of fun is probably the most desired aspect for almost every game. After playing a physical mock-up version of the original Cube Quest I can definitely say that it is a fair amount of fun. Seeing the different ways dice collide with each other was interesting, and at times, unpredictable to us as players. Another interesting aspect were the surprising trajectories we could launch our dice in. The game that I played ended when my opponent flicked one of his grunt dice (that was at ground level) in a way that launched it all the way to the king at the top of my castle (which was elevated by about 2 inches). Also, while this factor may not be in the final game, the randomness of a die’s capture brought about some characterization. Long story short, lucky rolls caused one of my grunt dice (which have the highest chance of capture) to avoid capture several times. We dubbed it an “invincible hero”. Since our game is still in a pre-production state, I cannot confirm how much of this will transfer over, but I have a good feeling these fun traits will be retained. However, situations where dice movement was pretty basic was not as enjoyable to watch, and miscalculations in the power of our flicks did lead to dice needlessly being lost. The latter is a problem that can actually be fixed by going digital, since players not skilled at controlling their physical strength will have an easier time gauging the power of their flicks. The former could also be solved by this as well, since overestimating the force of our flicks caused a good amount of those occurrences. On the other hand, since minor movement may sometimes be necessary, the problem will slightly remain. However, those cases will be desired by the players, so the lack of energy will likely not be missed.

The next lens I used was the Lens of the Toy, which focuses on the toy like qualities of games. A main question asked by the lens is whether or not the game is fun to play *with*, that is, can one have fun messing around without a goal. While Justin was setting up and explaining the rules of the game, almost all of the other team members were playing around with the dice. Taking this and the joy of seeing the dice fly around and hit each other (or fall off the table) into account, I think I can say that the physical game is a good toy. What about the digital though? We currently have no full digital prototype of this game, but we do have a prototype for testing the flicking mechanic. During my time working on it for the past weeks, there were several moments where I just played around with the dice, amusing myself with its movement. If this is indicative of how dice control will be in the final build, then perhaps the digital version will share in these toy like properties.

After that, I looked at the game using the Lens of Functional Space. Cube Quest is played on a long, medieval styled playing board. The board represents the boundaries of the game space; any dice that end up outside of it are out of play and no longer exist within the game. The board is also divided through the use of light and shadow, representing each player’s side of the field. Since this game relies heavily on physics, the space of the game is completely continuous. Likewise, our Cube War will have a similar structure. Instead of a flat board, though, our game will instead have a moon theme terrain, with dips and rises. Also, cubes will literally be removed from existence when falling off. The way we will be dividing the playing field has not been determined yet, but early prototypes will probably use a straight line.

In conjunction with the former, I also used the Lens of the State Machine. It is clear to see that the dice are the main objects of this game. Each die in the original has three attributes. The first being the die’s type. In Cube Quest, each die has a type that determines its physical and special properties. The grunts are considered weakest and have no special traits, the strikers have only one capture side, the skulks can “go into hiding” (leave the board) and be brought back later anywhere on the opponent’s side, etc. This attribute does not change. The second attribute are the die’s capture sides. Each type has a different number of sides that, when landed on in the opponent’s territory, cause them to be captured. Which brings us to the third attribute, the capture state. All dice in this game start “not captured”, but when they land on a capture side, they become “captured”. Once in this state, they must be rolled. If they don’t land on a capture side again, they are returned to the player “not captured”, but if they do, they are “out of play” and removed from the game. Our version of the game will be adding a “mass” attribute. Each type of die will have a certain mass that will make it heavier and harder to knock off the terrain. Also, since dice will have to be selected before being launched, they will have a launch state. This can be either “idle”, “selected”, or “launching”.

The fifth lens I looked through was that of Chance. With the fate of a die’s capture being in the hands of what side is facing up, a fair bit of this game could be considered chance. It is not completely chance though. Knocking off other dice is mostly a matter of skill, requiring the player to be knowledgeable of how they need to launch a cube. Plus, the whether or not a capture side lands face up depends on how it gets pushed around, so by that merit it is not completely random. However, what happens to a die after it is captured is complete chance. As mentioned earlier, the occurrence of die being captured felt pretty even for most of our playtest; the exception being the invincible hero grunt. Despite this, it is still possible for a player to get bad luck and lose more dice that the other. More playtesting will be needed to properly observe the effects of chance on the experience.

Last but certainly not least is the Lens of Risk Mitigation. What problems could keep our game from being good? If physics within of our game is not properly handled, we could end up with either a boring game or enjoyable mess. While having a chaotic, broken game where dice fly willy-nilly is fun to watch, it is hard to play. We need a balance between realistic and exaggerated physics to create the type of dice collisions we want. This is part of the reason why we chose our theme. With a moon based terrain, it we could imitate real dice physics, but keep unreal movement under the guise of the moon’s lower gravity. The more important issue in my mind, however, is whether or the digital adaptation will be as good as the original, physical one. Flicking around cubes in virtual space is pretty fun, but I’m not sure how many prefer it over flicking around dice in real life. While it is true that in real life you have to go through the trouble of picking the dice back up, the act of crawling around to find it can bring humor. The main way we could combat this problem is probably by making the collisions more enjoyable. Even then, I don’t think it would completely solve the problem. At the end of the day, this issue is one of preference.

After observing at our game in this fashion, I can say that we still have some problems to resolve, but we are making good progress. Hopefully by the next essay, we will have a more complete game to study with lenses.