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# OVERVIEW

## General Idea

Use a see-saw and a weight to launch your character to the target utilizing various objects, abilities, and avoiding obstacles.

## Target Audience

Teen or Everyone …. ?

## Target Platform(s)

iPhone OS (iPod touch, iPhone, iPad, eventually Droid), PC, Mac

# Gameplay

## Overview

Gameplay describes the overall game experience—what the player does in the game to win. It is divided into sections that should be defined in as much detail as possible.

### Launching

The one thing the player will do the most is launch a character using a weight and the See-Saw. At the beginning of each launch, the player will do two things:

1. Choose where to put the wedge
2. How high to start the weight

They can change either of these at anytime before they drop the weight. When ready, they will press a button to perform the drop (perhaps the A/action button) (or let go of the weight object on the touch screen), letting go won’t work because they may want to change the wedge position after they change the weight position.RSJ. There is no more interaction dealing with launching after this until the character stops moving and it is determined that the player can continue onto the next check point, level, or world (they have enough lives left).

#### Move wedge to desired location

GUI components will allow the player to move the wedge left & right, thus the pivot point of the see-saw platform. A range indicator will show up when they touch the wedge (mobile) or press the corresponding button (pc) showing them where the wedge is in relation to the maximum/minimum range movement allowed.

#### Move weight to desired drop height

GUI components will allow the player to move the weight up and down, thus affecting the force with which the character is propelled into the air. A range indicator will show up when they touch the weight (mobile) or press the corresponding button (pc) showing them where the weight is in relation to the maximum/minimum range movement allowed.

### Controlling Character after launch

The player will be able to control their character after they have been launched according to their abilities.

### Camera

There will be two “modes” that the camera operates in during the course of gameplay. The player will be able to switch between the two any time before they launch. They will be able to move the weight and wedge while zoomed out and initiate the launch, at which point the camera would do a quick zoom back in before anything would start to move. To zoom in/out there will be a button in one of the screen corners.

1. Zoomed in
   1. Focuses on the see-saw, with the weight in view. Camera will always be positioned back far enough so that the weight is in view at all times.
2. Zoomed Out
   1. Focuses on the entire level’s center based on where the goal is and where the see-saw is currently located.

# Core Mechanics

## Overview

These mechanics are the heart of the game. Since the game is about launching a character to a target, the core mechanics deal with the **See-Saw, Weight, & Characters**.

### See-Saw

The See-Saw is the primary tool used by the player to advance through the game. The See-Saw launches the characters when a weight is dropped on the opposite end.

### Wedge

The player is able to move the wedge back and forth a small amount, equal to about ¼ the length of the board, by touching the object and sliding it on the screen (mobile) or by pressing the left/right button (pc). This will change the pivot point of the See-Saw and allow for different trajectories when the character is launched.

### Weight

The player is able to move the weight up and down within a certain range to change how much force the character is launched with. This is done by touching the weight and dragging it up or down on screen (iPhone) or pressing the up/down keys (pc). The weight is then dropped by touching one of the action buttons (ANY OF THEM?)(iPhone) or pressing the space bar (pc). It will then proceed to fall by gravity onto the See-Saw and the character is launched accordingly.

### Character

Your character is launched from the See-Saw in an attempt to get him to the next checkpoint or the end goal of the level.

Your character can gain different upgrades throughout the game as you finish levels. These upgrades will provide your character with the ability to perform new actions and utilize more of his surroundings to get to the next goal. These upgrades will be visually shown on your character by corresponding meshes becoming visible or perhaps a different texture. RSJ

The character is a robot. As parts are obtained, different components are added (or simply made visible) to the mesh to visually reinforce that the player is upgrading their robot and making progress.

\_DESCRIBE CHARACTER IN DETAIL\_

# Features

## Overview

All features that the game contains will be listed here. Features being what the player can do and how they can interact with the game.

## A Features

## Interactive Objects

Interactive objects are objects that the player can interact with directly. They can help or hinder the player. An example of a helpful interactive object would be a jump pad which would spring the character into the air.

## B Features

## Parts & Upgrade System

At the completion of each level the player will be awarded one, two, or three parts/components depending on their performance \_DEFINE\_. These components will allow the player to receive special upgrades which improve the performance of their character. RSJ

## Ragdoll Physics

The character will move around as a ragdoll until a specific action is performed, at which point the appropriate animation will be blended to from the current pose of the ragdoll.

## C Features

## Level Editor

# Worlds

## Overview

Each world is described with a general feel, art-style, and the types of objects used & introduced in it. Each world consists of ten levels. Once a world is complete, the next world is “unlocked” along with a special ability/abilities depending on how well the player did on each level. RSJ

## World One

It introduces the jump pad, rope, and spikes (ground & walls).

## World Two

## World Three

## World Four

# Levels

## Overview

Describes the details of each level separated by worlds. Each level could have a name, or it could just be Mario-style??? E.g. 1-1, 1-2, 1-3, etc. RSJ

## World One

### Intro

### Level One

### Level Two

### Level Three

### Level Four

### Level Five

### Level Six

### Level Seven

### Level Eight

### Level Nine

### Level Ten

## World Two

## World Three

## World Four

# Objects

## Overview

Objects are the obstacles the characters will advance through as the levels progress. The character will react with each object in a certain way, eventually being able to interact by character abilities.

### Spiked Wall

Characters will usually have to fly, over and/or threw the wall. If the character interacts with the wall they will (die or jump off). – When can they jump off???

Die – Smack into the wall and bounce off.

Get stabbed threw body and stick to spikes with blood splatter.

Jump Off – accelerate at an upwards 45 degree angle in the opposite direction.

### Jump Pad

Characters will bounce and jump off this object to propel themselves forward, up or down through the level. Certain springs characters will always bounce off of, others the characters can pass through.

Bounce – Using ragdoll physics, gravity and dynamics will propel the character forwards.

Jump – Gain extra acceleration and distance using ragdoll physics, gravity and dynamics

### Rope

Rope may take many different forms: chain link, regular rope, vines, wires, etc. Rope may be hanging from various places/objects throughout the levels. It acts strictly according to natural physics, meaning it hangs down freely until the character grabs onto it and swings according to any momentum of the character until let go of. To grab onto the rope the player has to press the A button. If the player wishes to continue holding onto the rope they must keep the A button held, when they let go the character will jump off and their current momentum will carry them accordingly. NOTE: VERTICAL MOVEMENT ON THE ROPE MAY BE ADDED AS WELL.

### Pulley Rope System

Enter description here.

### Levers

Enter description here

### Buttons

Enter description here

### Spike Pit

Any interaction with this object will cause instant death to the character causing a drop in lives. The character will get stabbed through the body and stick to the spikes with blood splatter.

### Water Pool

Any interaction with this object will cause instant death to the character causing a drop in lives. The character will smack the surface and gradually sink to the bottom of the pool.

### Acid Bath

Any interaction with this object will cause instant death to the character causing a drop in lives. The character will smack the surface causing the (green) pool of acid to bubble, the characters flesh to dissolve and his skeleton to pop back up on the surface.

RSJ

# Character

## Overview

## Actions RSJ

These are things the character can perform, whether through user input or automatically. They have to do with interactions that can occur with the game world – objects and regular ground/walls.

### Wall Jump

A wall jump may be used when the character collides with a wall that is open (no spikes or deadly things). To perform the wall jump the player must press the A button when the character is within roughly an arm’s length. If successful, the character will be propelled upward and away from the wall at about a 50 degree angle.

### Jump

The character will be able to press the A button to jump. A jump will generally just give the character more velocity in the up direction…although it may be desirable to jump in a specific direction at some point during the game.

### Grab/Release Rope

When the character comes within a certain range of a rope (any section of it), roughly the character’s arm length, they have the option to “grab” onto the rope. This causes the character to be confined to the physical limits of the rope. In order to perform a rope grab, the player must press the A button at the appropriate time. If they wish to continue holding onto the rope they must continue to hold down the A button.

### Side to Side Movement

The player can move small amounts side to side to slightly influence his direction and velocity. This is accomplished by pressing the Move Left or Move Right button and holding it down. The amount of influence will be limited to roughly .25 seconds or until the button is let go of, after which the player must let go of the button and press it again if they wish to influence the movement more. ALTERNATIVELY: the movement could be limited to one use between contacting surfaces (of any type not lethal). In this case, the influence would last 1 to 1.5 seconds or until the button is let go of. ONE MORE ALTERNATIVE: the influence would last until the button is let go of, but this seems least desirable as it offers too much control and little strategy of having to choose correct timing.

# Art - RSJ

## Overview

This section lists all the art needed & used in the game. Include pictures of concepts or ideas if you feel like it. Explain designs out – the look, feel, how they will work with various interactions in the world (like a jump animation with jumping from a wall, how would it work?)

## Animations

### Jump Regular

Utilized when a normal jump is executed, whether it be off of a spring, maybe off of a rope, or anything that requires a vertical jump.

### Jump Wall

Utilized when performing a wall jump.

### Swing on rope

May not need an animation for this…

### Idle

* Waiting for launch

## HUD

### Movement directions (mobile)

* Left
* Right
* Up
* Down

### Button 1 (mobile)

* Action button one (like ‘A’ button on Nintendo)

### Button 2 (mobile)

* Action button two (like ‘B’ button on Nintendo)

### Wedge movement indicator

* Side to side range, looks like mile converter on a map key, horizontal bar with a vertical notch on each side and a middle notch.
* An arrow will indicate where in the range the wedge currently is

### Weight movement indicator

* Same as wedge movement indicator except flipped sideways

### Lives & Health

* Text as well as an image indicating the current status for each

### Menu Buttons

* Text can be dynamically placed in these with code
* One shaded texture for up and one for down

### Mouse cursor (PC)

* Something cool besides the regular pointer

# Input RSJ

## Overview

Any interaction the player has with the game as far as buttons are concerned is described in detail here.

### See Saw (all keys only useable BEFORE the launch is started)

W – Move weight up

S – Move weight down

A – Move the wedge left

D – Move the wedge right

SPACE – Drop the weight to begin the launch, any See Saw-related keys are no longer

functioning until another launch is setup.

### View