**YO: Game Design Document**

**Overview**

YO is a game about an unlikely young hero armed with two yo-yos and unmatched skill. The player takes control of Ty, a young boy who has played with yo-yos since he was in diapers. At night, Ty dons a mask and becomes Axle-Man, a superhero armed with two yo-yos and incredible acrobatic skill. The player can use these yo-yos separately or together to string great combos, but lose your groove and you’ll have to wind up your yo-yos again!

NOTE: Some people didn’t like the name YO, we may change it to something else. Ideas include…

* Axle
* Spin
* Bandalore (old name for yo-yo)

<https://en.wikipedia.org/wiki/Yo-yo>

**Story**

The story of this game is minimally important. It takes place in June 2001, in the fictional American city of Neonburgh. Ty is an 11 year-old boy with an affinity for yo-yos. While his parents sleep, Ty sneaks out of the house to fight crime as String-Man, a superhero who uses yo-yos to fight. He has incredible strength, reflexes, and acrobatic abilities, using both of his turbo-powered yo-yos majestically.

String-Man is derogatively called “flea-boy” by the city’s criminals, due to his small stature and great agility.

**Gameplay**

YO is a beat-em-up in the vein of classics like TMNT.

Players will use each of the triggers to control each of Ty’s hands. Like Bayonetta, a two-button control system does not mean it can’t be good. Combos are achieved through combinations of buttons. There are single-button combos, that can be performed with each hand separately at the same time, and there are combos that use both hands. Combos also vary depending on whether Ty is in the air or not, attacking while in the air will keep Ty in the air. Holding the attack button will maintain the yo-yo frozen where it ended up, and spinning, dealing more damage, but if held for too long it will come unwound. Make it so the player can hold down a certain button to keep their hands separate, otherwise combined combos will be performed. If a combo string is broken, the yo-yo will come undone, and will need to be wound. The bumper for each hand will have Ty wind that yo-yo, and both can be pressed at the same time.

The game is linear and progresses with levels. Each level ends with a boss, which would just be a stronger enemy, maybe with some sort of quirk. Enemies may drop health pickups when defeated. There are also breakable containers that may be in the field that will contain health pickups.

If multiplayer is implemented, the lore reason could be Ty has shadow-clone-jutsu powers, and clones just have different colors, and disappear into smoke if they are defeated, prompting the player to just press a button to come back. If Player 1 is defeated, as long as his clones are still at play, he can come back just like them, but his defeat animation will be different. He will be knocked to the ground and “fade” like in classic games, after which he will be prompted to press a button to come back. If all players are knocked out at any given time, they are sent back to the last checkpoint. Each “fight sequence” freezes the camera in place until all enemies are defeated, and after that sets a checkpoint as the camera moves again.

This game has upgrades, where the player is granted score each level based on their performance and combo strings, and can then spend that score to unlock upgrades. There is one upgrade tree, where each node has two branches. The left side focuses mostly on stat upgrades, while the right side focuses mostly on new tricks. Upgrades are shared by all players. There is an achievement for beating the game with no upgrades.

**Controls** (using Xbox controller as template)

**A:** Jump

**B:** (hold) Separate hands

**X:** Launch (special attack that launches an enemy into the air, Ty can jump and continue attacking in the air)

**Y:** Bind (special attack that has Ty throw one of his yo-yos and bind an enemy, so they cannot move. However, Ty cannot move too far from them, and one only one of his yo-yo hands will be available)

**RB:** Wind right-hand yo-yo

**RT:** Use right-hand yo-yo

**LB:** Wind left-hand yo-yo

**RB:** Use left-hand yo-yo

**Left Stick:** Move (Dodge if pressed in)

**D-Pad:** Move (Dodge if pressed twice)

**Right Stick:** N/A

**Start:** Pause (join if not in play)

**Select:** N/A

**Move list**

All possible moves String-Man can pull off. They’re all based on yo-yo tricks.

**Levels**

This game will be divided into several levels. The length depends on how much effort we put into it. The following levels are ALL the possible levels we could have, and we can skim from there. These levels will be composed of several “modules,” where each module is a battle scene of equal length. While for the levels it is pre-set, we could have an “endless mode” that selects one of the level themes at random and has the player go through it until they lose.

**LEVEL 1: THE NEIGHBORHOOD**

Ty’s neighborhood, near his home.

**LEVEL 2: THE PARK**

**LEVEL 3: THE PIER**

**LEVEL 4: THE MALL**

**LEVEL 5: THE SQUARE**

**LEVEL 6: THE FAIR**

**LEVEL 7: THE FACTORY**

**LEVEL 8: THE LAIR**

The big bad’s hideout, this should be the final level of the game.

**ENDLESS MODE**

The player(s) go through one of the previous levels’ themes, endlessly, until they lose. Fights get progressively hard, spawning more and stronger enemies as you get through battles. In multiplayer, players must be revived by their teammates if they are knocked out. If all players are knocked out, the game ends. Reviving takes longer the more players there are, up to 4, and enemies can hit you while you are reviving an ally. A high score is kept after the game ends.

**Upgrade tree:**

If upgrades are implemented, have the player start with just ONE yo-yo.

Graphical user interface, application, Teams

Description automatically generated

**Development**

This game can be started without an artist, with just primitives. The yo-yo itself is a separate entity from Ty, and the string is as well. The yo-yos should move naturally and play well with the string that ties it to Ty, so it can vary in length and stuff. Two simple circles of different colors to represent left hand and right hand could be used as primitives, with a bigger square to represent Ty. Enemies could also just be squares that change shade when they are attacking. They should turn on their side if they are defeated and fall to the ground just like old arcade games, flash for a bit and disappear. What’s important first is to nail the combat and movement of the player and the yo-yos, as well as the feeling of impact on the enemies. Have a weak-enemy spawner that spawns a new enemy when the previous one is defeated. The player should have an absurd amount of health for the purposes of testing this, but this will obviously be adjusted later.

Priority is movement, jumping, winding, and trigger moves, first single-hand and then double-hand. Then, make aerial moves. After that, make the Launch move. Then finally, the Bind move.

**Scope**

MVP: One player, all moves, one level, enemies, health pickups, checkpoints

Stretch goal 1: Multiplayer

Stretch 2: More levels, endless mode

Stretch 3: Upgrades