**Physics Launcher Design Doc**

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# User Stories

# Theme Ideas

* Mice vs. Cats
* Spirit Orbs vs. Demon Orbs
* Humans vs. Vampires
* Geeks vs. Nerds
* Gnomes vs. Plants
* Gnomes vs. Gnomes
* Nature vs. Technology
* Light vs. Shadow
* Daredevils vs. Protesters
* Pirates vs. East India Company
* Snowmen vs. the Heat

# Tools

## General Settings

* Reward Image
  + Select box, opens Asset Library
* Return Image
  + Select box, opens Asset Library
* Small Font Sheet
  + Select box, opens Asset Library
* Large Font Sheet
  + Select box, opens Asset Library
* World Order
  + Drop Downs with available Worlds created in World Mapper tab
* World Mapper
  + Name
    - Text entry field
  + Image
    - Select box, opens Asset Library
  + Locked Image
    - Select box, opens Asset Library
  + Level
    - Level Image
    - Select box, opens Asset Library
* Sounds
  + Select boxes, opens Asset Library

## Level Tool

## Terrain Tool

* Layering
  + 4 buttons
    - Move Backwards
    - Move Forwards
    - Move to Back
    - Move to Front
* Drag and Drop objects
* Enable/Disable Physics
  + Revert Button
* Snap to Grid

## Launcher Tool

* Power Range (Max Power)
  + Drop Down (1 – 10)
* Collision
* Slingshot Type
  + Distance (stretch)
    - Drop Down (1 – 10)
  + Sling Collision
  + Fork Mount Points
  + Rubber Band Mount Points
  + Pull Distance
    - Drop Down (1 – 10)
  + Pull Back Effect
    - Drop down with “Stretch” and “Stretch and Shrink”
* Trebuchet
  + Weight Image
    - Select box, opens Asset Library
  + Weight Mount Point
  + Weight Weight
  + Arm Image
    - Select box, opens Asset Library
  + Arm Mount Points
  + Rope Image
    - Select box, opens Asset Library
  + Rope Mount Points
  + Sling Image
    - Select box, opens Asset Library
  + Sling Mount Point
* Dude Perfect (Team Launch)
  + Directional Arrow Image
    - Select box, opens Asset Library
* Interactive Mode

\*\**When placing the launcher in the level, launcher will be fully extended to help with visual placement as well as making sure there is enough room for the player to fully extend the launcher*\*\*

## Projectile Tool

* Name
  + Text field
* Mass
  + Drop Down (1 – 10)
* Friction
  + Drop Down (1 – 10)
* Restitution (bounce)
  + Drop Down (1 – 10)
* Affected by gravity
  + Checkbox
* Affected by wind
  + Checkbox
* Rotational Inertia
  + Checkbox
* Sounds
  + Select boxes, opens Asset Library
* Collision

## Object Tool

* Name
  + Text field
* Mass
  + Drop Down (1 – 10)
* Friction
  + Drop Down (1 – 10)
* Restitution (bounce)
  + Drop Down (1 – 10)
* Affected by gravity
  + Checkbox
* Affected by wind
  + Checkbox
* Rotational Inertia
  + Checkbox
* Sounds
  + Select boxes, opens Asset Library
* Damage States with Points
  + New tabs open when user defines how many damage states for the objects
* Collision