cOsMiC TuMBLeWeeEd Design Document
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Peter Haynes, Kim Salac, Saeed Razavi, Jazlyn Nguyen

High Level Description:

The game is a platformer surrounding the experience of discovering your heritage. The players start at the top of their family "tree" -- aka their house or something. They have an argument with their parents where the parents end up rejecting the player's identity. The player runs away from them, and then lightning strikes and the connection between the player and their parents is severed, visually represented by the player's branch on their tree breaking. The player falls through the sky and lands on this tree, which is beginning to die because of the severed connection. Their goal is to get to the bottom of the tree. At each branch, the players meet someone from their family and learns more about their history, good and bad. The player is able to get an ability after creating a relationship with each person, or be faced with new obstacles if they encounter an ancestor with which they conflict. At the bottom, the players get to their roots, and they have learned everything about their history. Here they are given a choice to either save the tree or let it die. If they choose to rekindle the flame, the player must speed run to the top of the tree using what they learned from their ancestors, and the player and their parents compromise to accept each other, mending the tree. If the player chooses to not save the tree, then it becomes ashes; however, they can use the remains to plant a new seed, leaving the player with agency in their past, present, and future -- adopting tradition & culture vs new self expression whilst still bringing memories of their culture before.

Primary Mechanics:

- Time sensitive platforms
    - The game will have platforms throughout the level that allow a limited amount of steps the player can take.
- The ancestor at each level will be integral to the level itself either through play or throughout level design via one of two ways:
    - The player can gain (or really, upgrade) skills from ancestors who are deemed more supportive or helpful in the protagonist's journey.
    - The player can encounter toxic or unhealthy ancestors, thus needing to overcome a higher difficulty introduced by new obstacles at that level, which allows the player to learn how to overcome specific introduced obstacles during that level (which will show up again throughout the game).
- The narrative will provide the player the ability to choose the player ending
    - At the end, the player can choose whether or not to save the tree or let it die.
- Checkpoints
    - At certain points of each level, there's a checkpoint that allows the player to return to if they end up falling through some "rotted" platforms. This prevents the player from

having to start from the beginning of the level every time they fall out of the level (or fall off the branch).
- ○ When replaying a level they've already completed, the player can choose to start from any cleared checkpoint instead of the beginning of the level
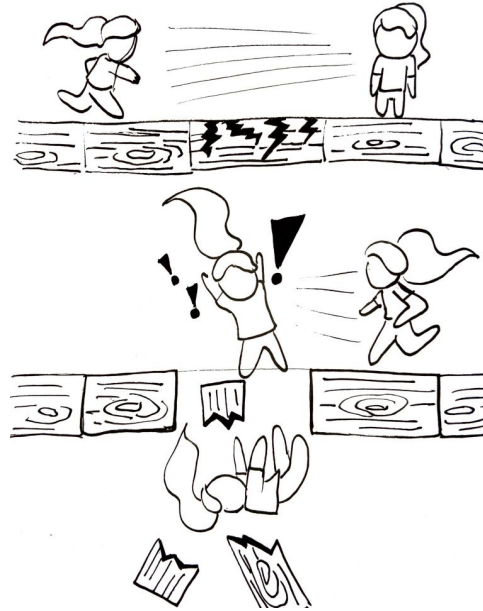
Examples and drawings of gameplay mechanics
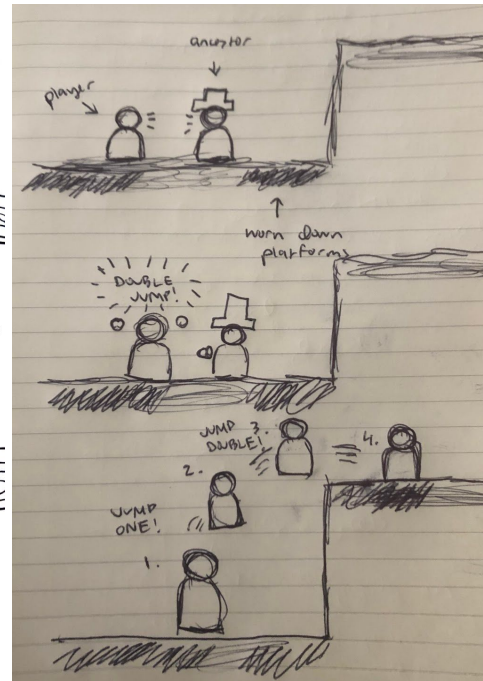

| Figure A | Figure B |

- ● Figure A: Platform decay indicates time sensitivity (ie can only step on platform a couple times before it disintegrates or breaks and becomes unstable for the player to navigate across)
- ● Figure B: Gaining ability from ancestors shows that can overcome an obstacle because of new ability

Dynamics:
- ● Dynamic 1: Gaining more skills/learning from the difficulty of encountering multiple ancestors on the way
    - ○ When a player encounters a supportive ancestor, the player either gets a new skill/ability or has one of their existing skills updated, illustrating personal growth.
    - ○ When a player conflicts with toxic ancestors, the level itself increases difficulty, introducing new obstacles that will allow the player to learn how to overcome them as they occur again in the future. This illustrates learning and moving past trauma, but still recognizing it.
- ● Dynamic 2: Creating a more mindful movement/navigation throughout the game

- The time sensitive/step-limited aspect of each level pushes the player to be more reflective about their movement, but also to move with agency and urgency as well. Since every movement counts, it encourages the player to be more introspective and strategic.
- Dynamic 3: Push to remember, and actively use all the skills learnt throughout the game to create cumulative and mindful play
  - The culmination of the game forces the player to use all the skills acquired from ancestors, while also encountering the same obstacles seen with toxic ancestors.
- Dynamic 4: Having a sense of control in how the game ends by choosing their own ending
- Dynamic 5: Encouraging experimentation by having different checkpoints so that death isn't too punishing. The objective is to progress more than it is to survive. Furthermore, by being able to start from any checkpoint when replaying, players can practice specific obstacles without having to retraverse a whole level to get to them.

Aesthetic: NARRATIVE & EXPRESSION

The different dynamics come together to create a gameplay experience rooted in narrative as the player uncovers more of their past and learns how to work through the game with the different levels. By making the player be more mindful of their movements while creating this sense of urgency, we are encouraging the player to be introspective and thoughtful of how their actions in the game could easily affect the outcome. By having the player gain something from each ancestor, we are showcasing to the player how your history has a direct impact on you, and how uncovering that history makes that explicit to you. By being able to choose their own ending, the player is able to self-insert into the game, making a decision that would be best for them, allowing them to express themselves in that decision. The overall structure of the game being about traversing down the player's family tree to get to their roots creates a symbolic narrative about learning more about who you are through your history, and being able to decide whether or not you want to accept or reject it.

Formal Elements:
- Players: The game is mostly a single player (generally one player vs game) framework but incorporates more co-operative moments with the game in terms of character interactions where the objective is not necessarily to beat the game. Rather, the definition of beating the game in this case would mean finding a sense of closure in the narrative of the game, and not really rising above the game
- Objectives: One objective that is motivated by the primary mechanic is **race/escape,** where the movement of the player is primarily motivated by the need to scale down the tree (move through the environment to the bottom of the tree or to arrive at the last level). A primary objective, however, as dictated by the narrative, is **exploration/solve**, where the hidden aspects of the game or the mystery being uncovered is the storyline, and the protagonist's ancestry as part of that hidden/solvable element
- Conflicts: One of the biggest conflicts that motivates a sense of urgency is the pressure of time, especially when there are sensitive platforms that can limit the number of steps the player can take. Therefore, the conflict is trying to beat the step limit to make it past each level. On top of

needing to be mindful about their traversal throughout the game, there are obstacles that the player also needs to overcome as part of the level design, thus making it past the obstacles in each level is one of the conflict

- Procedures and Rules:
  - Set-Up:
    - We do not have a system of lives instead players will be restored to checkpoints when they die.
    - All platforms will have their number of steps before breaking set at the beginning of each level when returning to checkpoints.
    - The player starts each new level standing on a platform (can potentially break away or move)
    - To begin playing, the player selects their level on the overworld map (zoomed out tree)
    - The player can only replay already completed levels.
    - The player can only take a limited amount of steps on each platform.
  - Progression of Play:
    - In order for the player to achieve their objective, they must get to the end of each level and successfully scale down the tree, using learned abilities and skills as they progress.
    - The player can only discover one level at a time (with the exception of optional branches), progression defined as levels not unlocking until the player discovers previous levels.
    - The player progress by maneuvering around obstacles towards the end of the level, using their acquired abilities to circumvent obstacles
  - Resolution:
    - If the player is playing a level they have not beaten yet, when they reach the end of the level, they will be taken directly to the next level
    - If the player is replaying a previously beaten level, when they reach the end of the level, they will be taken to the overworld map
    - When a player reaches the end of a level, their completion will be indicated by some animated event, such as their character automatically walking forward to a place offscreen, by a large section of tree falling away under them, etc.
- Resources:
  - The amount of steps the player has is the biggest resource and challenge to face. There's scarcity in the amount of steps the player takes on each platform, as they will break after all possible steps over them are expended.
  - The number of double jumps remaining is a resource that is either 1 or 0 depending on whether or not the player has already double jumped while in the air.
  - We may also add other resource-based abilities similar to double jumps to be determined further in development.
- Information: Since the player uncovers the story as the progress through the game, the information state would be **game private**. The player only learns more about the story and secrets

as they get further in the game. Additionally, as players move through the game they will discover abilities that they are unaware of at the beginning. Of course, there are also pieces of information shared with the player like the number of steps that they can take on a platform before it breaks (not explicitly stated but the player will be able to see the platform degrading with each step before it breaks). By the end of the game, if a player has done all optional levels they should have **total info** as they have met all of their ancestors and learned from each one.

- Outcome: The player gets to the bottom of the tree, and then the player chooses whether they save the tree or let it die. At the end of each level, the tree branch "dies" and the player occasionally gains an ability.