Exploiting Simplicity

by

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"If you want your game to be successful, everyone should be able to play it" - me, I said that. It seems simple, of course a game designer would want everyone to enjoy their game. But often times, the barrier that keeps a game from being exceedingly accessible is the gameplay itself.

Compare computer games to mobile games. Many computer games require you to use both the keyboard and mouse in order to play. These are two controllers that a player uses with both hands simultaneously. Using these controls require some coordination; it's not terribly hard by any means, but it may take some getting used to. Mobile game controllers, on the other hand, only consist of the mobile device itself. As a result, all gameplay mechanics revolve around touching the screen. Thus, mobile games are generally simpler and more intuitive. People can often understand a mobile game within seconds of picking it up.

We're in an age where making a successful mobile game is an artform itself. In 2016, 500 mobile games were released in the app store daily (Jarvis). The market is oversaturated with content and only a select few can break through the barrier and reach success. The iPhone app store reported 50 billion downloads through a selection of 900,000 apps. The top 20 apps on the store, however, were responsible for 80% of those downloads (Waller, Hockin and Smith 2). The

marketing in these games are broken down to a science. What do these games that reign supreme do that make them so successful?

Often the craft of making an interesting game is sacrificed in order to broaden the scope of potential players. The craft is now focused on what methods can be used to keep the players hooked. Create a game that is so simple a preschooler can play it, then sprinkle on some tricks that entice them.

Candy Crush Saga (2012) is a prime example of a mobile game that uses simplicity to its advantage. It became a monumental phenomenon, starting a series that has a combined download total of 2.7 billion. King, the developers behind the games, have said that a total of over 1.1 trillion rounds of *Candy Crush Saga* have been played (Kamen). It creates a foundation for how a mobile game should be designed in order to increase player addiction and profit. The game starts out easy, the game practically plays itself. This not only gives the player an understanding of the game, but it also makes them feel like they're good at it. Once a player has gotten through these beginning levels, the difficulty slowly starts to climb. This part of the game can still be easy, but a little bit of challenge is added each level. This is the hook. Through each level, the player is getting tested more and more. They just experienced how it feels to be good at the game. But now, they have to put in effort in order to obtain that feeling. It's a great feeling of satisfaction and can go on for seemingly infinite amount of time. Sometimes, players are unable to pass the difficulty spike, but they've become so hooked that they'll spend money to get to the next level. Chad Sapieha, video game reporter for the Financial Post, calls this method "Coercive Monetization." (Sapieha)

A big factor in *Candy Crush*, and many other mobile games, is how much control they have over the player. When a player first starts *Candy Crush*, they have five lives. If they fail a level, they lose a life. When all lives are gone, the game doesn't let you play again for a certain amount of time. The player can now wait the time, or they can pay for more lives. The game wins in both scenarios. How paying for more lives benefits the game is self-explanatory, but deciding to wait has its benefits as well. Hedonic Adaptation is a tendency that describes how a source of happiness becomes more pleasurable once someone has been deprived of that source for a period of time. Researchers demonstrated this effect in a study where they gave two groups candy bars. One group can eat the candy whenever they liked, the other group had to abstain from eating the chocolate for a week. The result was that, for the group that abstained, the chocolate was more pleasurable (Quoidbach and Dunn). *Candy Crush* does something similar when they abstain their players from continuing after they lost their lives. Once the timer is done and the players can get back to their game, the gameplay is more pleasurable; effectively hooking the player.

If a novice lost to a pro in a game of Ping-Pong, they weren't skilled enough. If someone lost at a game of slots, they weren't lucky enough. Where does a game like *Candy Crush* fit in the spectrum of luck and skill? The game finds the right balance, it starts with the levels being mostly about skill, but luck increasingly becomes more of a factor as a player progresses. Professional game economist, Ramin Shokrizade, says this transition is subtle enough where the player won't recognize the shift. With luck being an added factor, spending money to complete levels suddenly seems more enticing (Shokrizade).

Mobile games like to create a false sense of urgency. It's interesting how much a timer can influence our decision making. Look at *Panda Pop*, a mobile game with over 400,000 ratings on the IOS store alone, where a player is prompted to pop a certain amount of bubbles each level. If the player fails, they are prompted with the choice to buy more. Right next to that choice is a timer that counts down from ten. This makes the situation of buying more bubbles in order to continue playing seem more important. A player will feel more obligated to make the purchase if they think their only window to do so is within those ten seconds. In reality, if the timer reaches zero, nothing happens. The player is still allowed to make the choice. Compare this to timed levels in traditional game design. If a level has no timer, a player feels no rush and takes their time to explore. Simply adding a timer puts the player on a slight edge, possibly causing them to make rash decisions. Players may spend real money on a game all because of a simple game design choice.

As humans, we feel personal attachment to things that we spent time on. It's hard to get rid of something that used up a lot of our time. We don't want to deem them as, a waste of time. Consider the cognitive bias, IKEA Effect; the tendency to place a higher value on things that people have built themselves (Norton 1). While these apps aren't built by users like a piece of furniture, all the time used to beat levels or earn points to build a profile would spark a similar feeling. Mobile games inherently abuse this trait. Every level completed, every new establishment created, or every new high score, is used time. It makes deleting the apps that much harder. If the app is deleted than all progress is lost. One might think, "I'll just leave the app on my phone as a memory but never play it again". This is where the push notifications come into play. If a player tries to take a break, they are bombarded with notifications.

Notifications that act like they are speaking to the player directly. “Hey! It’s been a while! Why don’t you continue playing?”. They are messages that tease the player, convincing them to play, attacking their volition.

Volition refers to the power of using one’s will. When one thinks of doing an action, then commits to doing that action, that is their volition. American Psychologist B.F. Skinner believed that the concept of volition could be controlled. As in, it appears that a subject is making a choice on their own accord, but they are really being conditioned into making this choice. Conditioned through rewards and consequences (McLeod). In 1948, Skinner implemented his theory through an experiment that would be known as the Operant Conditioning Chamber, or Skinner Box. The experiment was simple, Skinner created a box with a button inside. Everytime the button was pressed, food would be released into the box. An animal, such as a rat or pigeon, were then put inside the box. The amount of times this button was pressed by the animal was recorded (McLeod).

What Skinner wanted to prove was that the decisions of the animals in the box can be controlled through Operant Conditioning. By controlling how often the animal presses the button, it proves that Skinner could condition the animal into making a specific choice. If the animal presses the button, food will come out, so of course they will want to press it again. But there was an interesting factor that went into this experiment. If the reward for pressing the button was random, or on a schedule, than the animal was more likely to repeat the action. If the animal was able to press the button whenever they want, than they actually pressed it less. If one knows that food will come out whenever the button is pressed, there’s nothing to worry about.

Adding in that slight control not only creates worry, but it also evokes curiosity, “Will it work when I press it this time?”

There’s an issue with this experiment however. The reward for pressing the button is food, a biological necessity. Subjects are more inclined to press a button that gives them food when they’re hungry, it could possibly mean life or death. Subjects are also less likely to press the button once they’ve gotten what they need. Once the animal is full, they’ve reached their limit, there’s no need to press the button until they’re hungry again. Skinner’s experiment proved that operational conditioning works on humans, maybe even more so than rats or pigeons (Cherry). Humans have needs that aren’t just biological. We want money, power, fame. These needs have no limit, unlike food, they don’t have a biological capacity.

Skinner’s theory of Operant Conditioning has a significant part in the gaming world.The skinner box game that many mobile games can be compared to is the slot machine. Slot machines are a fitting comparison to the Skinner Box, and could be defined as a Skinner Box Game. In one game, slot machines carry three operants. Neutral, winning back the same amount of money one put in. Positive, winning more money than one put in. And negative, winning less or no money. This is much like the skinner box, except all three operants are achievable through one action. The action is simplified to only pulling the lever. There’s a dynamic formed between the effort put into the action, and the reward. Doing something as small as pulling a lever in order to possibly obtain hundreds of dollars as a reward is enticing. The slot machines gave us a little taste. Maybe a player won only a little bit of money, now they know what that reward feels like. Combine this with their knowledge that winning loads of money is possible, and the conditioning is created. *Subway Surfers* (2012), a mobile game with over 30 million downloads

on the android store, can be broken down similarly to the slot machine. The chance of beating a high score or completing a challenge is the enticing reward and swiping the screen is the simple action to obtain it.

Subway Surfers is only one mobile game that uses skinner box tactics. To put it into perspective, *Subway Surfers* has gameplay inspired by *Temple Run* (2011), a mobile game that uses similar tactics. If we look at the massive amount of mobile games that copied *Subway Surfers* due to its popularity, than the amount of skinner box games in the app store is staggering. What makes these games different from slot machines, however, is how accessible they are. Slot machines are enticing, but not everyone has access to a casino. Although in this day and age, almost everyone has a mobile device. The skinner box game becomes powerful when its accessible on almost every phone for free. The technique is so successful that it is not seen only in games, but in applications as well.

Applications such as Facebook or Snapchat use similar methods in order to condition the user to keep checking the app. Tristan Harris, a designer who worked with Google, says that every mobile phone is like a, “slot machine in your pocket”. Much like how slot machines entice players with a positive reward, apps like Facebook, entice users with a positive notification (Harris). For example, many apps let users know that they have a notification, but it doesn’t specify what kind. A user wants to see something positive, somebody liked their post, or maybe their crush wrote on their wall. In order to see what it is, the user has to open the app. Looking at the notifications tab becomes a game itself. The user is taking the chance that maybe they’ll see something they want, and if they do, they won. But if they lost, they already opened the app, so why not just continue browsing?

The process of using these game-like, skinner box tactics within social media apps is explained by the gamification of social media. Gamification refers to the act of incorporating game design elements in not game products, such as social media sites (Deterding 1). Competing with friends on Instagram for who has the most likes is equivalent to competing for high scores in a video game. Twitter's character limit is like the game's rule that the player must follow in order to submit a tweet. Tinder turns dating into a game where the goal is to get as many matches as possible. This gamification can be compared to skinner box tactics through the social media app Snapchat. Snapchat has a feature called streaks, if a user sends a snap to a friend, and the friend sends on back, that's one streak. If they do the same thing the next day, that's a second streak, and so on. Eventually, a streak would get so high that users will now feel obligated to send a snap to their friend just to keep the streak going, even if there is nothing to talk about. This is Operant Conditioning in action because the reward of the streak is granted, but only if the users follow the rules set in order to obtain them. Users now become conditioned to open Snapchat everyday in order to get their streaks as high as possible.

While there are games that definitely take advantage of skinner box tactics, games, for the most part, inherently are operational conditioners. This is another way of saying that games are built around having an objective. A reward is given if one succeeds and punishment is given if one fails. Within these objectives are contingencies, or rules to follow that give rewards. The biggest two rewards in game design are ratios and intervals. A ratio is a reward given after a certain amount of completed actions. An interval is a reward that is given within a certain amount of time, whether it be random or organized (Hopson 2). These concepts can get deep, but a simple example of the two can be found in *Pac-Man* (1980). The player is rewarded with an

extra life once they obtain 10,000 points. And if they survive for a certain amount of time, they are presented with the opportunity to collect the bonus fruit. Much like the rat in the box, the players are presented with rewards only if they follow a regimen. This reward is what conditions the player to make the decision to follow the regimen.

The difference between operant conditioning in games like *Pac-man* versus mobile games like *Candy Crush*, is intent. *Pac-Man* is a game designed through passion. Toru Iwatani, the designer of the game, is a man who got hired at Namco with no experience in computers, arts, or music. He was hired based solely on his intense passion for game design (Pittman). While the ratios and intervals that persuade the player are there, the reasons behind them are more game design centric. They exist simply to reward the player for being skillful at the game.

One might say that *Pac-man* and *Candy Crush* are actually quite similar in philosophy. The game requires quarters to play, it hooks the player through its conditioning, which prompts the player to spend more quarters if they lose. Compare this to *Candy Crush*, or other free to play games. The games hook the player with rewards, and convince them to spend real money in order to continue playing. The intent behind the creation of these games is what separates them. *Candy Crush* is a business, it was created with a formula in mind that takes advantage of its users in order to spend money, video game is just the medium it is presented in. *Pac-Man* is the inverse. It's a game designed with the intent to make it fun and exciting, the money made from it is a byproduct. Of course, *Pac-Man* comes from the company Namco, so obviously they were looking to make money from their game. But nobody on the design team expected the game to be popular. It was a product made by a new hire to be released to a relatively new market. The Candy Crush developers saw potential in an exploitable market and could release their game for

free with little risk. This is due to the points in time in which these games were released. *Candy Crush* was released at a time where the video game industry was seen as big business, the idea of making millions off of one game is possible because it was done once before. One the other hand, *Pac-Man* was released at a time where there was no big business to exploit.

When a games intent is to trap the player with this Skinner Box mentality, there is a certain point where the player will keep playing the game, even when they're not enjoying it. Most experienced game players know the feeling. The gameplay just becomes repetitive and tedious, basically a chore, but you keep going because the reward just seems worth it. One may wonder if at that point, is it even a game anymore. A computer game can be defined as a form of play. Play has been apart of human culture since the beginning. Johan Huizinga dives into his topic through his book, *Homo Ludens: A Study of the Play Element in Culture* (1944). Johan defines characteristics of play. When comparing these characteristics to the gameplay of a Skinner Box game, one can make the argument this tedious grinding isn't play at all.

> "First and foremost, then, all play is a voluntary activity. Play to order is no longer play: it could at best be but a forcible imitation of it. By this quality alone, play marks itself off from the course of the natural process" (Huizinga 7).

Johan explains here that for something to be play, the players must have the freedom to choose to play. With operant conditioning and how developers abuse it in order to hook players onto their product explained, one's free will comes into question. Skinner wanted to prove that one's volition can be controlled, and he proved it through his Skinner Box experiment. He manipulated the animals choices through the persuasion of the result. If game developers use these tactics, one has to wonder if it's the player's choice to play the game, or if it's the developers choice.

The gameplay becomes a chore - if the player had the opportunity to skip the gameplay and go directly to the result, would they take it?

Johan also states that play can be repeated at any time, "It is transmitted, it becomes tradition. It can be repeated at any time…" (Huizinga 10). Mobile games tend to follow a tradition where gameplay is taken away from the player. If a player lost all their lives in *Candy Crush* or has to wait for upgrades to finish in *Mobile Strike*, there is no game to play anymore. The player must wait until a certain time in order to keep playing, or they can pay real money to bypass the wait. The problem here is that the game is inconsistent with itself. One might come back to *Pac-Man*. If you lose at the arcade machine, you have to put in another quarter to play again. But the difference here is that one had to pay to play *Pac-Man* in the first place. The game is consistent, the player knows they can play the game at any time if they pay because they're just following the rules set in the beginning. A game like *Candy Crush* is free to play, so right off the bat, it sets the rule that it should be able to be played at any time. But it breaks its own rules by making the player have the pay further down the line. So if one looks at mobile games through the "free to play" lens, the game cannot be repeated at any time. This breaks Johan's rule and creates an argument that free-to-play games like *Candy Crush* may no longer be play.

The definition of play varies depending on the person. Johan even states in *Homo Ludens* that it cannot be strictly defined (Jeffries). While arguments can be made that freemium mobile aren't games at all. That they're just a business that uses a video game as a model. The one that decides if they're a game is the individual player. If a player has a good time playing *Candy Crush* or *Clash of Clans*, then they probably consider them games. Inversely, there are players of games that regret every second of it, yet they still play. These players would fall under the

category of someone who has been conditioned into the regimen. To them, the experience is less of a game, and more of a chore. The definition of a game is made by the individual player.

I recently explored these issues through the development of my own game, Rock-Paper-Scissors: The Animation: The Game. My research involved looking at simple games that use specific techniques, outside gameplay, to hook the player. I started to think about how I could put my own spin on a simple game. How can I take a simple concept, and exaggerate it in order to make it seem more important than it really is? At the same time, I wanted to maintain my own style and voice, individualizing myself as a creator.

My first obstacle was finding out which gameplay style I should use as a base for my project. Many games today, especially mobile games, are remakes (or in some cases; blatant copies) of popular games of the past. *Candy Crush*, for example, is a remix of the popular matching game, *Bejeweled,* which itself isn't original, sharing an identical gameplay style with the 1994 computer puzzle game, *Shariki*(which was likely influenced by an earlier game). There are many mobile games that involve shooting colored bubbles in order to make matches (carbon copies of the arcade game *Puzzle Bobble)* and many 2D fighter games that borrowed *Street Fighter*.

In other words, most video games aren't original, especially mobile game. Mobile games produced a copycat market; meaning that there are games on the market that exist only to copy successful games. However, these successful games copied something as well. This creates a seemingly endless chain of copy games, each one less inspired and more blatant than the last. All in order to trick consumers into downloading their game so they can salvage whatever ad revenue they can. This was one of the concepts that I wanted to poke fun at when I was

conceptualizing my project. I wanted to take a game and blatantly copy it in order to shed light on the unoriginal world of video games. In order to do this, I had to find a game that was so easy to understand and universally known, that it clearly illustrates the satire to the player: Rock-Paper-Scissors (RPS).

I picked RPS as my game because I felt that it worked for my project on multiple levels. For one thing, the idea of creating a over-the-top rendition of RPS is funny to me. A sense of humor is crucial to my motivation as an artist. Another reason is that RPS is exceedingly simple and well known. Mobile games exploit the accessible in order to grab the attention of the player: RPS was the most accessible game I could think of. RPS also worked because some video games use RPS as a framework. An example of this is modern fighting games that include attacking, blocking, and grabbing. Grab beats block, block beats attack, and attack beats grab. Lastly, RPS seemed simple to program. Considering all the work from different mediums that goes into developing a game, I didn't want the programming to pose a substantial challenge.

With the gameplay of RPS dictating the structure for my game, the next stage of development was figuring out what spin am I going to put on it. The reaction I'm aiming for in my audience is a tricky one to acquire. I want my players to think the game is silly for being a rendition of RPS (as one of my goals is to expose unoriginal gameplay), but at the same time, I don't want my players to think, "this is stupid, it's just RPS". I came to the conclusion that everything in my game will rely on the presentation. The gameplay of RPS may not be inherently riveting, but I can use style and animation to keep the player entertained. The challenge then became how can I transform RPS into a spectacle that grabs the audience's attention, using visuals and sound.

Since RPS is a two player game, I needed to design two characters and the medium I decided to design them in was pixel art. I wanted my game to have a presentation similar to fighting games, so illustrating my characters using pixels, akin to *Street Fighter*, was an effective way to make that connection. Originally, my characters were going to be hands, playing with the idea of the hand symbols that are associated with RPS, but that didn't feel good enough. In fighting games, each character has their own unique design, which help makes the world within the game feel more alive since it feels like each character has their own story. This was a similar feeling I wanted to capture with my game, additionally, designing my characters with cliché martial arts wear would add that extra level of ridiculousness.

I also wanted to use animation tropes found in fighting games. One of those tropes is an important part of all fighting game characters: The idle animation. It's a staple in all fighting games for a good reason; having the characters move when nobody's interacting them goes a long way into making the game feel alive.

Along with the idle animation came the animation that plays once the players make their decision. Keeping things over-the-top, I decided to create an animation commonly associated with anime. Once the player makes their decision, the character will go into a charging stance. In this stance they are surrounded by a glowing aura that flows similarly to fire. The inspiration for this animation was from the anime series, *Dragon Ball Z*. In the series, the strong characters are surrounded by this aura during their fights, transforming the aura into a symbol of power. I'm taking this symbol in order to create the same effect for my game, turning the usually simple play of RPS into an climactic battle between two powers. Once both players make their decision, the characters jump in the air via an animation that similar to a blur effect (used to convey immense

speed) also commonly found in anime. The characters jump offscreen signaling an intense battle of RPS.

The background, or the “stage” my characters fight on is another major component of my game. I decided to have the background be a grassy field with visible daytime skies. My decision behind this setting was that I wanted something that was neutral for both characters, in other words I didn’t want the stage to feel like either characters, “home turf”. I also feel like every fighting game has a stage that takes place in some sort of grassy area. My process for making this stage was to take a photo of the location, and down the resolution so that the final product is pixelated. The stage on its own was too boring however, it needed some motion. I decided to create two other versions of the stage, one during sunset and the other during nighttime. I animated each version to fade into one another over time, creating the effect that time is going by, alongside these transitions are clouds slowly moving from left to right. The animation ends the same way it begins, so the result is a seamless loop. As soon as the game starts running, the animated stage plays in the background and it will never end, much like the music, this is to create an element of consistency through the scenes. The changes from day to night also gives greater importance to the gameplay, since I wanted it to feel as if it was a RPS battle that was going on for multiple days.

Within RPS, there are a total of six possible victories: player one can win three different ways depending on which choice they made, same with player two. These victories are the most important part of my game, so it was crucial for me to present them in a satisfying fashion that lives up to the spectacle that I’m trying to create. I decided to make six different animations for the six different victories. I could have easily made three animations for player one and reuse

them for player two, but that would have made my game's inherent problem more prevalent. The players will be seeing the animations multiple times and eventually, they're going to get old. Having six animations rather than three doesn't fix this problem completely, but it does alleviate it. It also adds to the characters I've created, each character having their own set of animations makes them feel unique and as a result, makes the player feel unique as well.

It is during these animations where the presentation of my game changes. These scenes abandon the pixel art style and change into a traditional 2D animated style. After the two characters jump in the air, the scene changes and the characters are now represented by silhouettes. With their hair clothes constantly moving and their bodies slightly hovering around the screen, I wanted to create the sensation that they are flying in the air. Along with these silhouettes, I decided to use another common anime trope that is known as, "Anime Speedlines". This trope is created by a constant movement of colored lines speeding across the screen. It's an effective tactic but also practical, animators don't need to draw detailed backgrounds, but instead interpret them as moving lines. My intention for using this trope is not only for its practical use, but to also parody it through its juxtaposition with the normal game of RPS. I wanted to know how far can these tropes go, and will it be effective in my goal to transform RPS into a spectacle. These tropes also act as my hook for getting players to keep playing my game, I want the animations to ignite that rush of dopamine that gets players to want to see them again, much like mobile games.

I wanted the animations themselves to be cinematic, I feel as if the silhouettes on top of the colorful speedlines succeeded in creating that tone. The animations all have a similar structure, the player that lost the interactions whips out their choice in a quick fashion, then they

are destroyed by the opposing choice of the winner. I want the dichotomy between the two choices to be comedic, for example, the losing player takes out their tiny pair of scissors as they are then crushed by a giant rock. Each animation works similarly and ends in a deadly fashion to keep up with the absurdity. The animations for ties work a little differently, nobody gets defeated, both characters just show their hand and simply go back to the ground.

Once these animations are over, the next stage of the game is the result screen. Both characters return to the ground, the winner is standing and the loser crashes down, bouncing on impact and ending up knocked out on the ground. Flaming text appears on screen stating the victor (PLAYER ONE/TWO WINS). I wanted to create an image that mimicked fighting games, the losing player is knocked out on the floor paired with the victor text is something very common and satisfying for the winner. Once this sequence is over, a flash envelopes the screen to create a smooth transition (another common trope found in anime) to the beginning, and the game resets. The whole sequence starting from the beginning to the ending doesn't last longer than a minute, each round in RPS is fast paced and it was crucial for me to translate that into my game since I didn't want it to get boring.

One of the most important aspects of my game was that I wanted it to be satisfying, winning alone isn't enough to keep people playing my game. Much like mobile games that keep their players attentive through satisfying effects that make the players feel like they've accomplished something, I tried to do something similar in order to make RPS interesting. Along with the animations, another important part was the sound effects. I think a satisfying sound effect goes a long way to keep the players entertained. When one of my characters gets sliced in half by a giant pair of scissors, the coupled sound effect should sound deadly and gruesome. The

feeling created should not only be satisfying, but should also evoke a feeling of control within the player. I want them to feel like they were in control of that satisfying feeling and that there is more for them if they continue playing. The sound effects are what ties this all together, from the power up sound that plays when the player first pushes a button, to the crashing sound that plays when the loser hits the ground, all of this is initiated by the player and the sound effects strengthen it.

Along with the sound effects, there is the background music. Composed by my colleague Dennis S. Mowers, the music of my game is a mix of orchestral and rock and its main goal is to make RPS feel epic. I wanted the music to not only bring to mind the feeling of "the final battle" but to also make the flow of the game more consistent. The music starts when the battle starts and plays through all of the scenes. When the game restarts, the song doesn't, it only loops when it comes to an end. This makes the music act as the glue that connects all the scenes, it is the motif that makes each sequence of the game feel like parts of the same whole.

The last thing my game needed was a title screen, an important element to all video games, but seemingly more important to the arcade game, which was the presentation style I wanted to go for when I exhibited my game. I wanted my title screen to accomplish a few things. One of which was to add an element of curiosity for potential players that would walk by the station where my game is exhibited. I think a title screen does this successfully since it gives players a preview of what to expect, rather than just throwing them into the action. The control given by a title screen is also important. The prompt "Press any button to continue" lets the players be in control of their own action. Their battle begins on their own command. I was also able to make a logo along with the title screen, this allows me to use another trope. The use of

layer styles for video game (even movie) logos has been around for a while and still exists to this day. The use of this trope makes my game feel grande, much like a blockbuster film. My title screen also has ambient outdoor noise as opposed to the background music. Once a player presses a button to go to the battle screen, the noise suddenly stops and cuts to the battle music. This sudden shift is a comedic way to emphasize that things within the game are getting serious. Lastly, the characters appear on the title screen in their resting animations, this creates a relationship with the outside world, the characters are resting when nobody is interacting with them and get up when people do. These resting positions are on the corresponding side of their battle positions, this positioning acts as a character select, since players will know which controller to pick up depending on which character they want to play as. The controller on the left controls the character on the left, the title screen is what establishes this.

After adding a couple more animations to make the game feel complete, the last question to answer is what kind of controllers will I be using. In the beginning of development, I was unsure if I was going to create my own controllers, or use pre-existing ones. The only bit in my game that references controllers are the prompts that tell the player which button equates to which choice. I designed these prompts so that they match the colors of the buttons on an Xbox controller. This way, if I have the time, I can design my own controllers that match those colors, if not, I can just use standard Xbox controllers. Since it is a computer game, I also have the option to use the keyboard, but that didn't feel intuitive enough. I ended up using the Xbox controllers since calibrating the controls managed to be simple and I didn't want the bugs that come with designing my own controllers from scratch to pose a challenge. I think the controllers

work well because they looked good with the set up and players could hide their controllers if they think their opponent is cheating.

With all the components in place, the last part was the set up in the exhibition. The set up looked nice, but it felt lacking, if I want to entice players and make RPS look like a spectacle, I needed more than just a monitor. I decided to use a projector as a second display, so now not only are two people playing on a monitor, but their gameplay is being largely projected on the wall near them. This created the atmosphere of a spectator sport much like a fighting game tournament. Now not only are two individuals playing an intense match of RPS, but others could watch them on the projector, the stakes are higher. I didn't want to use headphones for audio, I wanted speakers to play the sound and music loudly for everyone to hear, whatever draws people closer to my piece.

The exhibition itself went well. My biggest fear was since the game is two players, some exhibitors weren't going to have someone to play with, but most people had a companion. If someone was alone, I would step in and play with them, but I only had to do that a couple times. One thing I'm happy about is how invested some players got into the mind game of RPS. Something that I hoped for with my game was that through the use of my animations and sound effects (most of which were inspired by tropes from anime; something commonly associated with the intense inner monologue) the element of the mind game will be heightened. People playing my game displayed this and constantly tried to bluff each other, "You're going to choose scissors, I know you." or "There's no way I'll pick rock a third time. Or will I?" Seeing players get lost in the mind game makes me wish I included a random button that leaves the result to chance, so that players can throw off their opponent. One part I wasn't happy with was how

often players got a tie. The animations that show when a tie occurs are much less extravagant and satisfying, so when players were getting multiple ties in a row, I was getting nervous that they'll think that that's all there is to the game. It made me realize that I should have added more with the tie to keep things interesting no matter which result occurred.

Overall I think I made a very successful project that went into a very successful exhibition. Upon viewing people playing my game, there are definitely components that I wish I added or fixed, but I may continue developing this project in the future, so my chance to make these changes is still there. To shed light on the mobile game market, my goal was to take an accessible game and try to make it fun and addicting. My methodology for doing so was to fill the game with satisfying and absurd animations/sounds that transformed RPS into a spectacle. Through this I hoped to unveil many animation tropes which their practical use is to make things feel more extravagant than they seem. The result is a project that parodies game and anime culture in order to not only critique them, but to also express my appreciation for them.

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