# 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.)
* **Dwarfing Dumpling =>** each player/team gets their own *huge* dumpling. Players themselves cannot be hit (and are rather small), but if your *dumpling* is completely sliced, you lose.
* **Ropes =>** each player has a few objects attached to them with ropes. If another player slices through a rope, it comes loose, and you lose that “life”.
* **Capture the Flag** => one player from each team has a *flag* inside of them. However, this is hidden information. (The player who has the flag cannot throw knives, that’s how they know.) If you slice through that player, you capture the flag. The first to X captures wins.
  + This would require *teams*. I see no way to adapt it to single player or individual players.

Multiple player configurations (1-6 players max): Team-based, AI-bots

## 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 (from predefined list)
* **Ghost (temporary)** => you are temporarily unslicable
* **Hungry (temporary)** => walking over pieces makes you *eat* them (to grow yourself)

### Knife/Slashing

* Longer range
* Shorter range
* Extra knife
* Lose knife
* Boomerang knives
* Curved
* Faster throw speed
* Slower throw speed

### 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

* **Switch teams!** (Randomly. Can’t really show all colors on such a thing.)
* **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”.)

**Repeater =>** Throw *all* your knifes at the same time.

## 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.)

(One with a big *wall* between players, dividing the map into sections. You first need to *slice* through parts of the wall to get somewhere.)

## Collision Layers

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

## Groups

* Players => actual, controlled player entities (includes bots)
* Parts => loose player parts; still have a rigid body and value, but can’t be controlled
* Deflectable => knifes get deflected by them
* Stuckable => knifes get stuck in them
* Sliceable => knifes slice through these
* Unpullable => can’t be moved by e.g. a magnet pulling on it

# TO Do

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

**IDEA: Different aiming?** When you start to aim, your movement becomes *slidy* or *slowmo*. Which means you continue moving, yet can also properly aim

**Knife/Slicing Improvements**

* Don’t allow a deflection *right after* another deflection. (Just disable the raycast for a few milliseconds?) => prevents a bit of flipflopping on the knifes
* Add (short) cooldown to quick slashes
* *Also* knock back the player doing the slashing
  + Play a short “knife goes forward, knife goes backward” animation?
  + Show a “slash” sprite, which also indicates how far we slashed.
  + (If we hit a body with *one* side, but not the other, give feedback “not quite enough!”)

**General improvements:**

* Make powerups a bit smaller + pickup radius smaller. (Now you accidentally pick them up way too often.
* Make it much *clearer* what powerup you just grabbed. (Show it for longer.)
* Give powerups a bit of an outline + make them flicker
* Make the **most important powerups** appear way more often. (Extra knifes, growing/shrinking, etcetera.)
* **Don’t** pickup powerups that aren’t unwrapped. (Make this an optional rule you can turn on. Or *another* powerup.)
  + **Why?** Players who don’t understand/need the powerups can ignore them safely.
  + There is no “accidental” grabbing of powerups (where you don’t know what happened.)
  + It forces you to know how to use a knife to get them.

**Particles/Animations**

* Move particles players
* Explosion particles on slice
* Trail particles knifes
* “Grab powerup” particles
* Bounce on powerup appear. Bounce on reveal. Bounce on grab.
  + When possible, permanently show the effects of a powerup
  + When an effect wears out, show another powerup icon, but now with a big CROSS through it.

**Game loop:**

* Implement other game modes => think about how they’d work + a general structure

**Arena:**

* Improve the graveyard
* Make sure I can *set* different parameters for each map, so some arenas can be *bigger* than others. (Smaller player starting size, smaller ranges, etc.)

**Nice features:**

* Also apply “shoot away vec” to the remaining player. (Use a “knockback force” approach on their kinematic body.)
* Slowly fade away the rubble (on game modes where we *don’t* need it?)
* Give dead players *something* to still do.
* **IDEA:** Other things to throw? (Like the dumplings?)
  + That might also simply *deflect/protect against* knives, instead of slicing things themselves.
* **IDEA:** Different *ground terrains*. As long as you’re on that terrain, you are influenced by its special effect (whatever it is).
* If teams are enabled (there is a team with more than 1 player), show player teams on them??
* AI bots => controller button for *removing* them??
  + Create Human/Bot version for all player colors, pick correct one.
* Mobile version as well?

**Screens:**

* Show summary of current configuration on main screen
* Create deep-dive settings screen. (Same concept as Totems, maybe clean up the structure a bit.)
* Create Pause Menu.

**Extra settings/Rules:**

* 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
* Disable the “flashing” effects.
* Shrink area => after a while, the game area shrinks, forcing the game to an end
  + Really only makes sense for deathmatch, right?