

THE ESCAPE PLAN

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OVERVIEW







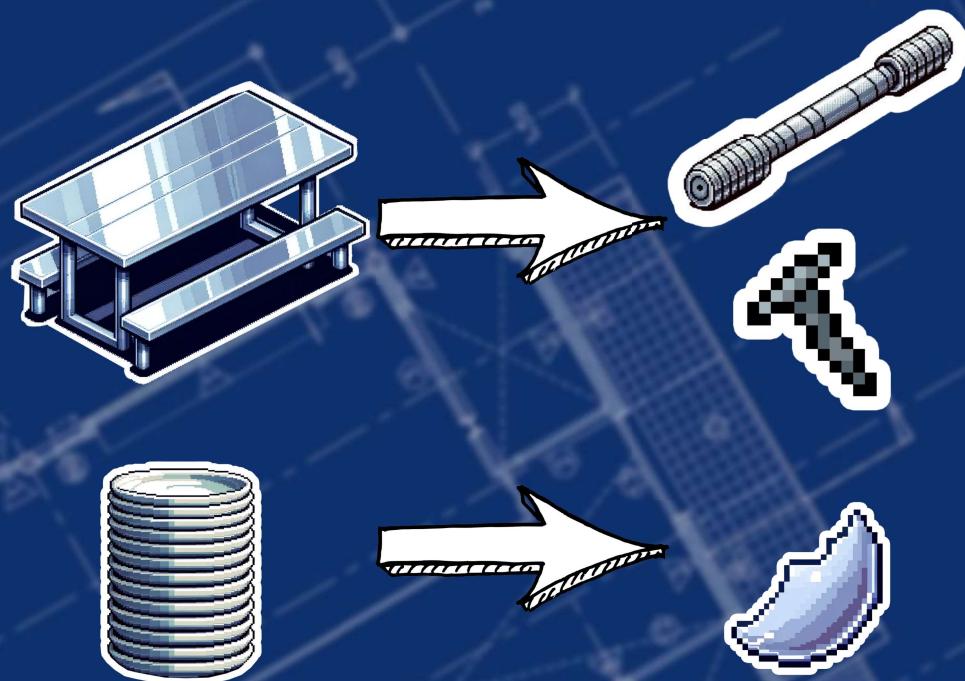
Pick Up Weapons



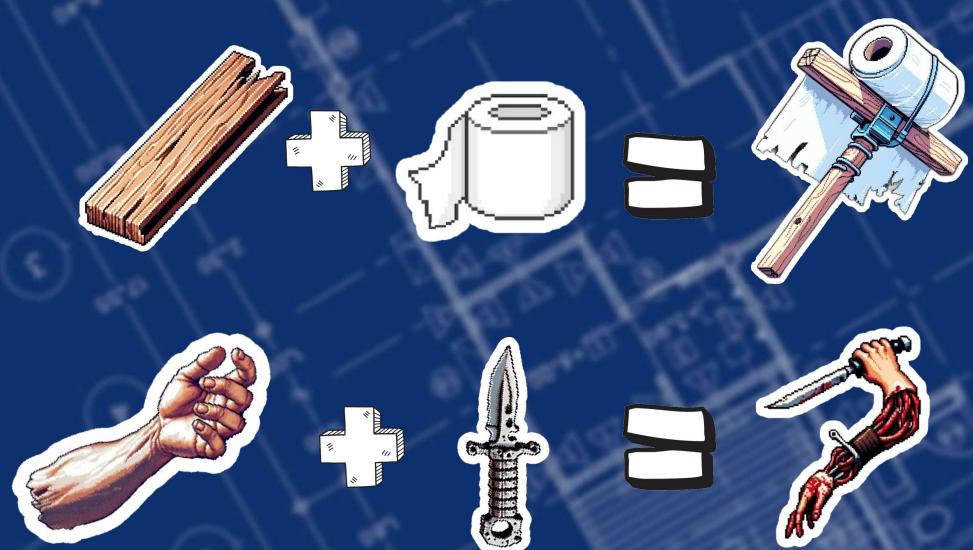
Kill Enemies



Escape



Breakable Environment



Fusion Weapons

THE GAME

Tutorialization

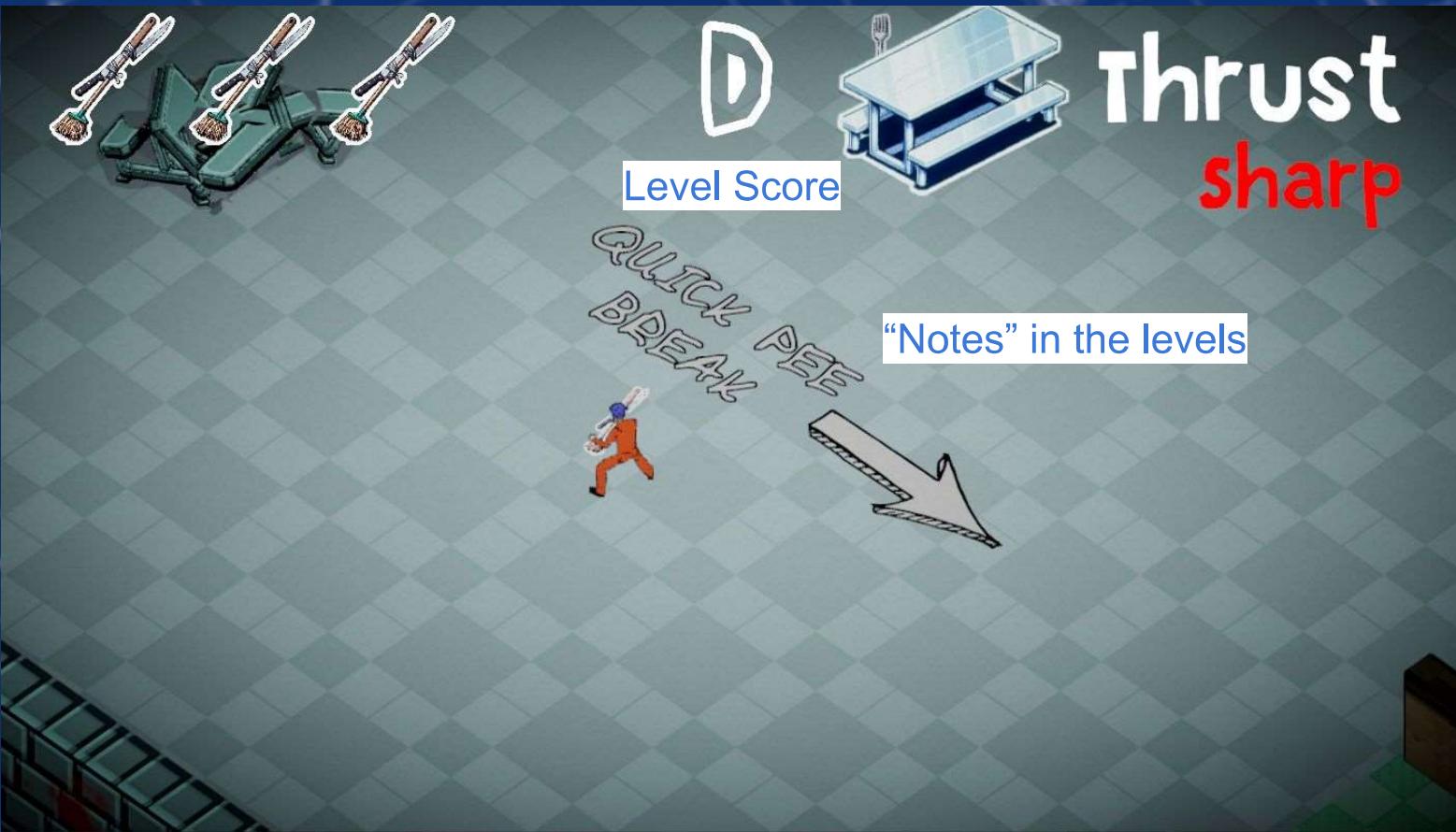


- Clear Instructions (color coded)
- Visual hints (subtle + obvious)
- Using “Escape Plan” aesthetic
- Mixing In Action
- Ramping Difficulty
- <https://youtu.be/Em0dpNybzS4>

Display Weapon Sprite + Durability

UI

Weapon Type + Sharpness



UI- Motion



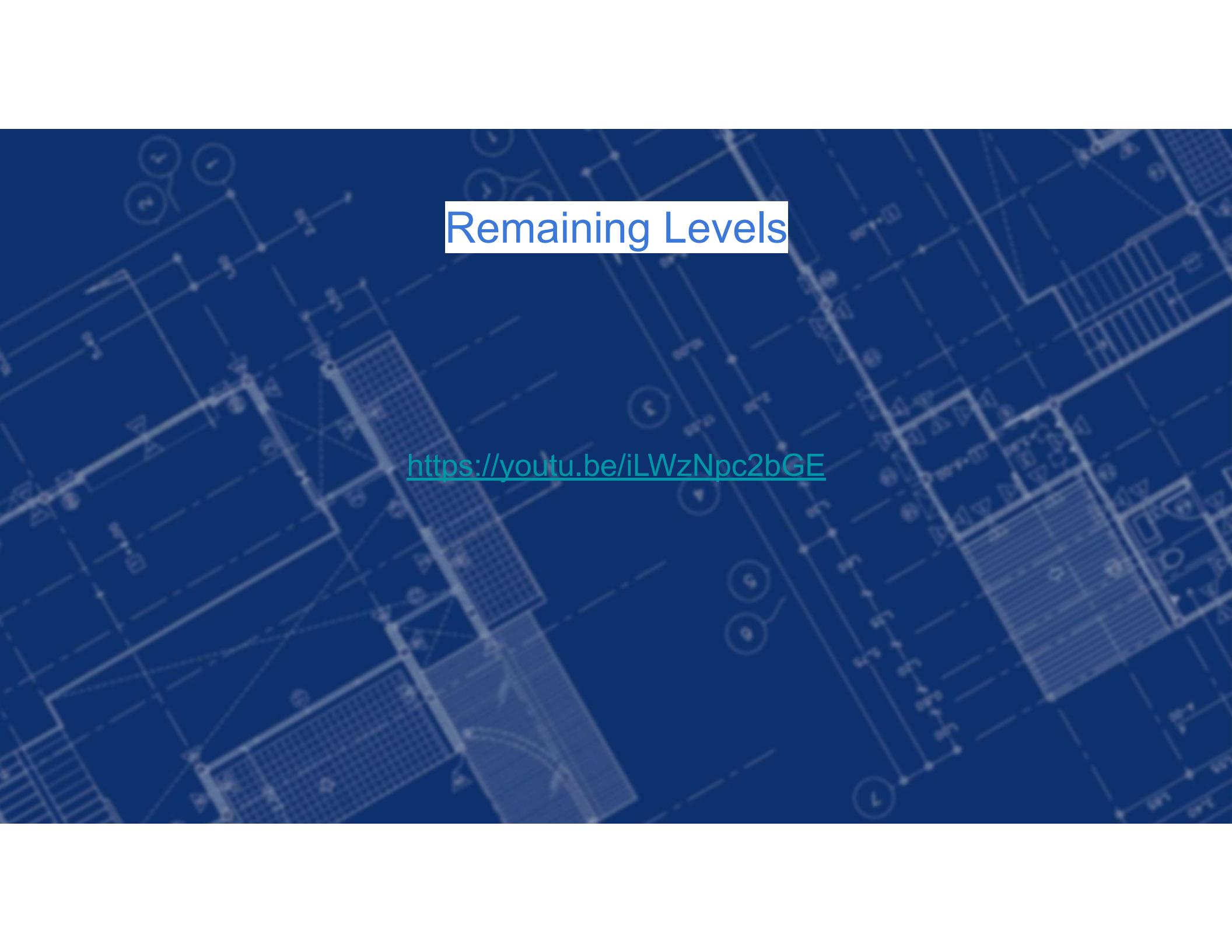
UI- Score





The Cafeteria

<https://youtu.be/atH2VLaaOfE>

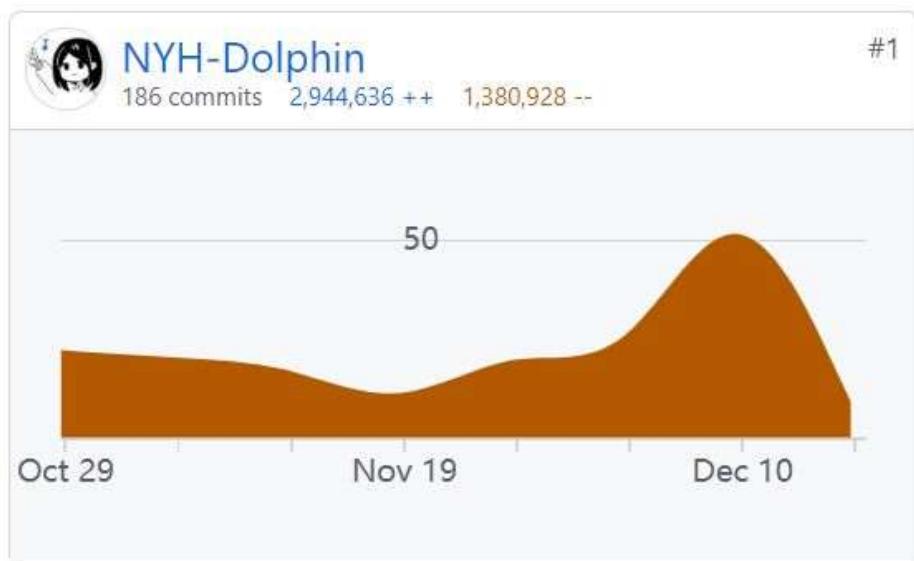


Remaining Levels

<https://youtu.be/iLWzNpc2bGE>

HOW IT CAME TOGETHER

Programming (Dolphin & Asad)



Programming (Dolphin & Asad)

- 6 Weapon Types
 - Slam, Throw, Thrust, Lob, Boomerang and Swing and their Behaviours
- Fusion System
 - Supporting Fuse one Melee and one Range Weapon together
- Player
 - Isometric Move and Attack
 - Animator
 - Enemy Detection and Attack
 - Weapon Detection, Fuse, Switch
 - Breakable Object Detection
 - Enemy Stun, Stomp and Execution
- Enemy
 - Nav Mesh for Walking
 - Animator
 - Player Detection, Chasing
 - Knockout and Death
- Breakable Object
 - Break Behaviour
 - Base Weapon Spawn
- Game System
 - Level Fadein and Fadeout
 - Score Calculation
 - Tutorial & Guide
- UI
 - Weapon Durability
 - Weapon Information
 - Fusible Weapon Hint
 - Score Display
 - Dialogue System
- Game Feel
 - Camera Shake
 - Timeline for Cutscene
 - Particle Effect, Blood Splash
 - Redesign Part of the Level and Layout
 - Light Effect and Laymask for detail control
 - URP Rendering Pipeline and Postprocessing
- Input System
 - WASD: Move
 - E: Switch Weapon
 - F: Fuse Weapon
 - Left Click: Attack

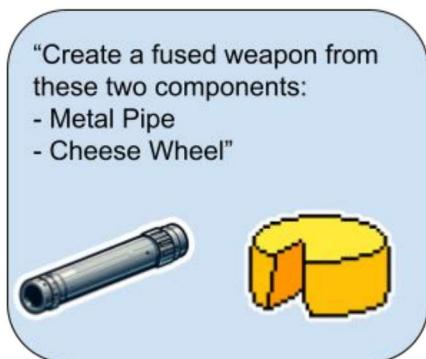
AI Weapon System (Tim)

Automated process to generate arbitrary weapon fusions

- Weapon art via Dalle-3
- Automated fusion process
 - Automatically generate prompts for fusion, manually select best
 - Store data in CSV, automatically read into fusion script



AI Weapon System (Tim)



Ask DALL-E 3 to generate sprite n times



DALL-E 3

Pass through background removal algorithm



Designer selects best and categorizes based on appearance

Add sprite and data to CSV file



melee	ranged	type	behaviour	sharpness	sprite_path
metal_pipe	cheese_wheel	melee	swing	blunt	metal_pipe-cheese_wheel.png
metal_pipe	fork	melee	thrust	sharp	metal_pipe-fork.png
metal_pipe	ice_cubes	melee	swing	blunt	metal_pipe-ice_cubes.png

CSV is automatically parsed by fusion script, creates lookup hashmap to retrieve sprite when fusion happens

AI (Tim)

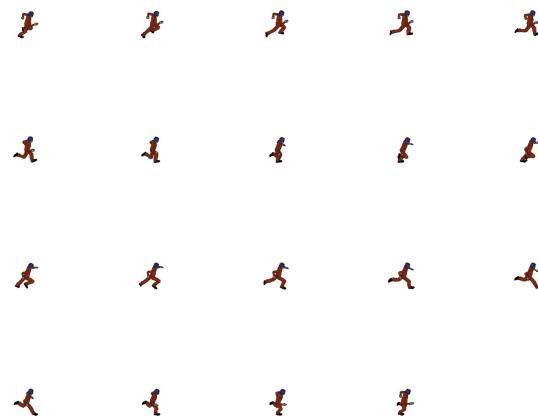
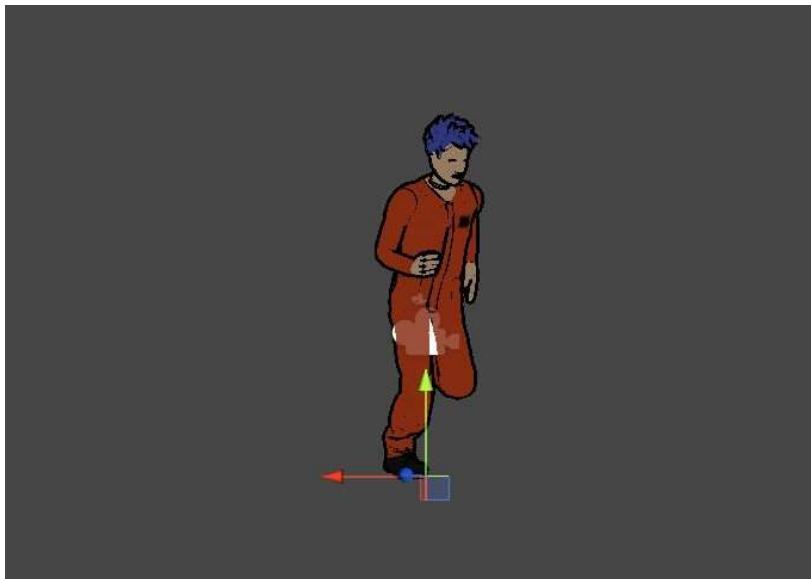
- 1-2 slides max
- **1 minute in length**
- Discuss how we got fusion
(again lol)
- Couple examples
- CSV + reading sprite name
system (easy to expand and
place in new levels)

Art (Chenny)

- 1-2 slides max
- 1 minute in length
- Discuss how we got animations
- Post proc/normal mapping
- Anything else that fits into this section in the time frame

Character Sprites (Chenny)

- Animations were created by capturing a 3D model from different angles
 - Similar to Dead Cells
- Used generic white slashes to handle attack animations
- Attempted to implement normal mapping, but ran into difficulties



Environment Reconstruction

Can you believe?

We reconstructed the environment of almost all the levels in the last week.



Environment Reconstruction

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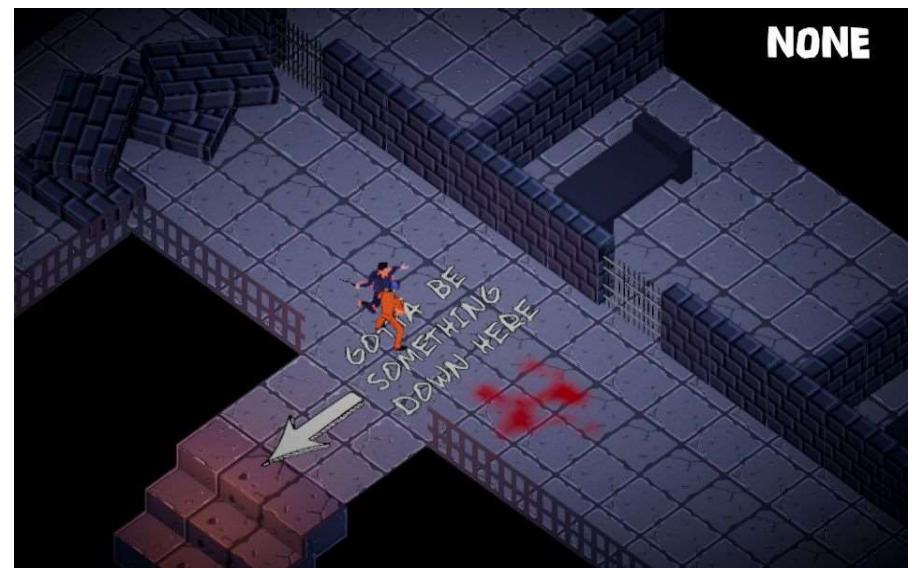
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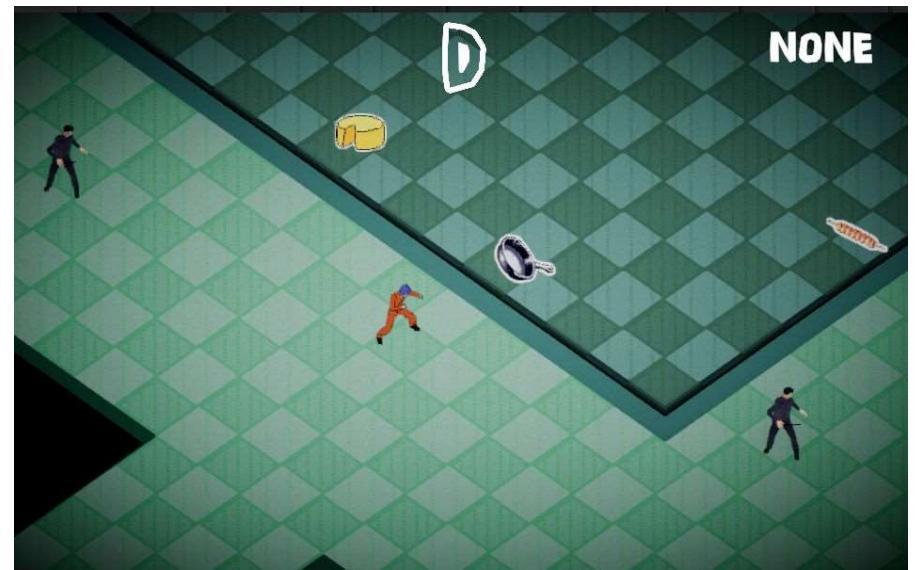
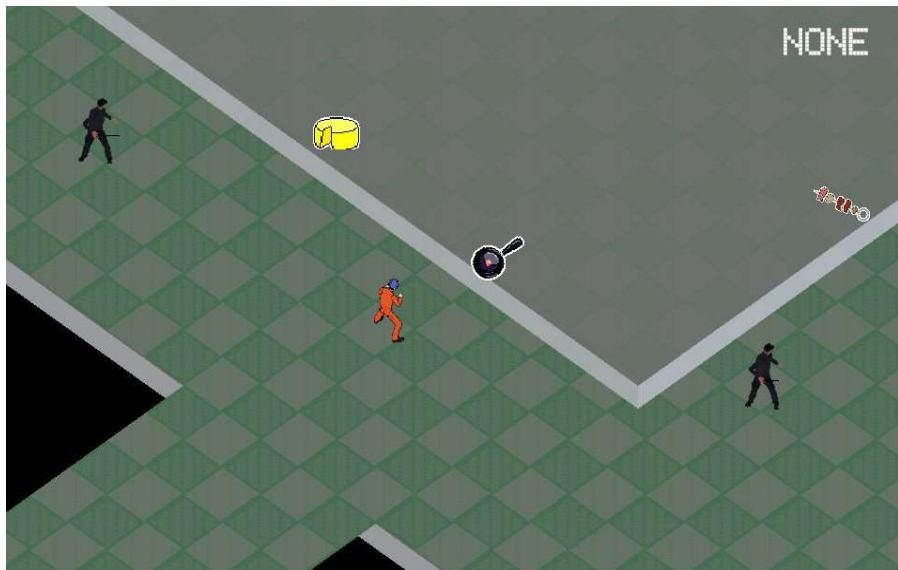
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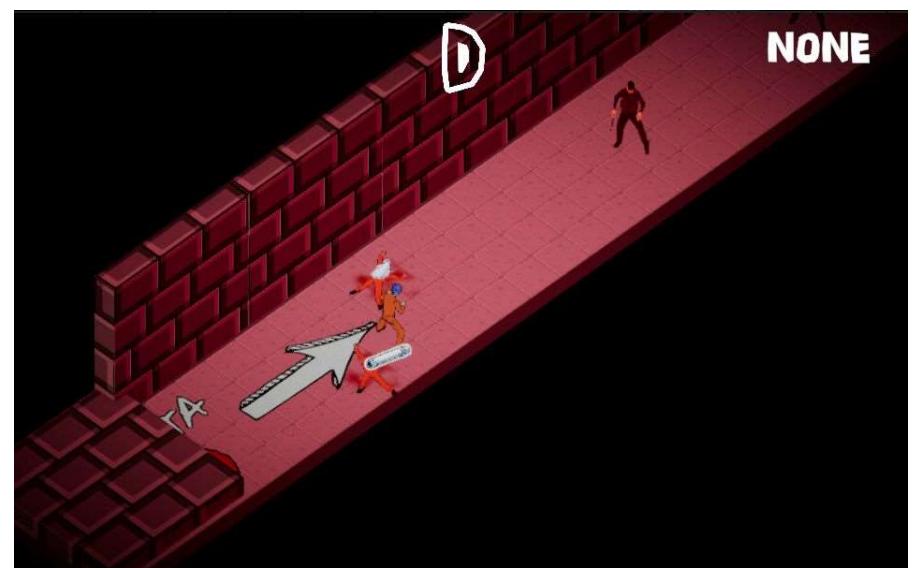
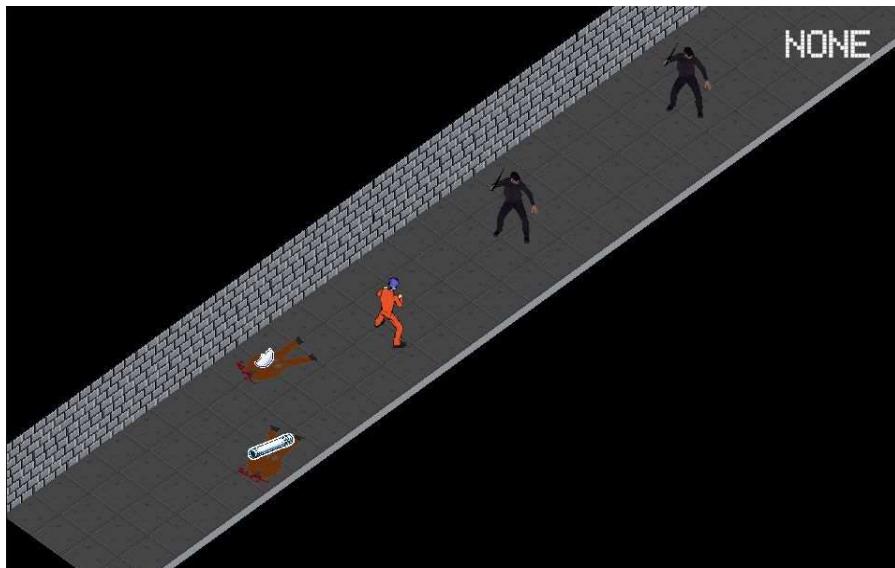
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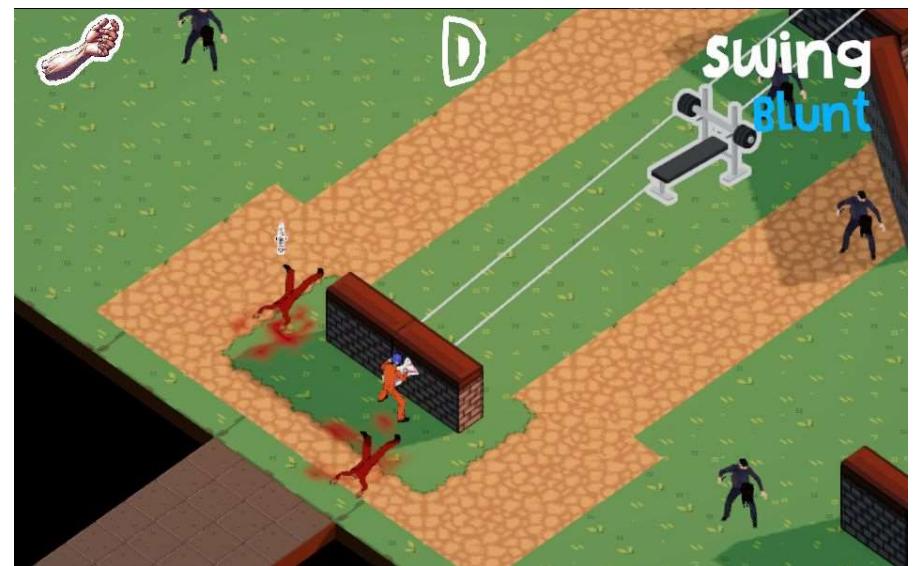
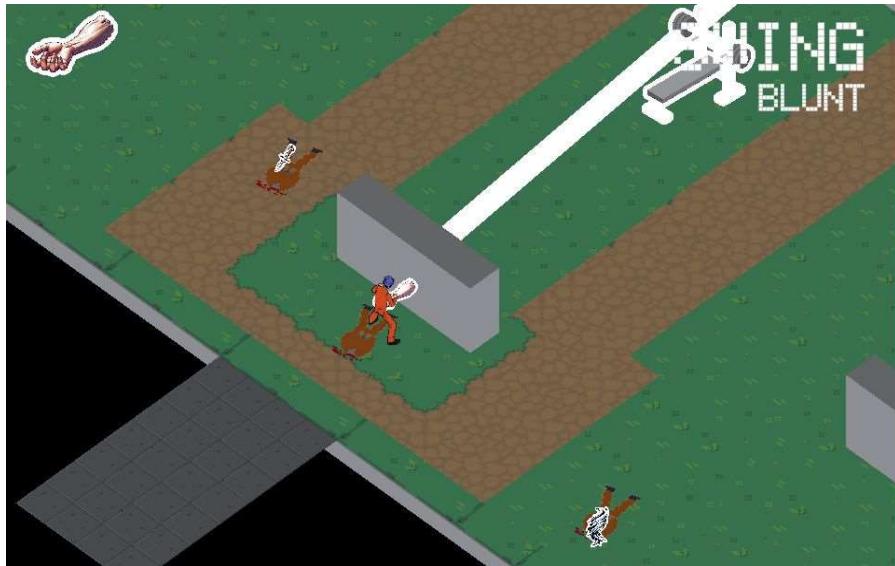
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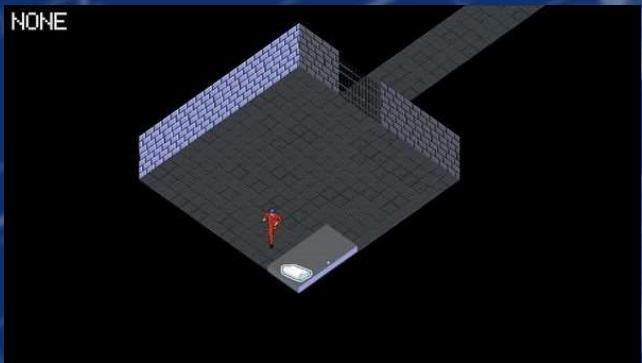
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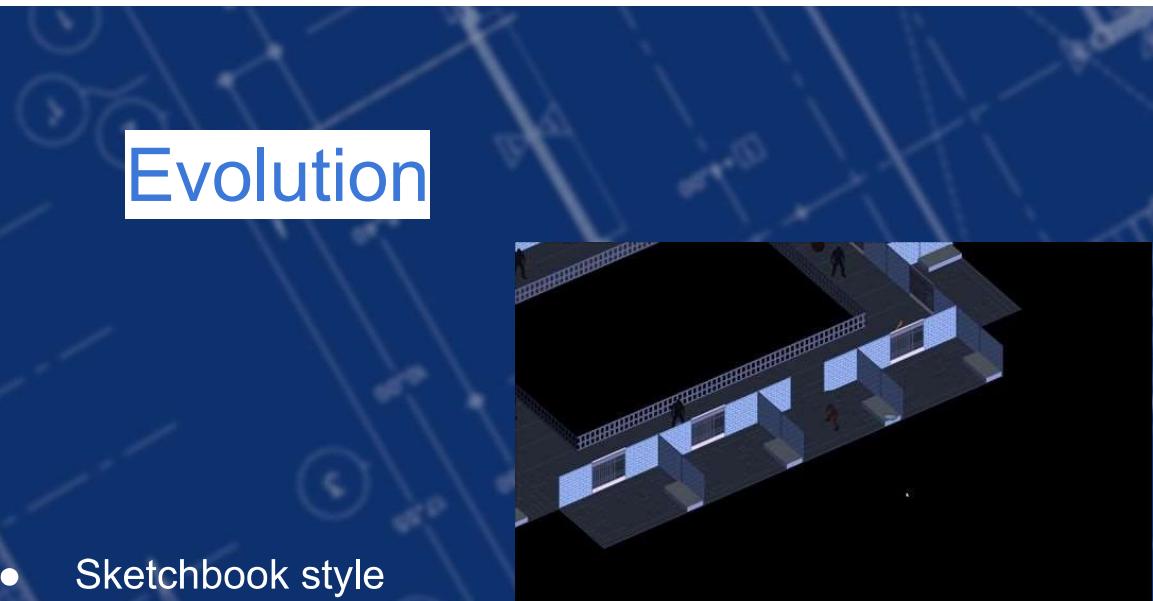
Evolution



Week 1



Week 4



Week 2

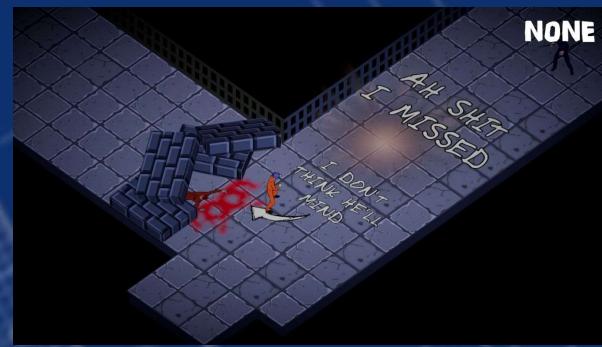


Week 6

Details



No sketchbook lettering in opening scene



Message + reload if tutorial failed



Object placement was often non-random

- Skip dialogue with multiple buttons
- Non-essential dialogue and cutscenes only play once (unless you restart the game)
- Sprint to enemies
- Knockback
- Range different for each weapon behavior
- Multiple control layouts

The Future

- Minor bug fixes, particularly on throwable objects
- Passive stats for items, making fused weapons more unique (stats carry over)
- More AI integration
- More levels, story