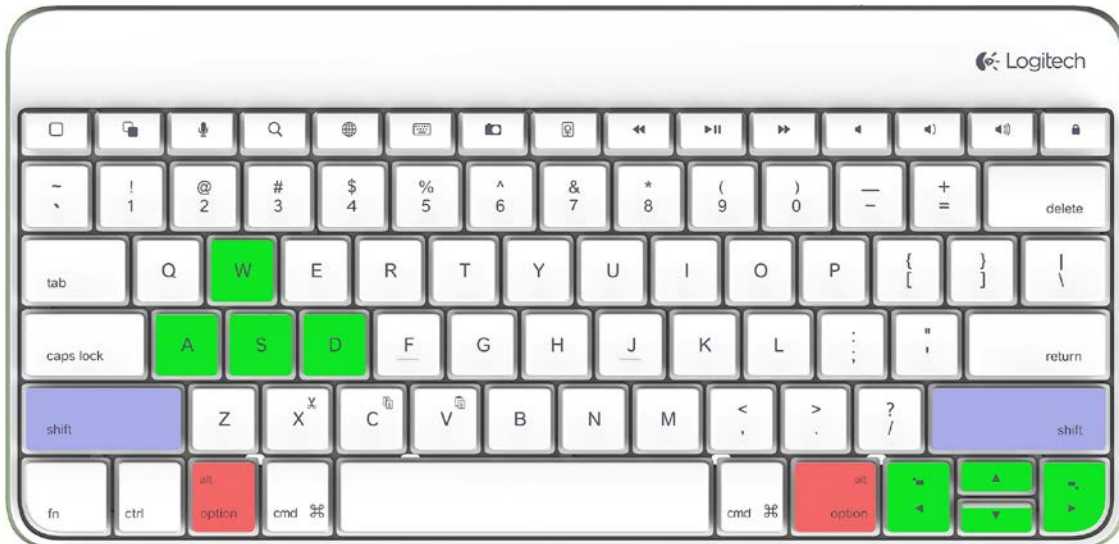
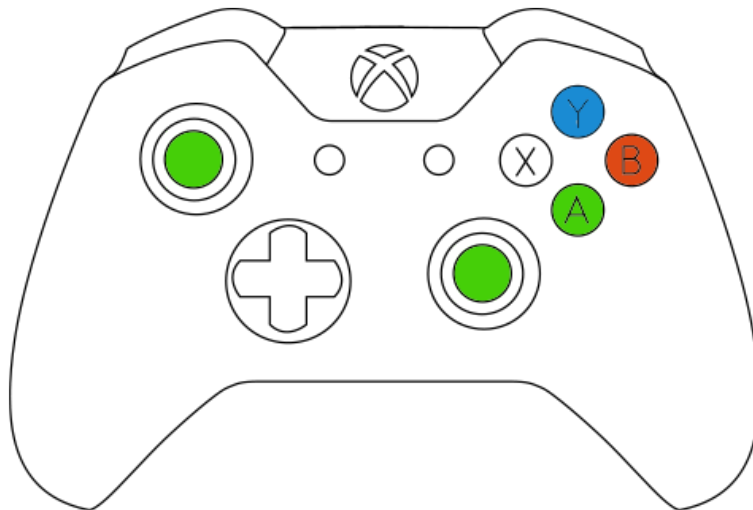


Game Instructions

Use GUI Menu to play (select arena) or change game settings. Players are fighting to collect candy pieces to gain points. The first player to reach the set amount of points (10 pieces of candy) wins the round. Players can take 3 hits before exploding/breaking and release a piece of candy to be collected. Up to 4 people can play using wired/wireless controllers; only 2 players for the keyboard layout were possible.



Keyboard controls for 2 players are **w,a,s,d** and **arrow keys** for movement and jumping, **shift** is the dash attack and **alt** is the spin attack on either side respectively.



Wired/wireless controllers use **sticks** for movement, **A** for jumping, **B** is the attack and **Y** is the dash attack.

Game Design Studio 1

Piñata Fighting/Brawl Game Design Document

Changes Appear in Blue

Title

Piñata Smackdown

Subtitle: *Smack Dat Piñata*

Taglines

Take their guts, take their glory!

Team Overview

Lachlan CorneyLauder - s3415923 - Design

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Alexandro Rubio - s3501189 - Programming

Joshua Reason - s3544917 - Design

General Overview

Piñata Smackdown is a pixel art Piñata themed fighting 2D (3D)game in which you play as an animal based piñata and combat other piñatas in order to obtain the candy they carry inside.

Gameplay involves mastering moves and special weapons to smack each other's candy out and become the ultimate piñata fighter. Defeating your enemy and collecting candy around the arena is key for obtaining victory.

Genre

Piñata Smackdown is a pixel art Piñata themed fighting - 2D (3D) Arena game.

Platform

The game is meant to be played on a PC, enabling different key layouts. [A controller layout was added for up to 4 players.](#)

Can be adapted to other platforms (Nintendo DS).

Target Demographic

Due to implied blood, gore and violence this game is ideally meant for young adults to adults (PG13+).

In essence a casual multiplayer game that is intended to be played with friends.

Perspective

2D (3D) Arena Platform with dynamic lighting to give depth perspective.

Background

Juan's birthday party is coming up and no piñata has been selected yet for the main party event. All the piñatas gather around in the basement wondering who will be the chosen one, the one to obtain eternal glory. The only way to go to Piñata Valhalla is to become the ultimate sacrifice! To settle the dispute, an ultimate piñata showdown was created in which only the bravest of them could participate and fight for candy filling. Sacred piñata weapons are created for the settlement and the ultimate tournament begins. [The story itself was not able to get into the game, since we primarily focused on the fighting mechanics and environments for the game. In essence it is a fighting game about smacking each others piñatas.](#)

Status Quo

Piñatas gather and create the piñata coliseum, in which they brawl in order to obtain candy filling for the main birthday party event. He who gathers the most candy will be the chosen one for glorious ascension to Piñata Valhalla! Several arenas are available for choosing.

Game Modes

Piñata Smack Down will feature four different game modes: Multiplayer Arena ([Due to timing only the multiplayer arena mode was featured](#)), Zombie Piñata Horde Mode, Training Mode and Adventure Mode.

Arena

The main mode, Multiplayer Arena, will allow up to four players, each player may pick to a character and a baton skin to play as before the game has started ([Arena Selection Screen is available, however characters do have different weapons but cannot be chosen](#)). In Arena mode, the players are competing to collect the candy pieces to gain points. The first player to reach the set amount of points, or the player with the most points at the end of the time limit, wins the round. The remaining players are ranked depending on the amount of points they gain.

The two main ways of collecting candy pieces is by either killing an opponent, or by picking up random drops around the map. When a player is killed one of their candy pieces is dropped where they died and they lose one point. The other candy pieces which spawn around the map will be placed to ensure player interaction as players will be competing to collect them.

Special items will also drop around the map to force player confrontation at certain points. If a player is losing drastically they will randomly be given special items to help them gain points.

Zombie Piñata Horde Mode

Horde mode will allow up to four players, each player may pick to a character and a baton skin to play as before the game has started. In Horde mode the plays cooperate together to defeat simple A.I Zombie piñatas. At the beginning of the round there will be very few zombies but the longer the players survive the more and more zombie piñatas will spawn. Each player only has one life and the objective of the

mode is to collect as many candy pieces as possible. The round ends once all of the players playing have died.

The only way to collect candy pieces is by killing Zombie Piñatas. When a Zombie Piñata is killed one candy piece is dropped where they died

Special items will also drop around the map to help the player survive longer, but also force them into riskier locations. As the round continues, better special items will drop. ([Special Items Removed](#))

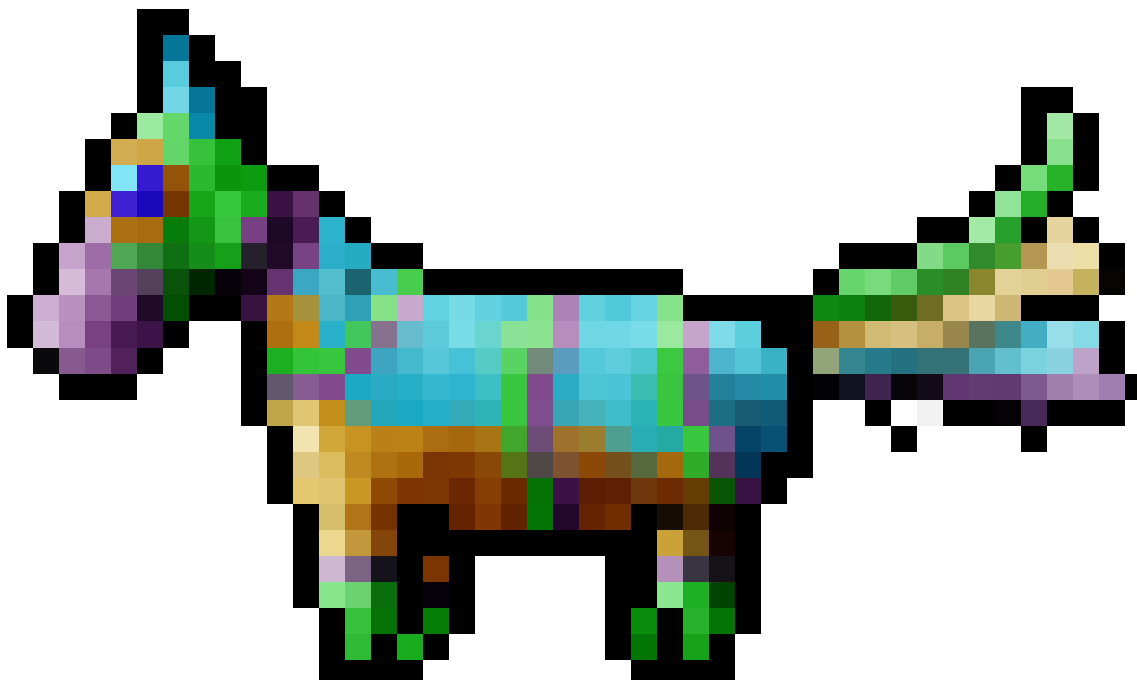
Training Mode

Training mode is very similar to arena mode but allows one player to compete against multiple A.I.

Adventure Mode

Adventure mode will allow one player to fight a series of battles against different sets of AI. In essence this gameplay, will chain together multiple Training fights, but the AI piñatas and arenas are pre-Picked. To continue on to each battle the player must win each round. If the player loses a round they must restart from the beginning.

Visual Style



The visual aspect of the gameplay is going to be pretty simple. We are going to use hand drawn 2d sprites which emulate the graphics of early games ([The game was changed into a 3D style pixel art with 3D Models since no one in the team can draw decently, the team felt more capable working with 3D Models and Environment](#)). What is going to distinguish Piñata Smack down from other games of the same style is the use of lighting in each level. To represent the horrific nature of which the piñatas have to endure, each level will use a sombre colour palette. The Piñatas on the other hand will be portrayed with bright colours, the juxtaposition of colours will convey to the player what Piñatas represent to the public (Parties, fun...) vs. the underground life of which they come from. The bright colours of the Piñatas will also make them stand out while playing.

Each map will only have a few points of light scattered through them, and we will use dynamic lighting to give the sprites a sense of depth which is otherwise found in similar style games. To achieve the dynamic lighting, a normal map for each sprite will be created, (this will only be necessary for moving sprites), normal maps will be created with four hand drawn light maps. (Dynamic Lighting was scrapped when changing to 3D, however the bright colours were kept and colourful spotlights were added to every player)



Light map example



Normal map example





(GIF of Dynamic lighting may not work in pdf)

The batons will take the shape of everything from a stick to a chainsaw to a laser sword strapped to the forehead of the Piñata. The batons will be attached to the Piñata as a harness, made of different materials such as leather, string or barbed wire. The idea is to make the harness look as uncomfortable as possible to convey the fact that the Piñatas are not cared for.



Piñata with chainsaw.

Cutscenes/Cinematics/Animations

Loading Scene before battle with HD 3D Models of characters facing each other epicly.

(Removed since characters are now 3D)

Game World/Environments

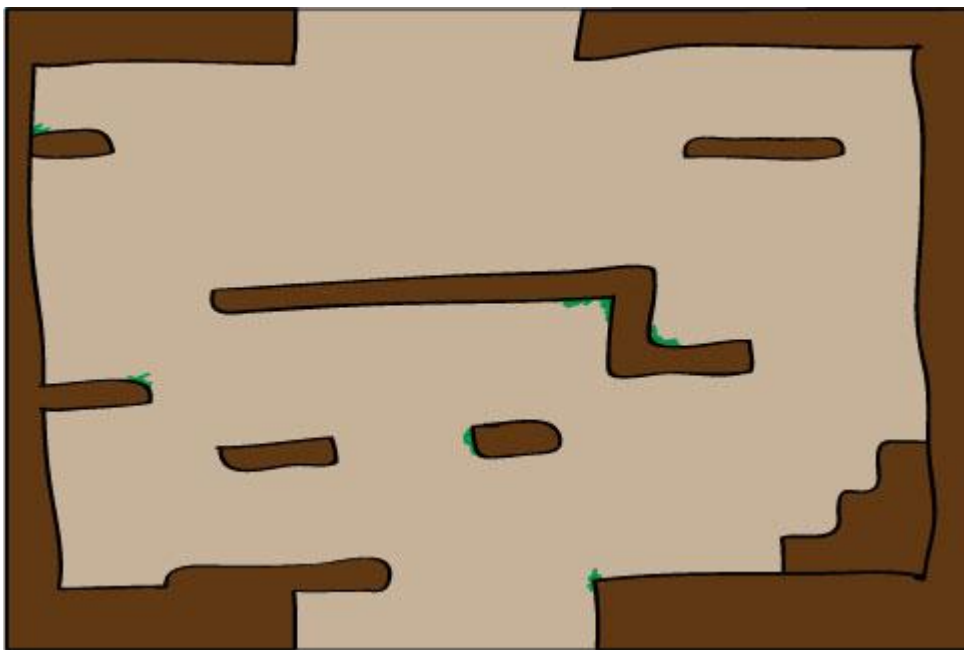
The game world and environment for 'Piñata Smack Down' are crucial because of the lack of story within the game. They need to be told through the use of the game world and environments. Each independent level needs to tell a story, there needs to be depth to the way each level is constructed and displayed. Each level needs a story in its own that gives backstory to the environment itself as well as showing why the characters are there and how the characters got there.

The main focus of the game is the piñatas. To help with focusing the action on the piñatas all the environments will be dark. Levels such as dungeons, caves or basements help this or a normal level at night time, cast in moonlight would allow for the piñatas to be brightened to allow them to 'pop' from the darkened environments while still allowing for environment story and context to the action.

'Piñata Smack Down' will feature 3 levels, each with its own unique aesthetic and play style. With a unique play style for each level it allows the player to change the way they approach and play each level. This allows the fighting to remain stable and constant while still allowing the gameplay to remain fresh for the player.

Cavern Coliseum

This map is designed like a cave; it will feature dark surroundings and dark set pieces giving spotlight to the characters. The set piece will be an underground arena like ruined stadium. The colour pallet will feature earth colours, such as browns, dark greens and greys. The light source for the map will be a hole at the top of the map, giving way to an outdoor setting. There will also be a hole at the bottom of the map, allowing for the player to fall through the bottom of the map and come out the top. This will give the player access to more strategic plays. The holes at the top and bottom of the map will be divided by a ruined platform so as to stop the player from getting stuck in an endless cycle. [The coliseum was changed a bit and does not allow for players to fall in the middle, made as a cage where players are forced to fight each other with not many ways to escape.](#)

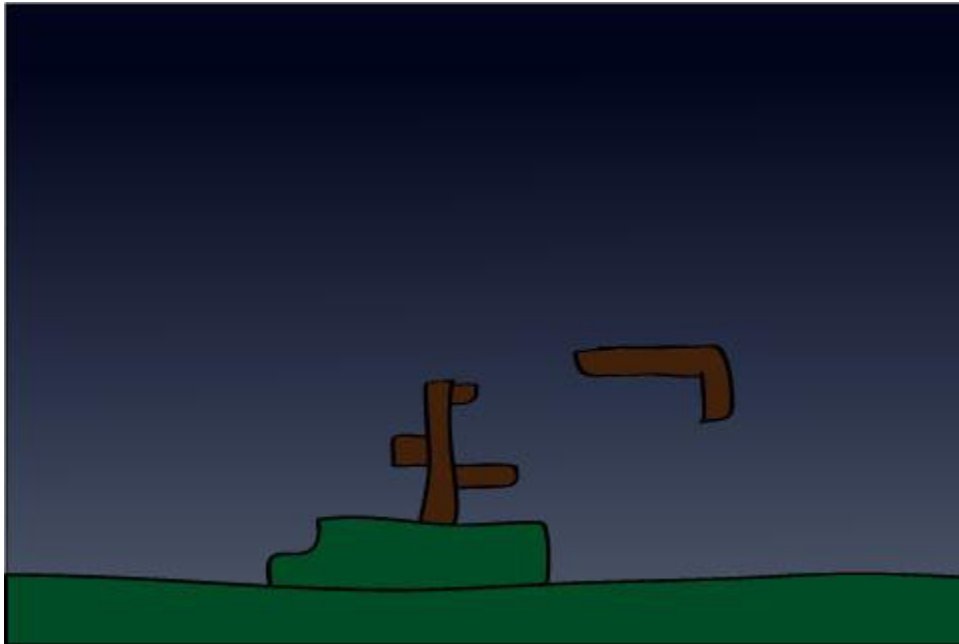


Map concept

Field

This map is set in a field at night time. Its colour pallet will consist of dark colours to put the Piñatas in the spotlight. Greens, blues and yellows will be used to give a vibrant look to the level. The background will depict a scene of escape of the Piñatas; there will show a fence with a hole and a rope hanging from a tree behind the fence showing that the Piñatas escaped the rope and fled the yard. The sides of the level will allow for you to run through one side and appear from the other. The level will consist of flat ground with multiple platforms to jump on as well as a pillar at the centre of the map to break it up and disallow the player from constantly running from one side to the other and going through the side of the screen.

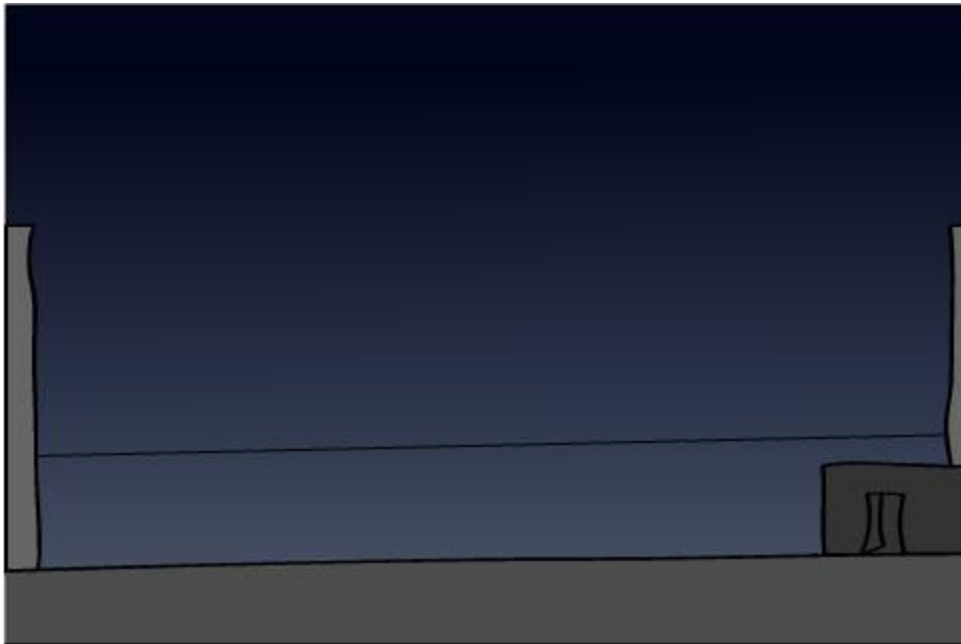
The coliseum serves as a cage box, therefore we moved into the idea of jumping from platform to platform in another environment in order to be able to escape from other players or to be able to develop strategies involving the terrain. Thus, a stage with platforms was developed.



Map concept

Rooftop

This level will depict a chase where the police are after the Piñatas for their escape. The level will take place on the roof of a building with a fence separating the Piñatas from the background scene. The background will show the rest of the city and the perusing red and blue lights of the police, with a helicopter in the sky. The level will consist of mainly shades of grey as well as red and blue highlights in the background. The layout of the level will be very simplistic consisting of a flat surface with a door entrance to the right of the level and a fence to the left. There will be a singular escape device in the centre of the map to give context as to what the piñatas are fighting over. [This map was scrapped since it provided the same level of play as the coliseum. An experimental stage involving a planet in the screen centre with gravity that goes around a sphere was thought of; however this final stage will only be added if other problems are resolved beforehand and if we have time to spare.](#)



Map concept

Characters

We were not able to create the different characters proposed in the original GDD since we focused on the fighting mechanics; however we were able to give each of them a different weapon strapped onto their head.

Gary the Murderous Donkey (Piñatas have the same animal shape)

Backstory: Gary is a stone cold killer. He got to where he is now by murdering every single piñata unfortunate enough to cross his path, not for any particular reason, simply because they crossed his path. Now that the tournament to decide piñata supremacy has begun, he still doesn't have any reason to kill, he just does so because he can.

He writes birthday cards to his grandma every year.

Personality: Completely apathetic, absolute disregard for life, empty eyes, people wonder if he actually has a soul.

Look: Like a colourful donkey-shaped piñata, nice and frilly.

Rebecca the Weapons Fanatic Alpaca (Piñatas have the same animal shape)

Backstory: Having read too many of Juan's father's weapon catalogues in the basement, Rebecca developed an obsession with every form of modern battlefield weaponry. This tournament is the perfect opportunity for her to sponge off the sponsors in order to make purchases from the catalogues.

Personality: Excitable, hyperactive, talks fast (especially around the topic of weaponry).

Look: Like a colourful alpaca-shaped piñata, nice and frilly.

Theme

The game's main theme explores the different possibilities among individuals of a certain type (piñatas) and lets them interact to solve a matter at hand. This is a fighting game, however it brings out emotions and lets the user interact with friends in a fun and healthy way, without the need for high-gore violence. Fighting piñatas manage to successfully bring fun to friends and family in a healthy and strategically manner. People are different around the world and they think differently as well, just like piñatas have different colours and sizes and are made after different animals they fight for a common cause (The success of a birthday party).

Core Gameplay

Movement: movement is basic run-of-the-mill run and jump with the exception of the dash and mid-air dash mechanic ([Mid air dash mechanic was changed to a spin attack that can be used to reach higher altitudes](#)).

Dash is a short charge in the direction the character is facing; it covers a shorter distance quicker than running, it also does damage to anything in the way.

Mid-air dash can be used while (obviously) in mid-air; you can dash mid-air three ways: vertically, horizontally, and diagonally. ([Dash was limited to an horizontal dash](#)).

Life: players can take 3 hits before exploding into candy.

Players are invulnerable for 1 second after taking damage before they can be damaged again.

Melee combat: there are four different melee attacks, two grounded and two mid-air, with a dash and a sweep attack belonging to each group respectively. These are further elaborated in the “Controls” section of the document.

Every melee attack can be blocked, but only one melee attack can block (instead of a separate block function). ([Attacks were simplified into the dash and the spin attack, in the presentation we were told to make the game simpler, therefore we limited the attacks and enabled the spin to block attacks as well.](#))

Different melee weapons are purely cosmetic, they all function the same in-game.

Ranged combat: Different ranged weapons carry varying attributes from each other, these include: range (short/medium/long), type of shot (arc/straight), projectile size (small/medium/large), explosion radius (if any), rate of fire, ammunition amount, special properties (e.g. continuous stream, goes through walls, homing, etc.).

Each weapon will have its properties displayed as well if it requires any special mechanics to use, e.g. a laser would be aimed using the directional keys.

Every ranged weapon can technically be blocked, however if splash damage reaches past the block area, damage is still applied normally. ([Ranged attacks were scrapped since it was complicated to add to the game and we focused on melee fighting.](#))

Collecting Candy: candy is collected either from random spawns on the map or from the cadavers of your fallen enemies ([10 candy pieces required to win the round](#)).

Controls

Simple, intuitive controls using a setup easily accessible to 2 players on a single keyboard.



Green - Directional Keys (Left/Right/Up/Down)

Red - Dash

Blue - Melee Sweep/Block (Changed to Spin Attack/Block)

Yellow - Ranged Attack/Fire/Throw (Removed)

All keys can be changed in settings to suit the preference/playstyle of individuals.

Directional keys are for moving your piñata around the screen, with up translating to a jump in-game. (Controllers were enabled for use in the game for up to 4 players with controllers. Updated keyboard layout and controller layout provided in instructions).

Red keys represent the ability to dash a short distance in the direction your character is currently facing (while grounded), inflicting damage to any enemy in the way.

Dashes mid-air can be directed using a combination of the dash key and one of the directional keys (a mid-air dash without the use of a directional key will result in a dash in the direction your character is facing). Dashes on ground have a 1 second delay between casts. Dashes mid-air can only be used once between leaving the ground and landing.

Blue keys represent a sweep attack in the direction your character is facing/also blocks incoming attacks from the same direction (while grounded).

Sweeps mid-air cover 1 full rotation around your character, does not block.

Sweeps on ground have a 0.1 second between casts.

Sweeps mid-air have a 0.25 second delay between casts.

Yellow keys represent the character's current specialised ranged attack. The attributes of each ranged attack is unique, cast times depend on the weapon equipped.

User Experience

- **Utility:** Functions in the system are planned to be useful and fit for the purpose of the game. The user interface will be simple and easy to learn to use.
- **Usability:** The system should be easy and efficient for the user to feel comfortable while getting things done.
- **Aesthetics:** 2D Pixel art does not bring the utmost quality 3D gaming experience that most conventional games bring, however it is visually attractive and very enjoyable, portraying old arcade successful games. The user should feel the game is visually attractive and pleasurable in hand. (When changed to 3D the game retained the arcade look with a modern style, still looks visually attractive).
- **Identification:** The product will be perfect for people to identify with it and even create customization sets. The goal is to make the user look and feel good when playing the game, both physically and mentally. (Customizing each piñata proved to be a harder task to accomplish, although they have different weapons, the user is not able to customize his piñata).
- **Stimulation:** The game inspires people to play with each other; it brings Friends and family together, providing a wow experience to all users involved.
- **Value:** The system is important for the user; its value is great since it lets the user interact with other members of the community in a visually aesthetic and fun way.

List of Custom Assets

- Character models and environment are original, as well as animations and background music.
- Music was originally recorded by Jeffrey Dunn (Josh's Housemate).
- Intro title sound recorded by Josh and Jeffrey Dunn (Josh's Housemate).
- Textures were obtained from www.cgtextures.com, royalty free for any kind of development.
- Basic movement scripts were taken from tutorial and slightly modified.
- Other scripts were created using references from the internet and the Unity Scripting Reference and Scripting API.
- Background Art made in Photoshop using paint splatter and pixelated filtered piñatas from www.deviantart.com.
- Sounds obtained from www.freesound.org, royalty free for any kind of development.
- Unity3d used as Game Engine for development.