



INTRODUCTION TO GAME DESIGN

CSD2511 – Week 09

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Before we begin

- Use the first 15 minutes to settle in
 - Sign your attendance
 - Log into your workstation
 - Log into Moodle, specifically CSD2511 module
 - Log out from your game, application, communication, chats
 - Prime yourself physically for the next hour, ie. Finish your food, fill up your water, visit the restroom, get comfy
 - Prime yourself mentally for the next hour, ie. Recall what happened during last week's session, put a save point on any ongoing conundrums, meditate on what to do this morning

Today

- Lab activity – 90mins
 - 2 rounds
- Pandemic (Homework)
 - Online: <https://tabletopia.com/games/pandemic-north-america>
 - Print&Play: https://images.zmangames.com/filer_public/48/20/482039b2-4b30-4fe9-9cf8-63ba8badc306/pandemic_hotzonena_printplay.pdf
 - Solo Rules: https://images.zmangames.com/filer_public/7c/6e/7c6eba67-ad9a-4690-a93d-791ffe094c24/hot_zone_solo_rules.pdf
 - Rule book: https://images.zmangames.com/filer_public/28/27/282708b6-502a-4112-abbb-2623349d0fe3/pandemic-hotzone-na_rules.pdf

Today

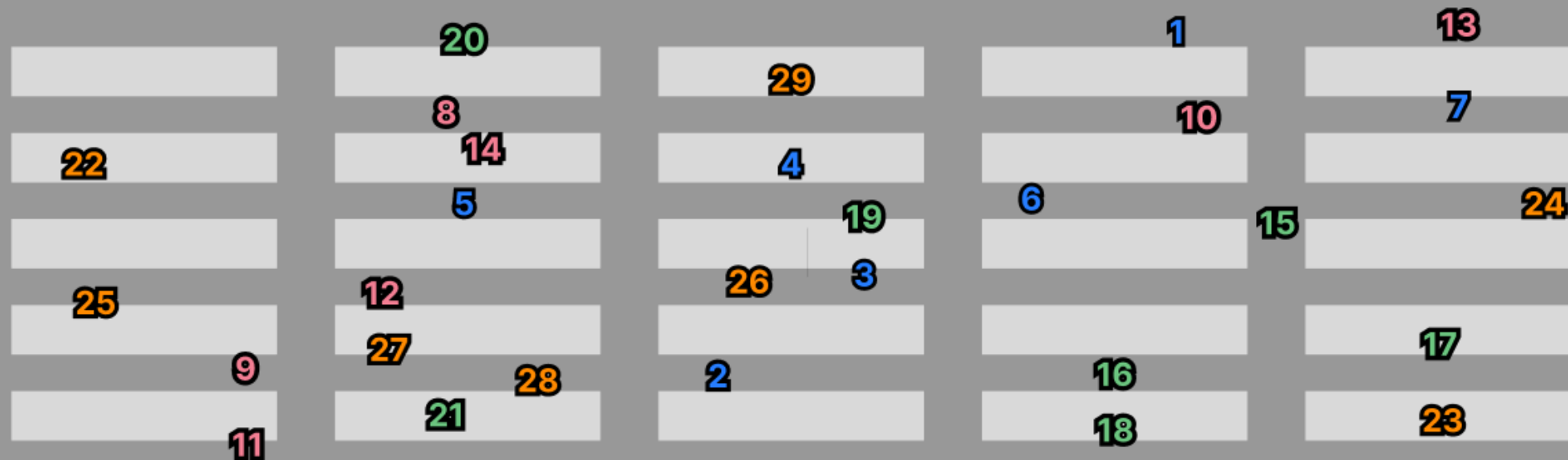
PASCAL

Screen 1

Presenter Table

Screen 2

Indicate your team's current positions! Important for locating your next opponent





US vs IT

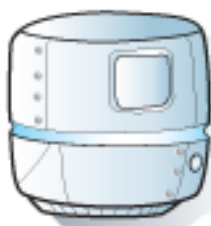


Let's Play

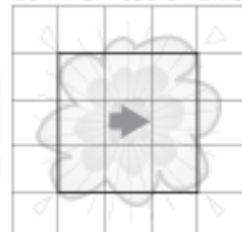
Let's Play – Stone Librande's “Us Vs It”

- “Program” a BOT to fight against!
 - *Strive for DRAMA, not for easy wins*
- As a team, fill up the bot's programming sheet
- (ROUND 1)
 - Set up the bot on the board
 - each team member controls a TANK to destroy the bot
 - Take a picture of your programming sheet
- (ROUND 2)
 - After a match, TUNE the bot's programming
 - Test it again!
 - Take a picture of your programming sheet
- Upload your programming sheet to FIGMA

► BODY



DEATH EXPLOSION GRID:



When hit points reach 0 the robot explodes.

HIT POINTS:



ACTION
ORDER:

ACTION NAME:
(Laser, Fist, Mine, Rotate or Move)

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

MAXIMUM ACTIONS PER TURN

► LASER EYE



Shoots closest target
in a straight line

DAMAGE GRID:



EYE TRIGGER:

► FAST



Attacks all adjacent targets

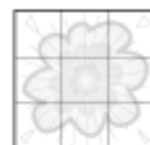


FIST TRIGGER:

► ATOMIC MINE



Drops in Robot's square



DROP TRIGGER:

EXPLOSION TRIGGER:

► ROTATE 90°



► MOVE

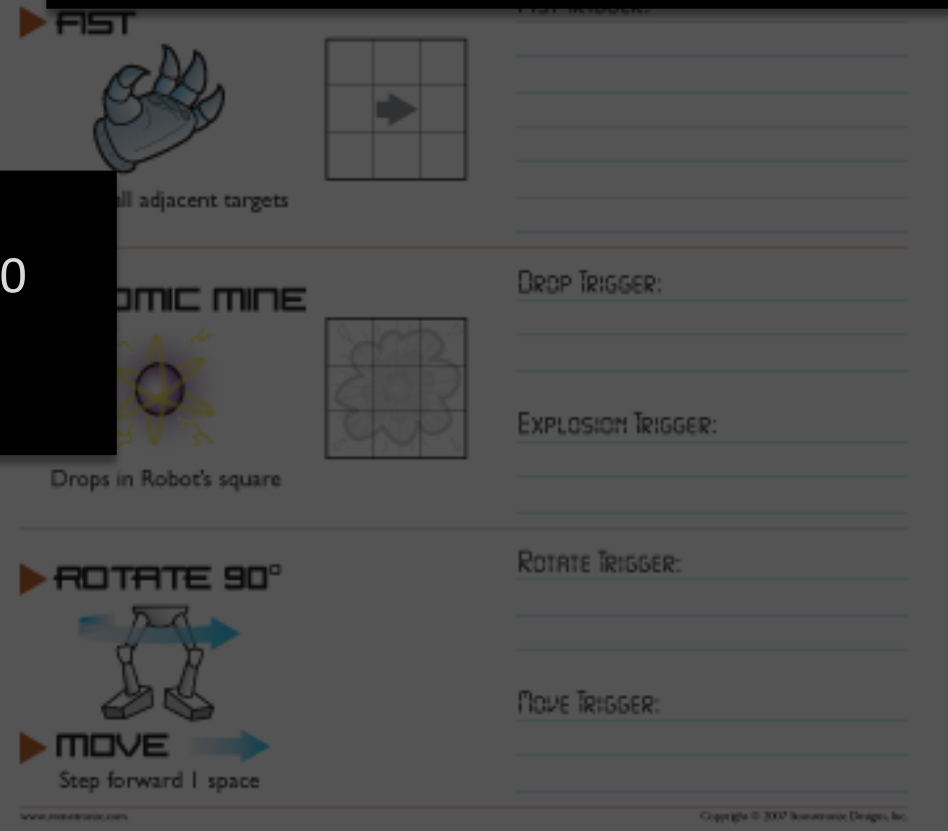
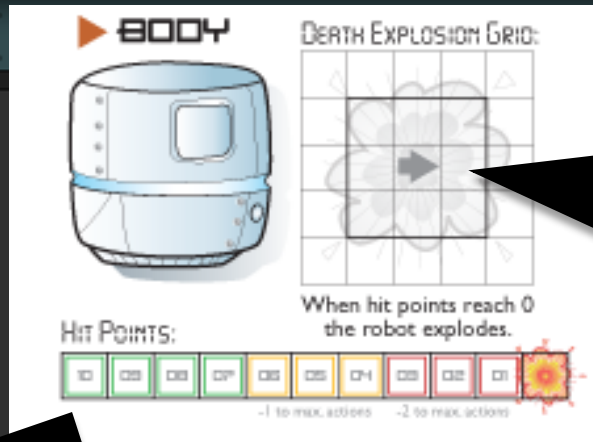
Step forward 1 space

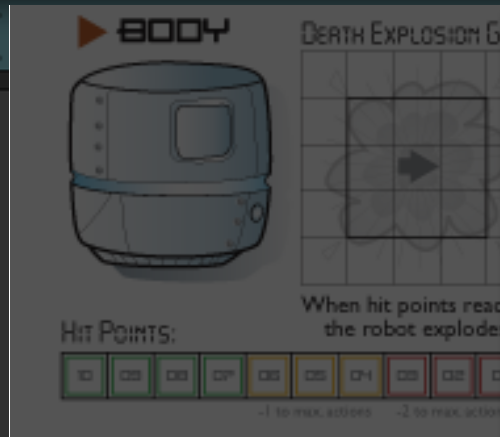
ROTATE TRIGGER:

MOVE TRIGGER:

- When the bot's health reaches zero, it explodes! Colour in the squares that represents its blast area
- You may write unique damage values in each square

- Bot's health counter starts at 10
- Game ends when it reaches 0





- Fill up all 10 actions using the action list on the right
- Actions are carried out in sequential order, 1 to 10

ACTION ORDER:	ACTION NAME: (Laser, Fist, Mine, Rotate or Move)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

MAXIMUM ACTIONS PER TURN



- Limit the number of actions the bot can take in a single turn

- These are the only 5 possible actions for the action list

- You may set auto-triggers for the actions

▶ **LASER EYE**

▶ **FIST**

▶ **ATOMIC MINE**

▶ **ROTATE 90**

▶ **MOVE**

▶ **LASER EYE**



Shoots closest target in a straight line

DAMAGE GRID:

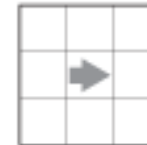
▶							
---	--	--	--	--	--	--	--

EYE TRIGGER:

▶ **FIST**



Attacks all adjacent targets



FIST TRIGGER:

▶ **ATOMIC MINE**



Drops in Robot's square



DROP TRIGGER:

EXPLOSION TRIGGER:

▶ **ROTATE 90°**



ROTATE TRIGGER:

▶ **MOVE**

Step forward 1 space

MOVE TRIGGER:

- Shoots CLOSEST TARGET in a STRAIGHT LINE

▶ LASER EYE



Shoots closest target
in a straight line

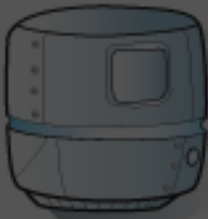
Eye Trigger:

Damage Grid:

▶									
---	--	--	--	--	--	--	--	--	--

- Fill in Damage value per square (Tanks – 4HP)

▶ BODY



DEATH EXPLOSION GRID:



When hit points reach 0
the robot explodes.

HIT POINTS:

10	9	8	7	6	5	4	3	2	1	0
----	---	---	---	---	---	---	---	---	---	---

-1 to max. actions -2 to max. actions

Action

Action Name:

▶ ATOMIC MINE



Drops in Robot's square



Drop Trigger:

Explosion Trigger:

Rotate Trigger:

Move Trigger:

▶ ROTATE 90°



▶ MOVE

Step forward 1 space

Maximum Actions per Turn

- Attacks ALL adjacent targets

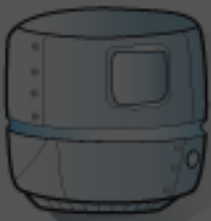
FIST



Attacks all adjacent targets

- Fill in Damage value per square for all squares
- Zero damage is possible

► BODY



DEATH EXPLOSION GRID:



When hit points reach 0 the robot explodes.

HIT POINTS:



ACTION ORDER:

ACTION ORDER:	ACTION NAME: (Laser, Fast, Mine, Rotate or Move)
1	
2	
3	
4	
5	
6	
7	
8	
9	

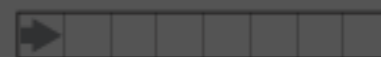
► LASER EYE



Shoots closest target in a straight line

EYE TRIGGER:

DAMAGE GRID:



► FAST

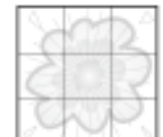


Attacks all adjacent targets

► ATOMIC MINE



Drops in Robot's square



DROP TRIGGER:

EXPLOSION TRIGGER:

► ROTATE 90°



► MOVE

Step forward 1 space

ROTATION TRIGGER:

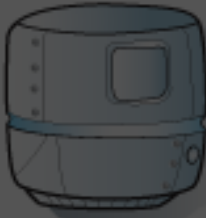
- Fill in Damage value per square for all squares

- Drops in Robot's square

- Fill in condition for exploding the mine


- Clockwise or Counterclockwise?

- Step forward 1 space




BODY

DEATH EXPLOSION GRID:



When hit points reach 0 the robot explodes.

HIT POINTS:




-1 to max. actions -2 to max. actions

ACTION ORDER:

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

ACTION NAME:
(Laser, Fist, Mine, Rotate or Move)


LASER EYE




Shoots closest target in a straight line

Eye TRIGGER:

DAMAGE GRID:




FAST



Attacks all adjacent targets

FIST TRIGGER:

ATOMIC MINE




Drops in Robot's square

DROP TRIGGER:


EXPLOSION TRIGGER:

ROTATE 90°



ROTATE TRIGGER:

MOVE



Step forward 1 space

MOVE TRIGGER:

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ROBOT GOAL LINE

NORMAL



Damage:

1	1	2	↑
---	---	---	---

03365 XBU



When Hit:

1 hit = Stun, miss next turn
2 hit = Damaged (flip tank over)
3 hits = Stun + Damaged
4+ hits = Destroyed

DAMAGED



Page:

123

03365 XBU



2023-11-17

1 hit = Stun, miss next turn
2+ hits = Destroyed

Pick TWO ACTIONS per tank:

A) Shoot in a straight line

B) Move forward

C) Rotate 90 degrees

HIT POINTS:

- | to max. actions:

-2 to max. actions:

10

09

03

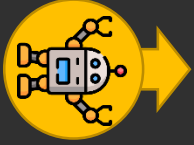
22

5

4

5

ROBOT START



Continue performing the actions on the list until the robot reaches his maximum actions per turn or you reach the end of the list. The robot's turn ends.

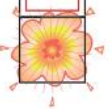


HIT POINTS



-1 to max actions:

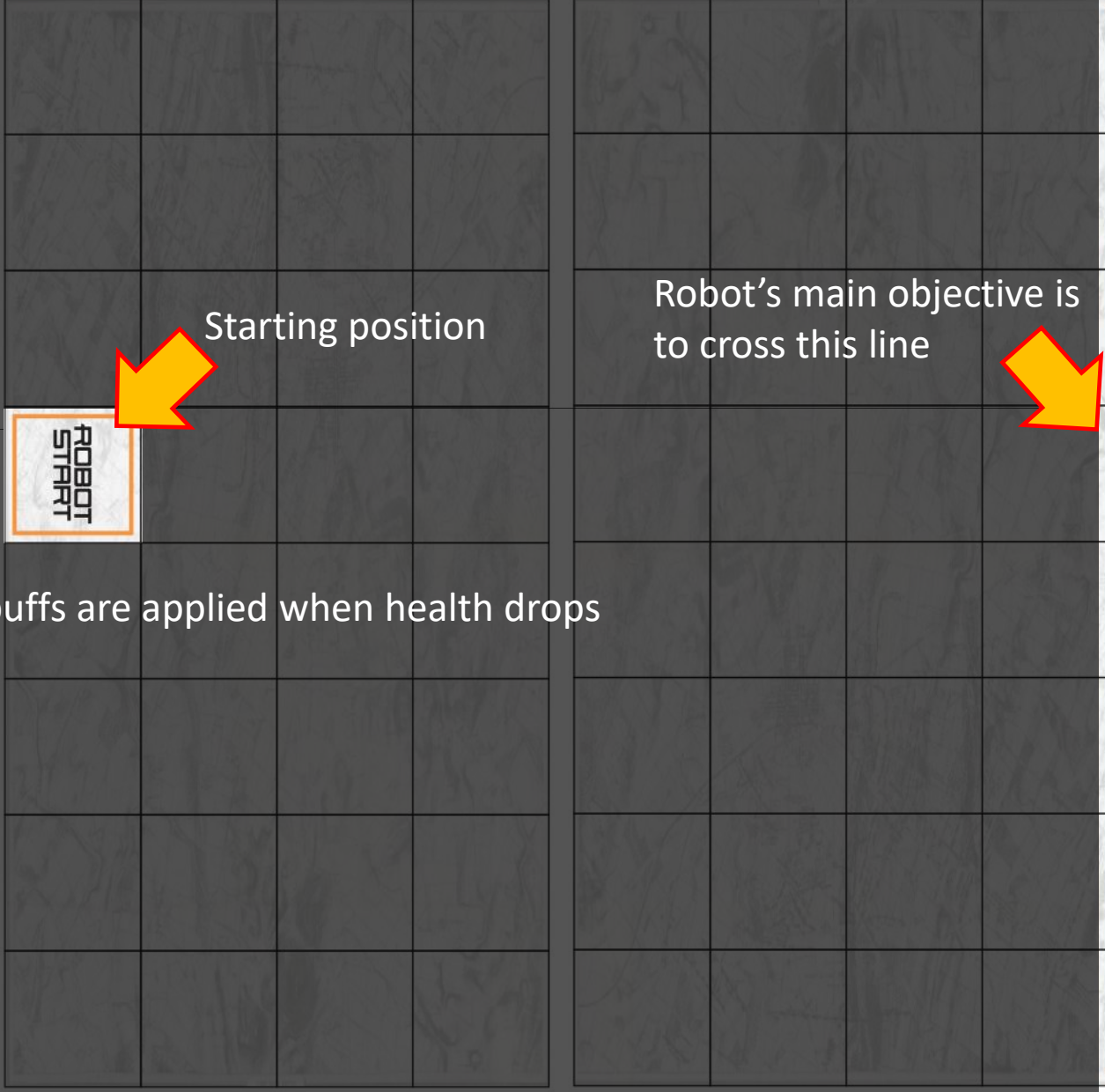
-2 to max actions:



ROBOT

Each turn the robot attempts to perform the actions on his list in order from 1 to 10.

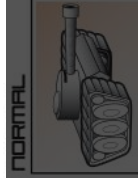
Look at each action and determine if it triggers. If it does then perform that action and the robot uses 1 of his action points.



ROBOT CORAL LINE

ROBOT CORAL LINE

NORMAL



DAMAGE:

2 1 1

MAX SPEED:

2

WHEN HIT:

1 hit = Stun, miss next turn
2 hit = Damaged (flip tank over)
3 hits = Stun + Damaged
4+ hits = Destroyed

DAMAGED



DAMAGE:

2 1 1

MAX SPEED:

1

WHEN HIT:

1 hit = Stun, miss next turn
2+ hits = Destroyed

TANK

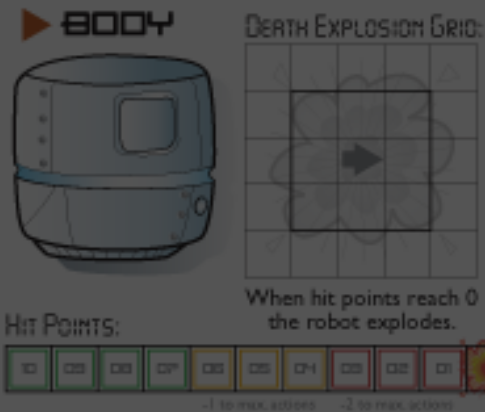
Pick TWO ACTIONS per tank:

- A) Shoot in a straight line
- B) Move forward
- C) Rotate 90 degrees

まずい

mazui
[adj]: not tasty

朝ごはんはまずかった。
The breakfast was not tasty.



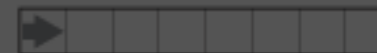
▶ LASER EYE



Shoots closest target

Eye Trigger:

DAMAGE GRID:



ACTION
ORDER:

ACTION NAME:

(Laser, Fist, Mine, Rotate or Move)

- 1 ▶ MOVE
- 2 ▶ MOVE
- 3 ▶ MOVE
- 4 ▶ MOVE
- 5 ▶ MOVE
- 6 ▶ MOVE
- 7 ▶ MOVE
- 8 ▶ MOVE
- 9 ▶ MOVE
- 10 ▶ MOVE

10

MAXIMUM ACTIONS PER TURN

▶ ATOMIC MINE



Drops in Robot's square

Drop Trigger:

Explosion Trigger:

▶ ROTATE 90°



Rotate Trigger:

▶ MOVE

Step forward 1 space

Move Trigger:

Remember to design for DRAMA!

Choose any starting position and orientation for your tank

ROBOT

Each turn, a robot attempts to perform the action on his list in order from 1 to 10.

Look at each action and determine if it triggers. If it does, perform that action and the robot uses up his action points.

Continue performing the actions on the list until the robot reaches his maximum action points or you reach the end of the list. The robot's turn ends.

HIT POINTS

10090807060504030201

-1 to max actions: -2 to max actions:

ROBOT CORAL LINE

WHEN HIT:

1 hit = Stun, miss next turn

2 hit = Damaged (flip tank over)

3 hits = Stun + Damaged

4+ hits = Destroyed

MAX SPEED:

2

DAMAGE:

211

NORMAL

DAMAGED

TANK

Pick TWO ACTIONS per tank:

A) Shoot in a straight line

B) Move forward

C) Rotate 90 degrees

ROBOT CORAL LINE

Debuffs

Possible Tank Actions per turn

Let's Play – Stone Librande's “We Vs It”

- Session 1 – 45mins
- Session 2 – 20mins
- Session 3 – Bonus round?

Let's Play – Stone Librande's “We Vs It”

- Upload your programming sheet to FIGMA:

<https://www.figma.com/file/xkJyDh6BDVxVTpv34LMzZ9/GalleryWalk?type=design&node-id=0%3A1&t=pk1y6p9BlpElKV63-1>

