Character/Player design

Simplify the design to reduce detail and use simple geometric shapes ('like 'thomas was alone')

Player consists of - body + bat, may be circles

 ← which way is it facing? Add tail to identify direction

Maybe too simple? Could hollow out centers/make it look like its made of neon rods.

Maybe have glowing segments in the center to indicate health

 Black out/remove segment on hit, possible invunility frames indicated by blinking

Guard? Actions player can take :- move, rotate, swing bat, Guard (loss points but no damage)

Possible customising shapes/alt costumes

Sprites or models? 3D Model should be quick to make + interesting perspective effect. Sprite would be easier fin to render but may take longer to make look right

6

Final design Idea

bat/on/bat. Swings and Guards

 ← Main body do not hit or ☠

alt shapes include

Inner segment indiclect health

 or + Make rare

Colour options :

 x black + blue don't stand out
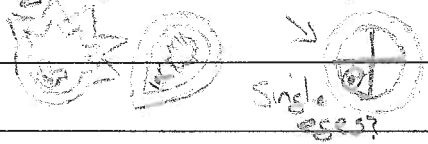
 ✓ blue cold doesn't work if its dark red + green works

 Yellow + purple/magenta works

Glow effect may make dark colours stand out

7

Enemy design

turret units : Stationary, but still needs to rotate

moving units : moves while shooting, can't reflect
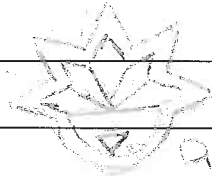
reflecting unit : has a Reflector like the player

Boss unit : unique enemy with a lot of health

enemys have a consistent colour scheem to destinguish from player. Mini Splatoon?

have enemys be a consistent colour and player becomes another colour for the level

Allow player to use enemy models in cut scene

(cutscene) Idea

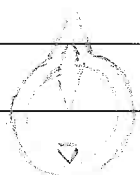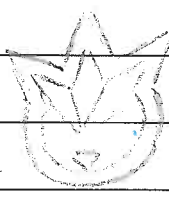enemys are circles with spikes. Number of spikes indetifys the type of enemy. The direction the enemy faces is dictated by the internal pointer, acting as eyes. Health is measured as X coloured segments on the backs of the enemy.
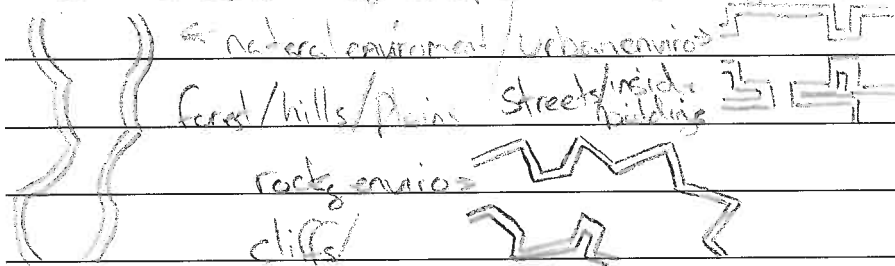

Enviroment design

Keeping to the idea of simple geometric shapes, not much detail. Would work near like the character. Level shape may depend on stage. eg
- natural enviroment / urban enviroment
- Forest / hills / Plain, street / inside building
- rocks enviro = cliffs /

Could have sections for enemys/items to hide behind. Maybe small detail outside like walls. eg enviroment details or hints.   One large enviroment may cause less line. collision box to add / remove areas of the level (similar to Unreal endless Runner tutorial 102/)
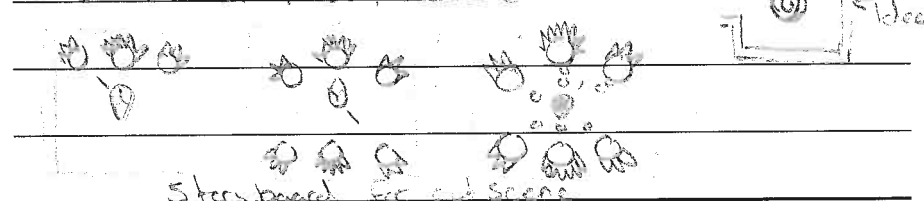
one issue with that is enemy may respawn if back tracking. Either keep or end kill counts. prevent enemy spawn if kill count is X.
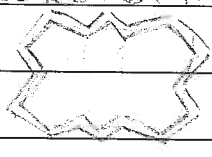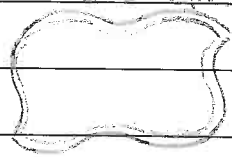
End of level could either be a portal / Goal or an animated cut scene.

Goal Idea

storyboard for cut scene

Arena Design

Arenas are like... matches. Similar to a tennis court, but the net is a wider area [diagram] that the players can't enter. The ball bounces off of the walls. Maybe different arena shapes based on the levels.

[diagram of two arena shapes] They could be unlocked by playing that level.

Players need to be able to choose their... arena before starting level/customise themselves.

Hazards would be introduced in some arenas to make things more interesting. These hazards would effect the ball, not the player directly.
- Portal: that changes balls position not velocity, walls that you go through from the side.
[spiral diagram]

Hazards at all arenas aren't important though, key is letting two players to be in a single match to start.
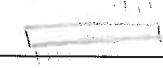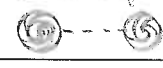[spiral diagram]

Hazard design

environment based obstacles that the player may not be able to exist destroy to get past. Based on gameplay, most will effect the trajectories of the ball instead of harming the player directly.
[rectangle diagram]: moving/rotating wall - limits the players movement & may get in the way of the ball. forces players to predict possible trajectories.
[spiral] - - - [spiral]: Portals - changes balls position, retains velocity. could throw players contained to coordinate... off screen could be used by players in not tricky style.

[diagram]: electrifying floor: damages the player directly, triggers after X seconds or instantly with it. Primary use is to force players to keep moving or restrict player movement without walls to stop the ball

[blob diagram]: Molases: slows/reduces the speed of the ball. like portals can assist or interfere with the player as would provide better control as the ball, but easier to predict and deflect.

The Ball

A key part of this game that I should have talked about sooner.

Three style idea...

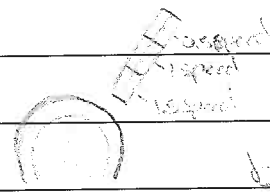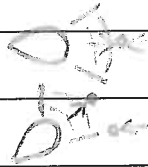ball of particles, dynamic object, regular object
style won't effect the physics of the ball
Interactions with player - direction the player is facing effects the ball direction
speed of the ball after hit can be dependent on where on the ball it hits

Interactions with environment: bounces off as well at mirror angle. Contact with the player or enemy unit removes one unit of health.
enemys units spawn a ball infront of themselves to fire at the player.
In arena mode, roulette for who the ball spawns infront of. Spawns in a consistent area on that side of the arena.

Gameplay UI Design

Health is displayed as coloured units on the character. Arbitrary score displayed in top left/ bottom right?
As game is not primarily score based & all important info is already provided is a ui needed?
Maybe in additional game mode? But current focus is vs mode and Adventure mode for completion first.
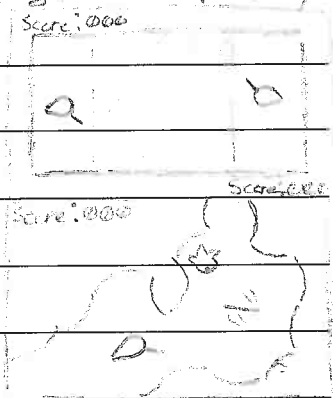
Game Engine choice

Self made one:
+ only has functions I need
- most likely don't have time to make one

Unreal 4:
+ prior experience 'working' in unreal
+ blueprints + coding mode are interchangeable
- blueprint mode may be too simple

Unity:
+ More code based so looks more technical
- no prior experience so is ... it.

Conclusion:- I would prefer to use Unreal as I as my prior experience would make it easier to use. My initial plan is to use blueprint mode to get bulks of the game made, and finetune/add details using the code mode.

Controls ideas

Action	Keyboard	Xbox	PS4	Switch
Move player	A S D	L	L	L
Rotate player	< v >	R	R	R
Swing bat	Spacebar	RT,RB	RT,R3	RT,FE
Guard	Ctrl	LT,LB	LT,LB	LT,LB
Nav menu	ASD <v>	L R	L R	L R
Select/confirm	Spacebar/enter	Y/B	A/O	X/A
back/deselect	backspace/esc	X/A	□/X	Y/B

5+6+7 - Simple player controls with 2/3 gameplay modes, based on it

3+4 - encourage planning for set levels. Maybe a story?

1+8 or 2+8 - by using complication on top of complication :D

7+9 - Soooo... Storm world dig?

4+10 - players make cards? OR program strategy for their deck? (automate)

Prefered Idea

5+6+7

A top down view game using simple geometric shapes and gameplay based on "Dead Mans Volly". Dead Mans Volly consists of two characters 'parrying/reflecting' a projectile between each other until one 'misses' (or) tires, at which point the projectile impacts then causing damage. This style of gameplay/combat was devised and named by the 'Legend of Zelda' Franchise.

Two gameplay modes can be implemented. The first is a versed match against either a computer or a user controlled character. The objective is to reduce the opponents health to 0, though other objectives maybe included. This is primarily local vs (same screen) however online will be considered. The second mode would consist of exploring level/environments while defeating simple enemies and (possibly) bosses. This mode would have a story that could either be told through narration (similar to the games theme was done) or through clues in the environment. Players could be rewarded for progressing the story with customisation for their player controlled character, extra difficulty options or additional environments for the Versus matches.