

Grapple Gang

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Design Document
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Version History

Version 0.1 - October 19, 2019

- Prototype design document

Version 0.2 - October 28, 2019

- Refined and expanded prototype design

Version 0.3 - November 3, 2019

- Layed out more design and refined current design for our demo

Game Overview

Tagline

Two lizards engage in a legendary tongue battle where each one must make use of the environment in order to grapple onto the other player and reign supreme.

Synopsis

A fast-paced, action-packed, four-player game that is centered around a grappling mechanic. Each player is able to grapple onto walls and objects and can hit players with it. The grapple is the only way to move, and players must use them to hit other players, move themselves around the map, and dodge incoming objects in order to be victorious.

Description

In Grapple Gang, players battle it out in a variety of game modes to see who reigns supreme. Using a grapple hook to move around, players must outmaneuver their opponents to win in different ways such as hitting your with your grappling, maneuvering through an obstacle course faster than your opponent, or slinging your opponent into environmental hazards.

Genre

Party, Fast-Paced Action

Theme

Wacky, Animals

Platform

PC with keyboard + mouse, and/or controller input.

Target Audience

- Young children to Adults
- All genders

Number of Players

Two player local battle

Related Games

- Towerfall Ascension - Multiplayer combat arena with items, last one standing
- Starwhal - Silly local multiplayer competition with a uniquely fun game mechanic
- Speedrunners - Multiplayer competition with power-ups and momentum

- Ultimate Chicken Horse - Light-hearted competition with fun animal characters and a static camera

Rules/Goal

- Players must tongue-grapple their opponents to win
- Players can grapple walls and objects to move around the level
- Each round will last two minutes or less
- If neither player wins after two minutes, the round results in a draw

Key Player Experiences

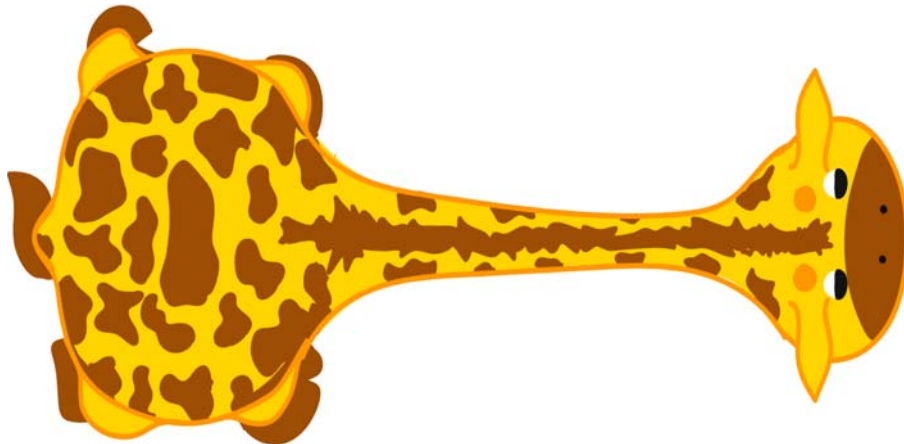
- Outplay your opponent to edge out a victory
- Enjoy a variety of wacky animals and characters to play

Camera View

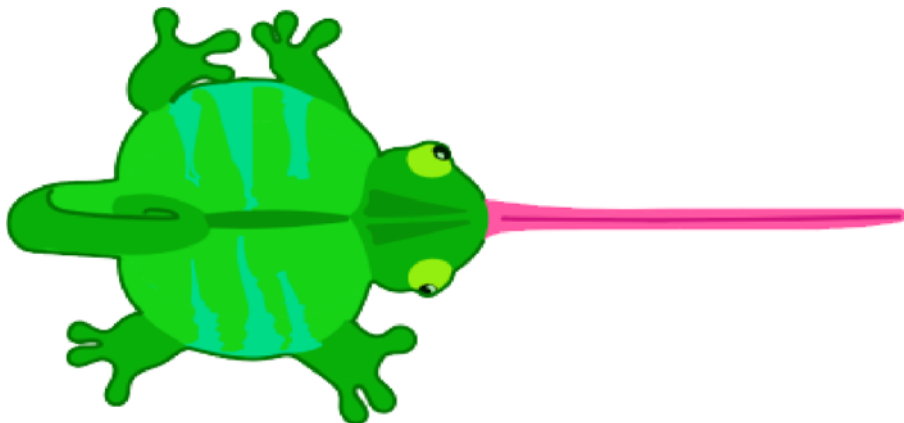
The world will be viewed from a 2D top-down perspective.

Characters

The cast of characters consists of a variety of animals, all of which can extend their tongues to grapple onto things, move around, and attack the other player.



Geo the Giraffe is a friendly creature in its natural habitat... But put it in an arena with an opposing grappler, and things can get fierce! This giraffe makes use of its long neck to grab on to terrain and masterfully navigate through any arena.



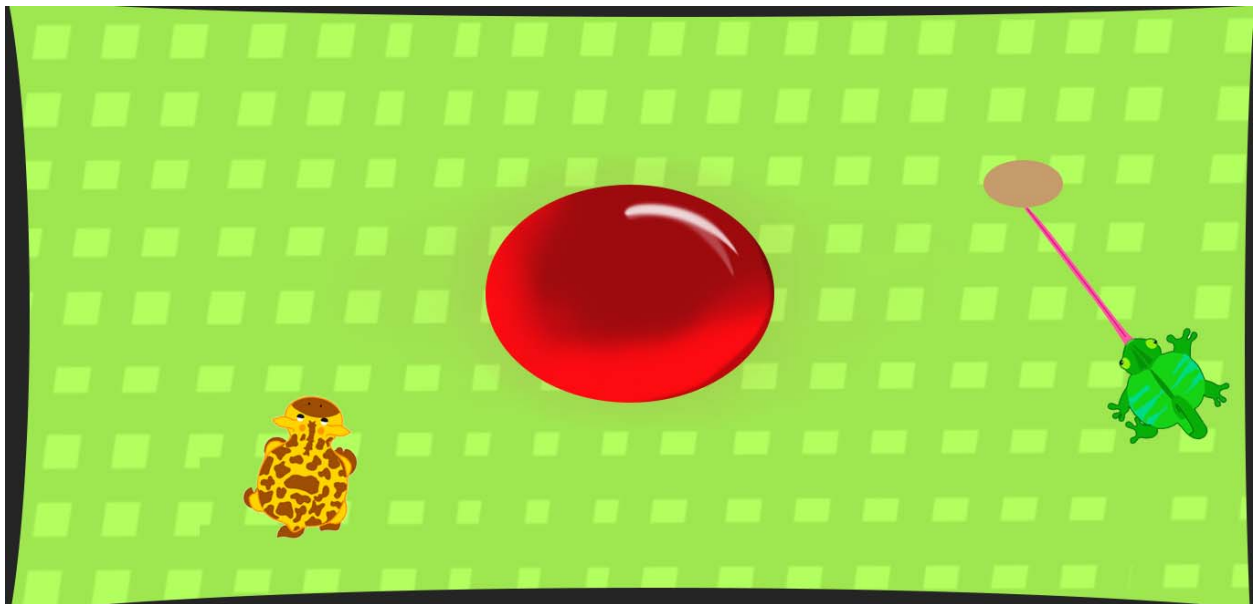
Leo the Lizard is not here to play... He's just here to eat. This guy hasn't eaten since breakfast, and he's HUNGRY for some POWERUPS!

Character designs in progress:

- Anteater
- Butterfly
- Snail
- Elephant

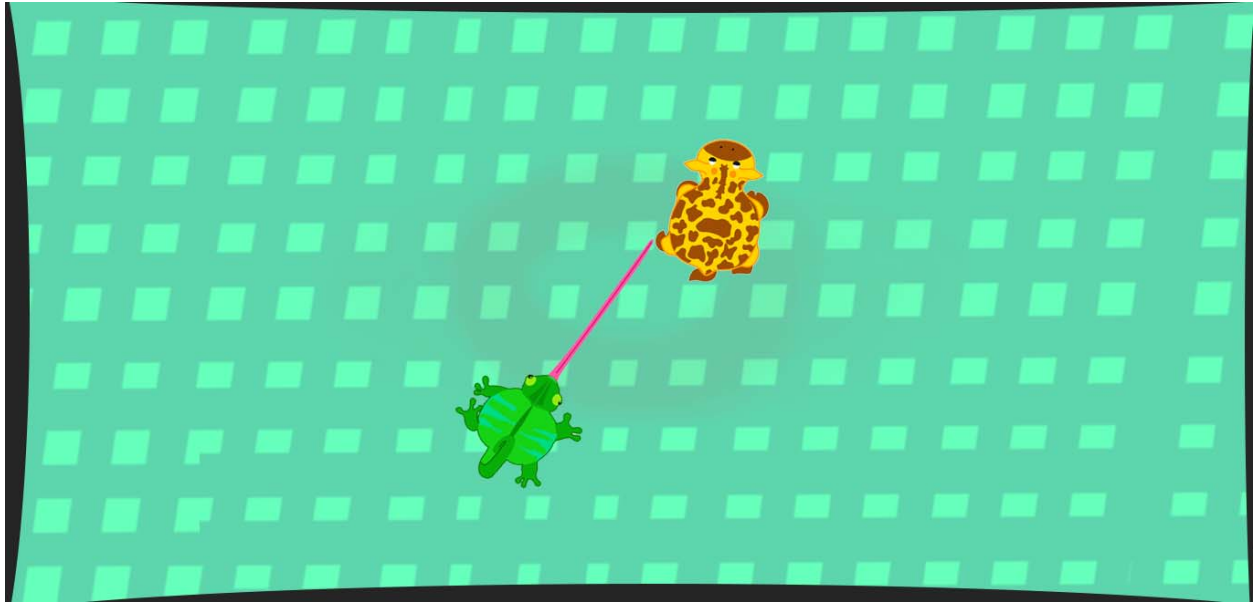
Arenas

In the Danger Zone arena, two players play around a huge pit of lava! Touching the lava results in disqualification from the game, and the last player remaining wins the game. Each player's goal is to latch onto the other player and pull them into the pit of lava before they fall in themselves! To spin things up, there may also be static or kinetic terrain littered around the arena.



In the Tongue Tag arena, two players are pitted in the ultimate game of tag! The first to tag the other with their grapple wins. To survive in this game mode, you must be quick on your feet, and

equipped with the fastest reaction times in the animal kingdom.



Good luck in the arenas, player!

Music

[A lighthearted yet energetic composition.](#)



1

Grapple!!

Score created with the free version of Flat - <https://flat.io>

♩ = 80

Grand Piano

5

9

13

Secret Sauce

Our game is built around the unique attack-movement pattern of the characters. When a character attacks, they enter an offensive state and threaten to damage an enemy player. If they miss, they enter a vulnerable state and are in danger of being hurt by the enemy player. This design encourages a flow of offensive and defensive states between players during a single match, and play styles may be unique to individual players.

The game also relies heavily on floating objects, whether they don't move at all or if they're moved by the grapples. This will give players more opportunity for strategy and giving the grapple different situations to be useful.

A main attraction is the silly animal theme. Adding multiple characters will give players a feeling of freedom in being able to select an animal that they personally like, instead of being given one they don't like. It also creates a fun and relaxing mood in the midst of the chaos of the mechanics.

Our game modes will tie together all of the aesthetics and mechanics to create clear and specific goals that the players can enjoy striving for. They will give our game purpose and set the direction of what we want our players to experience.

Purpose for Creation

This game's purpose is to allow two people to engage in an enjoyable experience with the other player. This could be between two close friends or even two complete strangers. The goal is to give the players interesting mechanics that they will have fun figuring out how to use, and in the process will not solely focus on beating their opponents

Audience

Target Audience

We aim this game at players that enjoy a fast-paced game that pits friends against each other. The game is easy enough to pick up for casual players but can be mastered to reward more skillful players.

Bartle's Taxonomy of Player Types

Grapple Gang best fits the Killer category of Bartle's Taxonomy of Player Types. As a game aimed at pinning players against each other, Killer's will enjoy outplaying their opponents in the fast-paced action gameplay.

Mechanics

Grapple

The core mechanic of the game, the grapple, is how you both move around and attack in Grapple Gang. By pivoting around from their current position, the player can aim themselves at their target. The grapple shoots out from the player and then latches onto terrain. The player chooses when to move to the grappled position. If the grapple strikes an opponent, victory to the striker.

Game Modes

The grapple's behavior and goal of the game changes based on which game mode is being played.

- Head-to-head: In the Head-to-head game mode, if the end of one player's grapple hits the other player, the striker wins that round.
- Survival: In the survival game mode, the last player alive wins the round. The grapple will latch to the other player instead of destroying them, and the only way to lose the round is by being destroyed by environmental dangers. The goal of this mode is to try to toss the other player into the obstacles while avoiding them from doing it to you.
- Race: The players will move through a looping obstacle course with their grapple. The camera follows the player that is furthest ahead. When a player falls far enough behind to where they are no longer on the camera, the other player wins.
- Kelvin Mode: This is an option that can be turned on in any of the above game modes. This makes any moving objects, including players, grapples, and terrain, ~~move 5x faster.~~ 0.5x slower. There will also be a laser pointer showing where the grapple will make contact.

Physics

The interactions between players and the environment will be physics based, with elastic collisions, and near-zero-gravity physics, where momentum applied to objects lasts longer than normal. Grappling will apply continuous force on the player in the direction of the grapple, but will not instantly point the player towards it.

Game World

Overview

The game consists of several maps with different terrain layout and aesthetical themes.

Hazards

Spikes, lava, and the edge of the stage. Each hazard has unique physics properties, and will require critical decision making by the player to be avoided.

Environmental Effects

The playable area contains both static and movable terrain. The movable terrain will respond differently depending on how the player hits the terrain. On the edges of the area are tunnels that wrap around to the other side of the map.

Tasks to be Completed

Implement Game Modes

- Head-to-Head: Create arenas where the players are spawned with floating objects around the map. Players win each round by grappling the other player, and after one player wins enough rounds, they are victorious and the game returns to the menu.
- Survival: Create arenas where players are spawned with floating objects placed around the map. Players must grapple each other into other objects to deal damage. Win condition is when the other player runs out of health, and the game returns to the menu.
- Race: Create an arena that continually expands itself so that players can keep racing with their grapples. Once one player gets far enough ahead of the other, they are victorious and the game returns to the menu.
- Kelvin Mode: Head-to-Head mode where everything moves at 0.5x speed and players have laser pointers that show exactly where their grapple will go.

Level Design

- Create at least three arenas to be used for Head-to-Head and Survival
- Create one expanding arena to be used for Race mode
- Implement a random number of floating objects and random position of those objects
- Consider environmental hazards to add interest to certain levels (i.e. a hole that players must avoid or can be grappled into)

Character Design

- Implement each character using our artwork and make them all have the same basic behavior.
- Figure out which characters should have what advantages, if it all, and balance them

Menu Design

- Design a menu for character and map selection so that players can decide what they want to play

Sound Design

- Add sounds for each character to create a unique experience to distinguish characters.
- Add sounds for objects hitting characters and objects hitting other objects to create a more engaging experience.

Mechanics

- Decide on the specifics of the behavior of grappling
 - What kind of effects happen when players grapple each other?
 - Are they pulled towards each other?
 - Do they immediately disappear?
 - What happens when a player makes contact with an object they grapple to?
 - Do they immediately stick to the object?

- Or do they bounce off unless holding a certain button?
- Are they able to push themselves away from the object, launching the object in the opposite direction?