

Tumble Rumble!

IdeaMache: <https://ideamache.ecologylab.net/v/UpeGkSj1X9/>

Game Name: Tumble Rumble! (A game about tumbleweeds brawling it out)

Meaningful Play Specification:

Game Description

- **Game Environment**

Our game is foundationally similar to the stereotypical fighting game, except it will feature a cast of tumbleweeds, customizable with colors, clothing, and weapons. The basic premise is this: A player selects/customizes a tumbleweed and fights other players to the death in an arena.

Our game will be fast paced. It is essentially a contest of which player can press the right buttons at the right time, usually in the fastest manner.

After all players have chosen their characters and the arena has been selected, a match - or Rumble - is started. This is when the real game begins. Here, the players will use the keys described in the Operational Rules to try to defeat their peers. They will see a direct effect of the keys they press, since as soon as they press a key (assuming it's mapped to an action) their character will either move or attack, based on which key they pressed. Each button will consistently perform the same action, so the player will easily be able to discern which keys map to which character actions.

Regarding the larger context of the game, this means that each player will be viewing a screen that contains at least one other player, who is able to perform the same exact actions. And after a while, a player will gain experience and learn that certain combinations of buttons have the potential to be incredibly effective in reducing their opponents health. This is known in the gaming world as a "combo."

As far as meaningful play is concerned, the players can learn, create, and share their own combos and moves with other players, or keep them a secret and then *use* them on other players. Personally, I have found this aspect of fighting games rather addicting.

- **Core Mechanic:**

The core mechanic is, simply stated, this: execute attacks on your opponents in order to decrease their health before they decrease yours. This allows a winner to be chosen, which is the object of the game. As described in the implicit rules, a player should want to win. And as described in the Game Environment, players are able to learn that certain combinations of keys can give them an advantage, so our Core Mechanic is so much more than just button-mashing. The players have to be strategic, smart, quick, and

actively thinking about how they can damage their opponents without their opponents damaging them.

- **Discussion on Gameplay Experience:**

Our vision for Tumble Rumble is so much more than just another fighting game. We want it make it so enjoyable, so fun, and so thought-provoking, that our players can't help but think about it throughout their daily lives. The game environment is, as stated previously, fast-paced and active. It is our goal to never let the player rest, but always have them on the edge of their seat, leg bouncing and tongue sticking out in concentration. We can accomplish this by presenting the player with an end goal, making them *want* it, and then making it hard to achieve.

Rules



- **Operational:**

- The player will play in-browser using the keyboard.
- They will be able to move their character (Tumbleweed) left and right with the 'A' and 'D' keys.
- They can jump with the 'W' key, and duck with the 'S' key.
- They can perform actions, such as use their weapon or punch, with the 'K' and 'L' keys.
 - All these keys and actions can be mapped to other keys as the player desires.
 - These are just the defaults.
- The "enter" key will serve as the "start" and "continue" action, to be used when starting a match (all players must agree to start) and continuing after the results screen is displayed.

- **Implicit:**

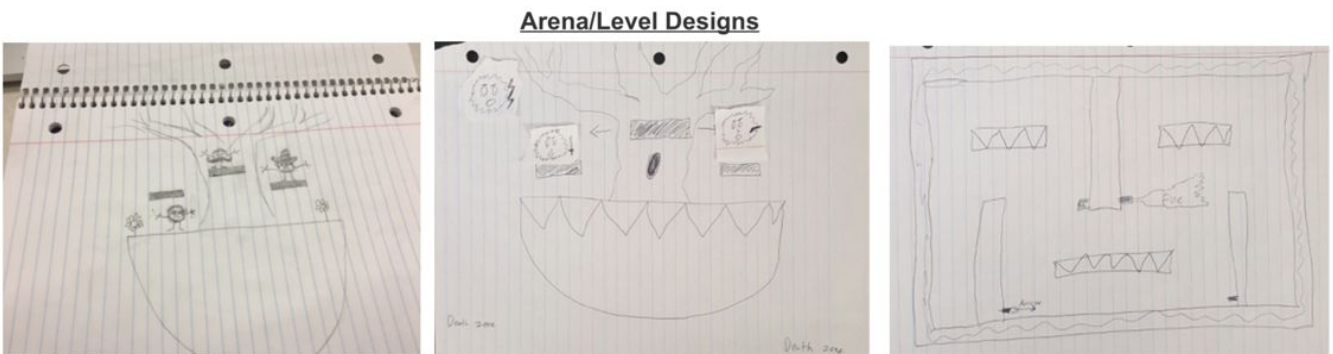
- Each player must try to damage other players.
- Each player must try to avoid being damaged.

- Players should *never* rage quit in the middle of a game, or doing anything else that goes around the gameplay mechanics, to prevent another player from winning
- A player should *never* physically walk away from the game during a match, nor do anything else to give his character an AFK (away-from-keyboard) status.
- **Constitutive:**
 - No two tumbleweeds will be permitted to be identical.
 - Identical Tumbleweeds are defined as two tumbleweeds with the same clothes and color.
 - Clothing is optional, as long as all tumbleweeds are unique with their color
 - No tumbleweed will be considered valid without at least a weapon.
 - The players will also have the choice to edit some of the gameplay mechanics during the actual fight. They will be able to change these values:
 - Clock timer: to ensure a Rumble (a single game round) will not last forever, the player can change the clock value to anything greater than 2 minutes and less than 1 hour. The default value is 2 minutes.
 - Health points: the players will be allowed to change their starting health points (explained below) to any value from 100 to 1000.
 - Stock amount: this represents each player's amount of lives. The value default is 1.
 - All tumbleweeds will fight to the death. Only one tumbleweed can be declared winner. This will be the last tumbleweed left with a health point value greater than 0.
 - In the case of many stocks (or lives), the winner will be the last Rumbler with at least 1 stock and a health point value greater than 0.
 - In the event of a tie where all tumbleweeds are left with 0 health and the game cannot determine which tumbleweed was the last to die, there will be no winner.
 - Each tumbleweed will begin with 100, or some other predetermined number, of health points.
 - Using his weapons, a tumbleweed can decrease another tumbleweeds health points by making a successful contact
 - A successful contact is defined as any active weapon hitbox encountering (occupying the same pixel area) as a tumbleweed
 - A tumbleweed may not decrease his own health points with his weapon
 - An arena may contain any number of obstacles, so long as it is still considered playable
 - A playable arena is defined as any arena that allows the opportunity for its Rumlbers (players) to win based on talent and skill, and must be at least 50% non-obstacle.
 - For example, an arena with nothing but lava (an obstacle) is not playable because the players will be unable to win based on skill, and it would be 100% obstacle.

- An obstacle is defined as any part of the arena that can harm the Rumbler.
A lava pit, for example, would be an obstacle.
- An arena must be large enough to be considered playable.
 - We plan on using a 2D, tiled template for all our arenas. So a “large enough” arena will be defined as “At least 10 tiles wide, where a single tile is the about the width of a tumbleweed.”
- The template will also be large enough to fill a typical computer browser screen, but it won’t extend past that. Basically, our goal is to have each arena completely visible at all times.
- Additionally, there will be 2 types of arenas. Open-system and closed-system.
 - Open-System: In this system, the players are battling on an arena that is not enclosed. This means the player has the freedom to go basically anywhere, even outside of the screen’s visible zone. If the player falls, strays too far outside the visible zone, or is pushed off the arena, their health instantly drops to 0 and they die.
 - Closed-System: In this system, there is a defined boundary the player cannot cross. This will usually be implemented with walls and a ceiling, shown as an enclosed arena. One advantage of using this layout design is the player does not need to worry about their character falling to their death. A disadvantage of this layout is, it allows the player to run into a situation where their character can get stuck in a corner and get constantly pummeled by their opponent to death.

Lightweight prototype:

Figure 1 - Initial sketches:



Character Designs



Figure 2: Wireframes:

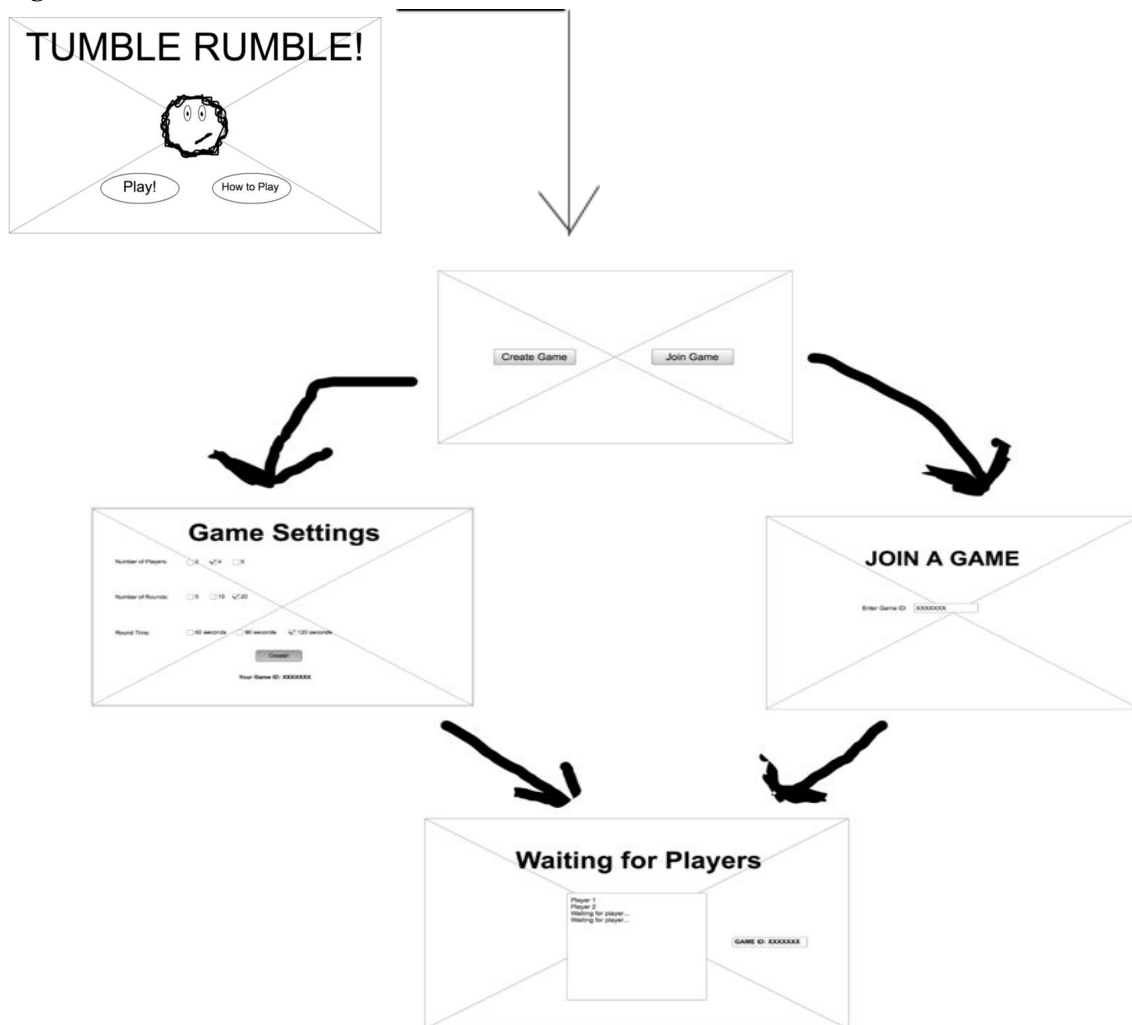




Figure 3 - Color Scheme:



Figure 4 - Title Screen Mockup:



Figure 5 - Game page Mockup:

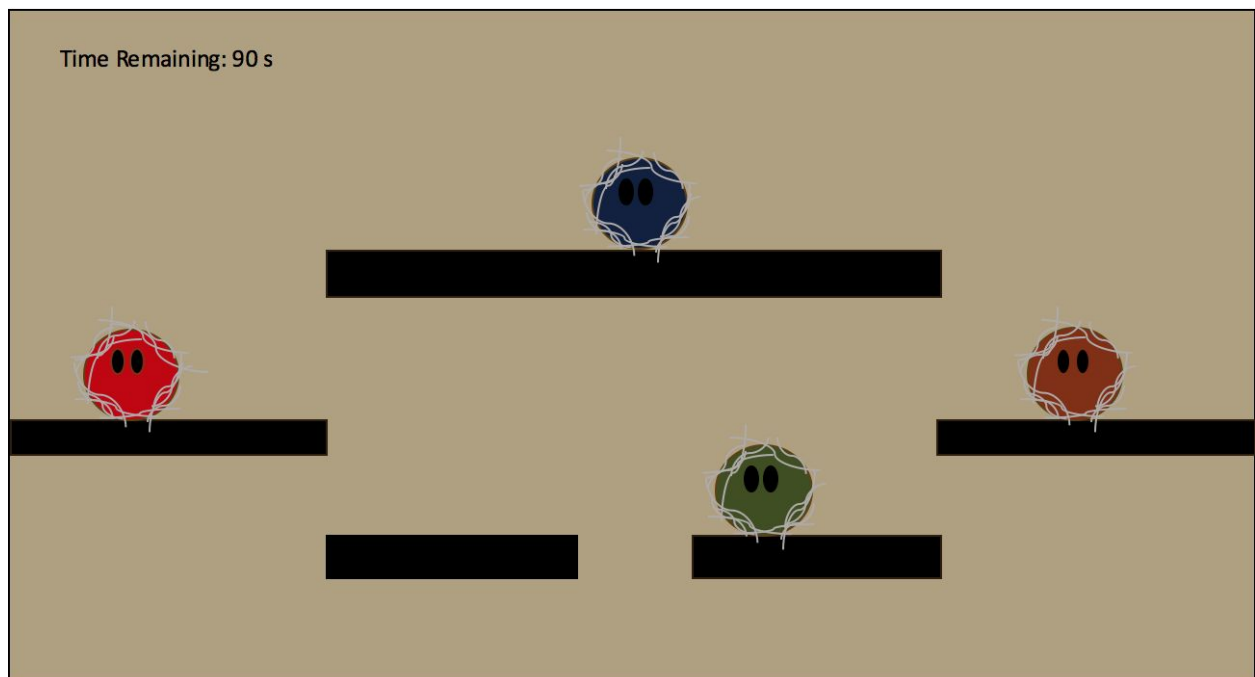
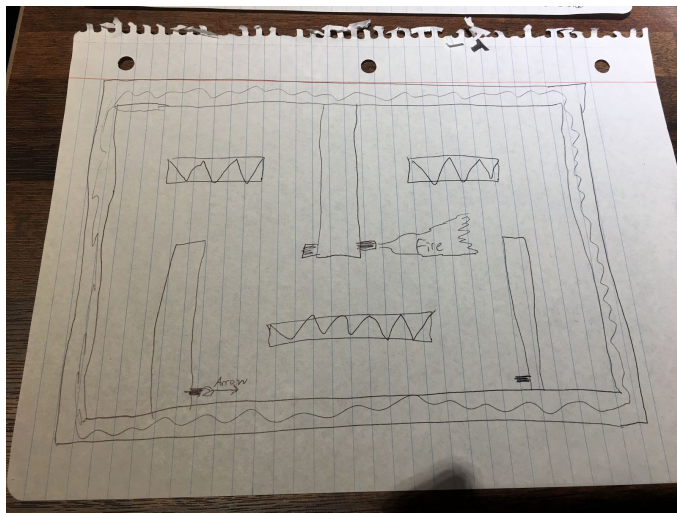
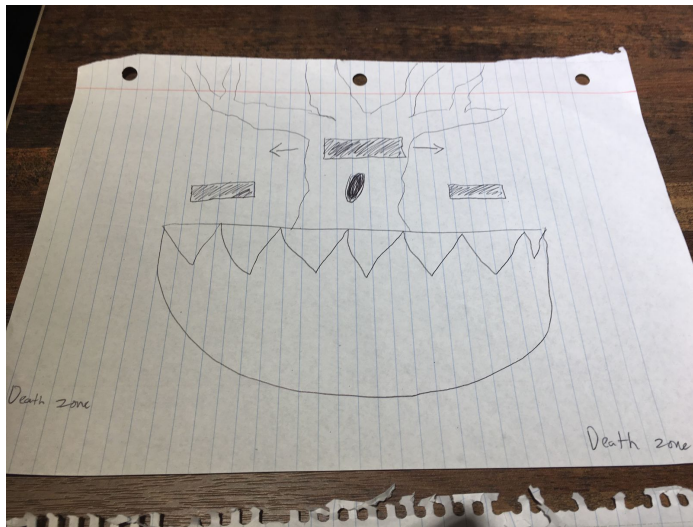
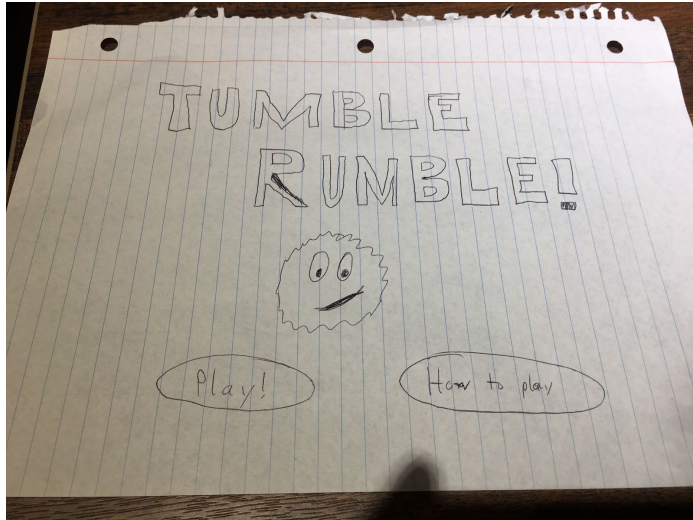
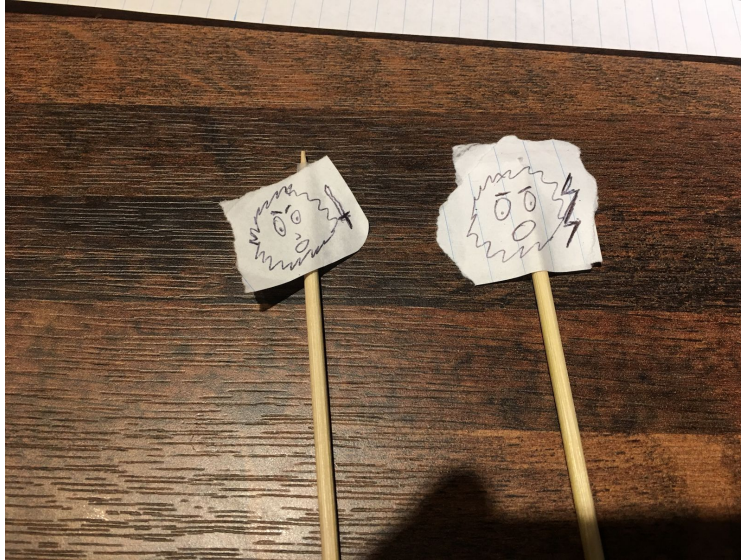


Figure 6 - Lightweight Prototype for Lo-Fi Testing:





Wireframe Walkthrough

- The game opens with a homepage, which features the title “Tumble Rumble!” and contains two buttons: “Play,” and “How to Play.”
 - “Play” Brings user to the next page where they choose to either create a new party, or join an existing one. If the player chooses to create a new party, they will be taken to a lobby page where they can wait for other players to join. The lobby page will have a randomly generated party ID other players can use to join the current player’s party.
 - “How to play” shows a popup of the game’s description and controls
- After a party is ready, the players are taken to a Character selection screen where they can customize their tumbleweed’s color and weapon.
- After the party has chosen their characters, they screen shifts to an arena selection page, and the players vote on an arena. Whichever arena with the most votes is selected, and if there’s a tie, it is randomly chosen between the selected arenas.
- After the arena has been selected, the players are spawned with their characters on the selected arena, and the rumble begins!

Meaningful Play and our Lightweight Prototype for Lo-Fi Testing:

Our lightweight prototype uses paper sketches to represent each page the user sees, and tumbleweeds attached to the end of sticks for the two or more users to interact with. We also have a stick to act as the mouse cursor for the user to click on buttons and objects. One of our team members will act as the computer, holding the pages and flipping through them as the user interacts with them.

We require at least two users to participate in our lightweight prototype, to accurately depict the multiplayer aspect of our game. Once the users are engaged in combat, they can use the tumbleweed’s swords and guns to attack each other, until one of them has 0 damaged (2 of our team members will act as health meters for each tumbleweed, shouting out the damage left

after each successful hit). When only one tumbleweed is left with health, he is declared winner and the game ends. In order to gain relevant data, we will have our users play on both open and closed-system arenas, as well as offer them different game modes, such as special abilities vs. no special abilities, where a special ability is something like increased speed, etc.

How our lightweight prototype is amenable to lo-fi user testing:

Our lightweight prototype is amenable to lo-fi user testing, as it allows users to actively test how our game will work. We are able to determine how our game should respond to certain events, such as two players attacking each other at the same time. After the user session ends, we will conduct a short survey that consists of the following questions:

1. Which arena style do you prefer?
 - a. (Open vs. closed)
2. Which Rumble style did you like/dislike?
 - a. (Several Rumble styles were played out: one involving characters with different special abilities, one with all characters sharing the same ability, and one with the characters without any abilities at all. Some of the more popular abilities include extra speed, extra damage given, and less damage received)
3. What is your favorite part about the game?
4. What is your least favorite part of the game?
5. What are some changes you want to make to the game?

Scenarios:

Our game will feature several possible scenarios. In the beginning stages, the players will all be doing the same things. First, they will either join or create a party. This allows players to play with friends. The party size is capped at 4, so if anyone tries to join a full party, they will have to wait. Next, the players in the party will select their character and their desired arena (whichever Arena has the most votes will be chosen. If there's a tie in votes, the game will randomly pick between them). After all players are ready, the real game begins, and several scenarios are now possible.

- Scenario 1: Player 1 wins
 - Reed (Player 1) and Jason (Player 2) decide to give Tumble Rumble a shot. They join a lobby and unanimously decide on an arena. Furthermore, they both decided to wield a machine gun (damage rates are low, but fire rate is very high). In this particular game mode, the time limit is set to two minutes and each player has 2 lives. Let it be known that each character is identified by being different colors. The match begins upon a countdown. At the start of the game, Reed wasn't quite paying attention. Jason unloads a magazine into Reed. Reed's health bar almost instantaneously runs out and his Tumbleweed falls apart. Reed is now down to just one life. Reed then respawns and begins to go after Jason. Jason quickly sustains quite a bit of damage before temporarily getting away from Reed. While pursuing Jason, Reed gets hit a couple of times. Just after that, Reed ambitiously launches an assault on Jason and just barely manages to finish off the kill. Jason is down to one life. Next, Jason respawns and they both, again, go after each other. Jason is on a full sprint towards Reed. Reed successfully makes

contact with two bullets. This only does minimal damage to Jason. However, in the process of the attack, Jason jumps over Reed and falls off of the edge of the map. Just like that, Jason is down to zero lives and the game ends with Reed being the victor.

- Scenario 2: Player 1 loses
 - At the same time that Jason and Reed are playing, Brandon (Player 1) and Cory (Player 2) are playing in a separate lobby. However, upon choosing an arena, Cory and Brandon wanted to play in different arenas. Because of this, the map was chosen at random. In this particular match, the time limit is set to three minutes and stock was set to just one life. Cory decided that he wanted to wield a Katana (High in damage/fire rate, low in range). While Brandon wanted to wield a Sniper Rifle (High damage rate/range, low fire rate). The Sniper rifle takes about four shots to successfully kill the opponent. While the Katana only takes two hits to successfully kill the opponent. Again, the game begins upon the termination of a countdown. Immediately, Brandon makes a good shot and Cory's health gets knocked down to about $\frac{3}{4}$ full. Cory then launches towards Brandon and makes solid contact with the Katana. This takes half of Brandon's health. However, Brandon manages to get away and takes a shot at Cory. Cory is then left with just half of his health. Moving forward, Cory understands that he needs to close down space in order to be victorious. So, in a full on sprint towards Brandon, Cory takes a hit and his health is down to just $\frac{1}{4}$ full. Lastly, while Cory closes down space, Brandon unsuccessfully makes an attempt to jump over Cory's head. Cory gets the last hit off and Brandon's tumbleweed has been killed for good.