IMY 300 Deliverable 3
3 Minute Noodles

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Note: the videos for paper prototyping are accessible via google link drive found under paper prototyping.

1. Explain your game idea [5]

We are creating a story-driven single screen precision platformer, similar to games like Ori/Gris and Limbo. The game will be split into two distinct gameplay types. During the daytime sections of our map, players will be tasked to use all their traversal mechanics to avoid hazards/enemies in the environment. During our nighttime sections, our character will be able to use combat mechanics to defeat enemies, there will be an exclusive combat mechanic, which is the slash, as well as repurposed traversal mechanics which will be used as combat mechanics as well, such as the ground pound and the dash.

Precision platformers focus very heavily on making you use your traversal mechanics to reach frequent checkpoints. The challenge for the player is to use the mechanics in combination with one another at specific intervals to further progress through the stage. Frequent checkpoints are required due to the nature of the game in which fail states will be reached often. So players would be able to tackle the same traversal challenge frequently, using trial and error to complete if need be.

The separating of the game into two distinct gameplay styles was so that we better curate the traversal oriented side of our game and not have to design all stages that could be tackled using combat and traversal mechanics, which we think would be detrimental to the traversal side. Which is the gameplay style that we would most like to explore. Although some sections will allow for player choice in how they tackle it.

Puzzle-solving will also form a small part of our game. Puzzles will be fairly simple and will mostly take the form of figuring out how to move objects to certain locations so that they can be used to aid you in traversal, such as moving a box which you can then use to get to a higher point. Puzzle-solving also exists outside of these situations but it takes the form of figuring out how to perform certain traversal challenges.

Boss battles will also exist and will take the form of short, curated sequences that will require players to perform certain mechanics at fairly specific times to traverse further into the stage, whilst a boss is chasing you. These sections will be harder than normal traversal gameplay because mistakes or miss-timed inputs will result in death. But that is balanced out because these are shorter scripted sequences which will not be very frequent.

2. Core mechanic and variations [20]

Describe your core mechanic [10]

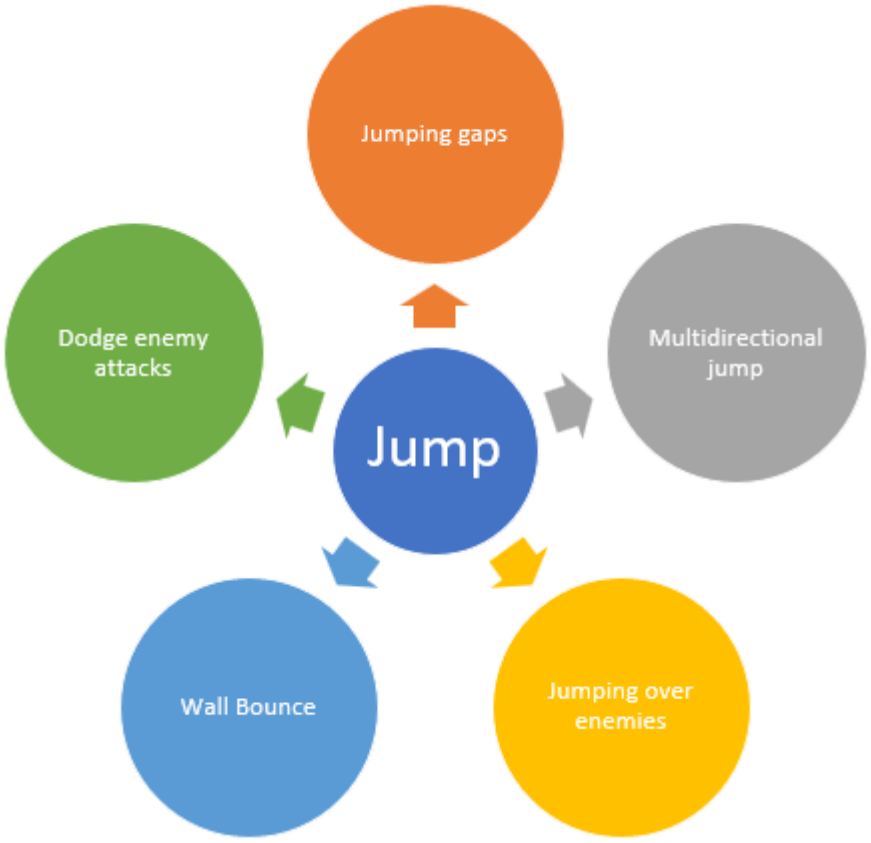
1. Explain what the core mechanic(s) of the game will be.

Jump

2. You must also include at least 3 variations of the core mechanic, although your game will probably have more.

Jump : Normal jump, multidirectional jump, wall jump + bounce
(*Dash 4 usages :*
Used in combination with a normal jump to travel a greater distance
Used in combat to stagger enemies when they are hit with it
Used in combat to get behind enemies that you cannot attack from the front
Dash through obstacles in front of you)

3. Map out your core mechanic and variations using a diagram such as that shown in the class notes to indicate how the core mechanic will be used for the various parts of the game.



What [5]

Players will have the ability to use a simple jump which will be used to get over small gaps in the floor as well as reach higher points, which is satisfying the simple platforming aspect of our game. Jumping is considered one of our core mechanics because in combination with other inputs would allow the player to perform various other minor traversal mechanics. If players jump into a wall it will initiate a wall run and bounce which can be used to scale vertically parallel surfaces. If players jump and then dash they will be able to jump over larger gaps in the floor. If players jump near an enemy projectile or into a jump pad/platform they will have the ability to initiate a multidirectional jump which will be used to not only move further vertically but in any direction that the player specifies with the controller analogue stick, this will allow stages to be created that requires the player to not just move from left to right. Chaining together a number of the multidirectional jumps will form a part of the "puzzle-solving" in the game since players will have to figure out the timing to move from one projectile to another in order to travel further distances. Jumping will also be an important part of our combat moveset. Players will be able to use jump to get over enemies that are required to be attacked from behind, or to navigate past them entirely. Jumping is also required to initiate a ground pound/slam which will be used to combat and traversal. Ground pounds will be used to destroy environmental elements which will be objects such as dead logs beneath your feet that are blocking an entrance to a new area below you. Dropping objects onto enemies from above them is also done with the use of the ground pound, this is done by ground-pounding on the platform above spikes which hang from the ceiling, these spikes will fall onto unsuspecting enemies and will damage them. Traversal during the day portions of our game cannot happen without the jump mechanic and is used to add depth to our nighttime combat sections by giving the player a wider array of moves/techniques to use. Using all these mechanics that are dependent on the jump is how players will traverse through the areas that we create, it is all up to the player to recognize how these mechanics have to be used in conjunction with one another.

Why[5]

Platformers are a rather simple game genre, essentially players are continuously using the same mechanics(running, jumping and dashing) from area to area. What stops this from being repetitive and boring is how variability is used within the game.

We intend to leverage this to create an experience that is largely void of repetition, it is for this reason that we have split our game into two different gameplay experiences, so as to make sure that when we feel that one section is becoming drawn out, we can switch to the opposing gameplay experience.

Platforming (Daytime gameplay experience)

The long term goal of our game is to continuously make your way through from one area to the next. The majority of this long term goal will be achieved during this portion of the gameplay experience. The short terms goals of each area is where variability, in the form of different/new environmental obstacles, are introduced. The player is tasked with navigating through the area in a way that is wholly unique to that area. Achieving these short term goals will contribute to a feeling of progression and exploration. That being said, the satisfaction of achieving these goals will be locked behind the player's ability to figure out how the “puzzle” needs to be solved and then will have to be able to execute their plan with time-sensitive and precise controller inputs. Thus achieving short term goals will cause some frustration with players who are not accustomed to the time-sensitive style of gameplay, but with trial and error and sometimes even luck, players will eventually navigate through the area and hopefully with that we grant them a small burst of pleasure. The short bursts of gratification are what we hope will compel the player to continue and at some point achieve the long term goal.

While still relying on the same concept of achieving short term goals as the catalyst to continue playing, boss battles will condense this formula into a shorter and sharper experience. Boss battles will require the player to navigate through short but more challenging areas in which you are being chased by a boss enemy who will kill you if you do not make the right decisions under pressure, or if you take too long to move from obstacle to obstacle. In these sections, time is scarce and planning and execution will largely become the same thing because of the harsher time constraints. Players will almost certainly have to rely on trial and error in these sections which can become tedious but the short bursts of satisfaction are achieved far more frequently in these sections because every obstacle navigated past puts the player closer to achieving the long term goal of passing the boss area. The planning and execution of inputs become easier as you continue to reach the death state because the player will have the knowledge and muscle memory to navigate through the same sections but then will still have to rely on quick thinking and execution as they progress further than previously, which means the feeling of being under pressure will not dissipate. Essentially we hope to create these sections to put our players in a flow state in which they overcome the anxiety of what is happening in-game and are able to think clearly and logically about what their next move is going to be and then be able to execute it. Which will exhilarate the player far more than our normal moment to moment gameplay. The sense of accomplishment also granted will further add to the player's drive in achieving the ultimate long term goal.

Combat (Nighttime gameplay experience)

Well-paced as the daytime gameplay experience may be, it does not particularly contain any instant gratification, which is what our nighttime gameplay will achieve. The combat sections of our game will serve as a break from the precision style of gameplay experienced during our traversal sections. Whilst being a break from it, it is not void of that which makes the traversal as gratifying as it will be.

Combat mechanics are not as varied as traversal, but it will be required for the player to master them to achieve some success in combat sections. Traversal still forms a part of combat but is contained to small and short engagements which are not so time-sensitive, but it is important that we carry on the feeling of anxiety that we introduce in the boss battles but in much easier and shorter enemy engagements. We will do this by having enemies who are fairly aggressive towards the player, giving them less time to plan out their engagements, these exchanges will serve as intense moments of gameplay in which players must balance muscle memory with their knowledge of the certain enemy type. The type of enemy faced will dictate how the player must go about attacking their enemy.

The feeling of always being on the back foot whilst navigating through the world is nonexistent here. Players will be granted a feeling of being on level terms with the enemies that they are unable to attack directly during the daytime sections. When engagement styles are figured out by the player they will likely gain a feeling of carefreeness and will easily be able to dispatch enemies, which will contribute towards being an instant gratifying action.

3. Design choices [14]

Objectives and Outcomes [4]

While never explicitly stated, an objective for players would be to become fairly comfortable with the traversal mechanics so that their “planning” is always being executed with little to no frustration. We think creating playable areas which would allow players to simply flow through, with a little thought, would be beneficial because traversal is our main gameplay style.

Two outcomes could arise from this, one positive and one negative. The negative being that players could get bored easily due to how simple they find the game as they are able to merely flow through stages. The positive being akin to driving

simulators/racing games in which getting from point to point is enjoyable enough that players feel the need to continue playing.

Uncertainty [4]

We are making use of **Performative uncertainty**, this works with platformers because it's dependent on the players ability to perform certain actions at the right time to progress.

We are also making use of **Solver's uncertainty,** because it's up to the player to be able to solve the "puzzles' ' that we create, in the form of playable areas with varying obstacles and impediments.

Feedback loop [4]

Positive : Successful progression will unlock more traversal options for the character to use, since the majority of the traversal mechanics will be unlocked throughout different areas of the game.

Negative : Players will gain knowledge when they reach death states. During our day sections this will help them figure out how to properly navigate through their current section. Similarly, dying from enemy attacks will grant the player knowledge about attack patterns and how to eventually kill the enemy.

Emergence [2]

The emergent system requirement is satisfied during our combat sections in which our combat moves (slash,ground pound,stagger) can be used by players to create their own "combos". Such as how staggering an opponent will leave the player more time to attack, and then they can use the other two in combination with one another. Combos will never be explicitly introduced, but players will have the ability to play around with the moves and ascertain what works best for them.

4. Paper prototyping [28]

Google drive link with videos: Paper prototyping videos

1. We decided to prototype the main mechanics of the game, and decided to prototype each mechanic in its own level to test if the gameplay is intuitive. This includes the jump, dash, ground pound, multidirectional jump and environment/object manipulation. Hence we will be prototyping the character, NPCs and game objects as well as their interactions with each other.
   We need to prototype these to clarify that our conceptual ideas of these mechanics would be practical in game situation, as well as if they actually have a place to work in oyr game. As a precision platformer these are the main aspects of the game that the player will be using so it is important to test them as early and well as possible. By doing so we will gain and understanding of where/how we can improve these mechanics before actually making the game. We need to playtest them in order to understand how users approach game situations and what are their instincts to get past these situations.

2. N/A

3. N/A

4. The prototype has shown that mechanics might be hard for players to understand or use properly. This means that it is important that the player learns how to perform the mechanic and has enough time to use it without much difficulty before they need to use it more precisely or with more precise timing. This will allow them to learn and get used to it over time before the difficulty scales. It also stresses the importance of the ‘tutorials’ for the mechanics that teach them how to use the mechanics.
   During testing, since the group member needed to manually control the elements, it helped us a lot to understand what we need to keep in mind when developing the game.
   It also showed us that the way(s) in which the player can traverse a section needs to be more clear so that they are able to avoid dying unnecessarily. For example, where the multidirectional jump level is shown, the distance should be far enough so the player knows they won’t be able to cover the distance by just performing a jump and dash. Additionally, should the player need to move an object so they can use it to get up to a platform, the platform should be greater enough compared to the the player’s jump height so the player knows that they wont be able to get up to the platform by merely jumping.
   We also found that object manipulation in the game should be handled by letting the player ‘grab’ the objects hence requiring a grab button. During playtesting, it

was achieved by the player pushing against the object to move it. However by giving the player the ability to ‘grab’, the player will also be able to pull the object as well.

5. Tutorial level design [10]

Included in accompanying PDF

6. Technology [5]

-Unity game engine. The engines we know about are unity and unreal. After researching them, we understand that they both have their pros and cons, but unity is better for making 2D games which is what our game is and as a result, we have decided to use unity.
-Desktop platform. The members of 3 Minute Noodles are mainly PC gamers, as a result we decided to make our game a desktop (PC) game as we are more used to it and feel that it would be easier for us to test.
-We intend to allow both keyboard and controller input so that the user is able to use the input they are most comfortable with.
-For sound we will use Adobe Audition as we have used it before and are hence familiar with it. For visual assets we will use a Adobe Photoshop and Illustrator as we have also used these softwares before and are familiar with them.

7. Group member roles [1]

Level design - Dharshan
Coding - Matthew/Dharshan/Mayur
Testing - Group members & 3rd willing participants
Sound - Mayur
Design visual elements - Dharshan/Matthew/Mayur