# Carving pumpkins

## General

The idea of “slice a shape into any other shape” was not applicable in my rolling game.

But it still works and it has potential, so let’s make a different game out of it. The most logical conclusion: a fighting game where you *literally* slice your opponents.

**Titles:** Carving Pumpkins and Dwarfing Dumplings

## Main mechanic

When slashing/attacking, you *literally (realistically)* *slice their shape*. They become the “biggest shape”, the other one is simply lost. Once the biggest shape is below a threshold, a player is considered completely dead.

## Objective

Multiple game modes

* **Deathmatch** => slice your opponents until they’re all gone
* **Collector** => you can *collect* the slices of opponents; the first one to get X of them wins.
* **Bullseye** => targets appear across the map; hit one with your knife to get it, the first to get X wins
* **Dumplings** => players can eat dumplings, which will *grow* you, and then *appear inside of you*. When slicing a player, if you hit a dumpling, you get it. (You grow, they shrink.)

Multiple player configurations (1-8 players max?):

* Team-based
* Add AI-bots

Extra settings:

* Aim helper => aims you at the nearest player (in your current direction)
* Front knife is always in front of you => whenever the front knife is selected, it is teleported to the front of you, for easier aiming

## Input

Arrow keys / Joystick = Move

Button = Slash

* Quick-press it to slice straight ahead. (The normal across your looking direction, with a small maximum range.)
* Long-press it to throw your knife.
  + This shoots a narrow rectangle, which functions as a bullet, and will keep flying until it reaches a non-player object.
  + There it gets stuck. Touch it to retrieve it again.

I could add the “Totems of Tag” rule where *rotating adds curve*. But then the games look too much alike. (And doing so *loses* the ability to move around and re-aim.)

Instead, let’s keep it this way. Just add an item to the arenas like “curver”, which adds curve to any knife flying through it.

## Powerups

Powerups are shown as “packages”. You need to *slice them open* to see what’s inside. (You can also grab them the normal way, but then you don’t know what you get.)

As always they are grouped by *category*, where each category follows the exact same color scheme.

### Shape

* **Grow**
* **Shrink**
* **Morph** => reset to a *different* shape? (Use that list of predefined shapes from sheepe?) => **TO DO**
* **Ghost (temporary)** => you are temporarily unslicable
* **Vacuum cleaner** **(temporary)** => walking over pieces makes you *eat* them (to grow yourself) => renamed to **Hungry**

### Knife/Slashing

* Longer range
* Shorter range
* Extra knife
* Lose knife
* Boomerang knives => fly straight until it hits something; then go to “return” state and fly straight back to player. => **TO DO**
* Curved **=> TO DO**
* Faster throw speed **=> TO DO (first figure out Question)**
* Slower throw speed => **TO DO**

**QUESTION:** How is “throw speed” different from “range”? If range really only matters for quick slashes … is that useful enough to get its own powerups?

* Maybe I need to *signal* the short-slash range to players? At least when you *actually do that* and when you *grab the powerup*.

### Moving

* Faster move
* Slower move
* Reversed controls (temporary)
* Ice (temporary)

### Collecting

* Magnet (temporary) => you *attract* stuff to yourself
* Duplicator (temporary) => any dumplings you eat/parts you collect are *duplicated*
* Clueless (temporary) => you can’t collect anything

### Misc

* **Vampire** =>
  + The game has light/dark. Vampires can’t enter the light?
  + A vampire can only slice you from *close range*, but does *more damage* if so. (As they “drink your blood”.)

## Arenas

**IDEA:** Something that *deflects* knives.

**IDEA:** Something in which knives can *get stuck*.

**IDEA:** Parts of the arena/map/environment are *also* slicable!

Graveyard, Dinner party, Spooky forest, Haunted House

(One with actual *rooms* inside a house. Regularly, some rooms have their light *turned off.* Allowing you to hide, but also to do dumb stuff.)

## Collision Layers

1. All
2. Players
3. Terrain
4. Powerups

# TO Do

**Take some devlog images, early on.**

**Knives:**

* Slicing force => calculate proper vector *away* from slicing direction, apply
  + Also apply rotational force, quite randomly, to make things fly apart a bit.
* Remove Area, just detect with RayCast if we’re near to player? (Because Areas can’t be parented/reparented when called during physics queries.)
  + Another reason: ghost players (without physics body) cannot pick up their own knives now (as they also don’t have a body). **=> or maybe this is actually a nice idea**, keep it?

**Powerups:**

* Finish spritesheet => implement functionality
* Find good location:
  + Don’t overlap physics body
  + Not too close to player
  + Not too close to edge
* Add some bouncy tweens and particles + show feedback above player.

**Gameplay:**

* Some better way to aim? The longer you hold the button, the more your rotation *slows down* so you get more precise? (At least a *guide line* from your current active knife …)

**Game loop:**

* Animate game over screen => pop up the windows, only once that is done *allow restarting/exiting*
* Convert last player shape into ghost (of their color).
* Implement other game modes => think about how they’d work + a general structure

**Arena:**

* Create a basic arena: background, obstacles, look

**Nice features:**

* Teaming up => on start screen, press a button to “switch team” (just goes through list in order)
  + How to set the *number* of teams? Or are there simply <max playercount> teams and you can pick any of them?
* AI bots =>on start screen, press a button to “add AI player”
* Mobile version as well?