

MOONCRASH

Resetting The Immersive Simulation



Rich Wilson
Level Design Lead
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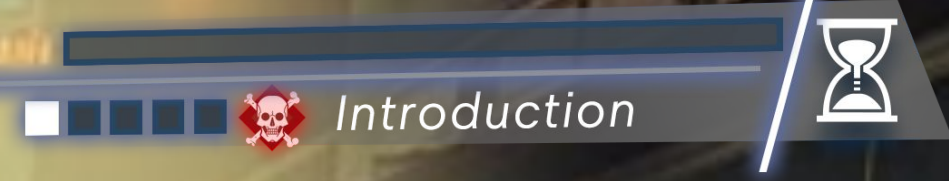


MOTIVATION
TO EVOLVE

PRESERVATION
OF CORE VALUES

ADAPTATION
TO NEW PROBLEMS

First, a brief digression...



Prey

- Immersive Simulation
 - Abilities and science gadgets
 - Fully explorable space station
 - Psychological elements
 - Grand moral dilemma



Introduction



Prey

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Introduction



Prey

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Introduction



3/4

LEFT

FRONT

RIGHT

BACK

P R E Y

ARKANE
STUDIOS

Bethesda

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Prey

- Immersive Simulation
- Abilities and science gadgets
- Fully explorable space station
- Psychological elements
- Grand moral dilemma

Introduction



Prey



- Immersive Simulation
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Mooncrash

- Mechanical extension of Prey
- Set in a moon base simulation
- Player has to escape the moon
- Multiple playable characters
- “Roguelike” framework

Introduction



65
88
100

Mooncrash

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Introduction



Escape Pod (12m)



SELECT A CREW MEMBER

Mooncrash



ENGINEER

Joan Winslow

Joan never met a machine she couldn't fix or improve, and isn't shy about trying a little 'impact calibration' on living things, especially the sort with tentacles. Joan can always summon a friendly turret.

Key Abilities: *Repair, Summon Turret, Machine Mind.*

DEFAULT LOADOUT



Wrench



Spare Parts

STORY OBJECTIVE

Escape with the Engineer using the Shuttle to unlock their Story Objective.

STATUS

HEALTH

150

PSI

50

ABILITIES PROGRESS



Introduction

12,100



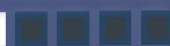
- Mechanical extension of Prey
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Esc Save and Exit

P View Progress

Enter Next

Mooncrash



Introduction



- Mechanical extension of Prey
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PAUSED

Dwarf Fortress



Introduction



What are immersive sims?



- a: View Announcements
- b: Building
- c: View Civilizations
- d: Designations
- u: Unit List
- m: Military
- N: Points/Routes/Notes
- w: Make Burrows
- p: Stockpiles
- q: Set Building Tasks/Prefs
- R: View Rooms/Buildings
- t: View Items in Buildings
- v: View Units
- n: Nobles and Administrators
- z: Status
- Tab: Move this menu/map
- ?: Help
- ;;: Movies
- r: Reports
- o: Set Order
- j: Job List
- s: Squads
- h: Hauling
- i: Zones
- H: Hot Keys
- k: Look
- ESC: Options
- D: Depot Access

Space: Resume .: One-Step

What are immersive sims?



LEVEL 1	SCORE 0	LIVES 3		HEALTH 100%	AMMO 8	
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MOTIVATION

TO EVOLVE

A young boy with light brown hair and striking blue eyes is peering through a small, rectangular opening in a weathered, light-colored wooden door. The boy's face is framed by the opening, and he has a curious, slightly mischievous expression. The door is set into a wall of similar wood, and the lighting is soft, highlighting the textures of the wood and the boy's features. In the top left corner, there is a dark grey rectangular box with the text 'Growing Beyond Our Domain' in white. In the top right corner, there is a blue progress bar with a skull icon and the word 'Motivation' next to it. The overall image has a cinematic, slightly grainy quality.

Why Roguelikes?



Deconstructing Our Game



Motivation



Deconstructing Our Game



Motivation



DLC Provides a Stable Launch Pad

- Tools and tech are mature
- Team is familiar with tools
- Mechanics are established



Motivation



Game Jam

SCORE! SCORE! SCORE!



Motivation



Game Jam




 Motivation



Game Jam



Weaver

Motivation

75
100
100

x21

Game Jam

Pet Mimic

Motivation

75
100
100

Pet Mimic
F Unsummon



PRESERVATION

OF CORE VALUES



Preservation



World Building and Storytelling

■ ■ ■ ■ ■ Preservation



Process Intensity Theory





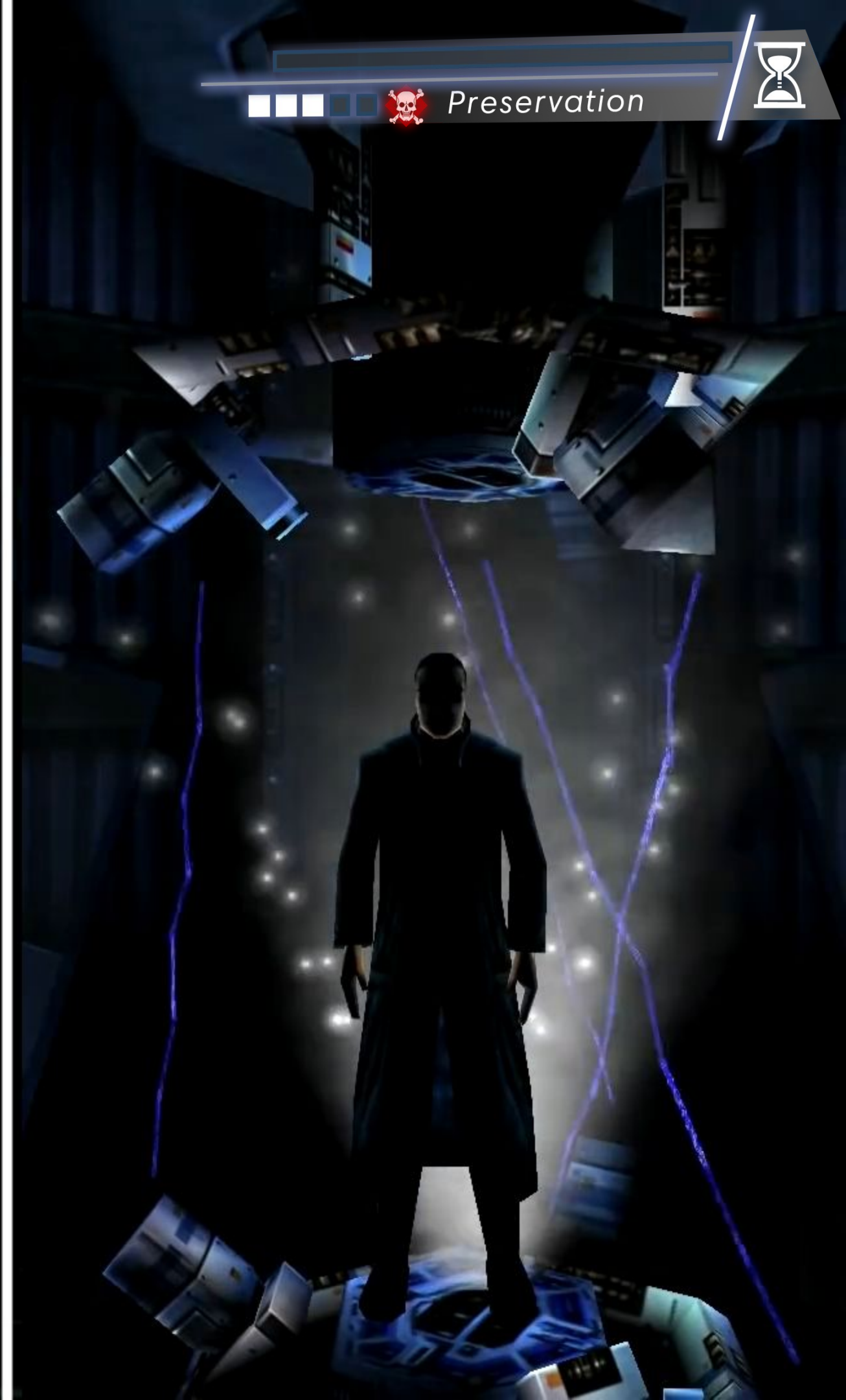
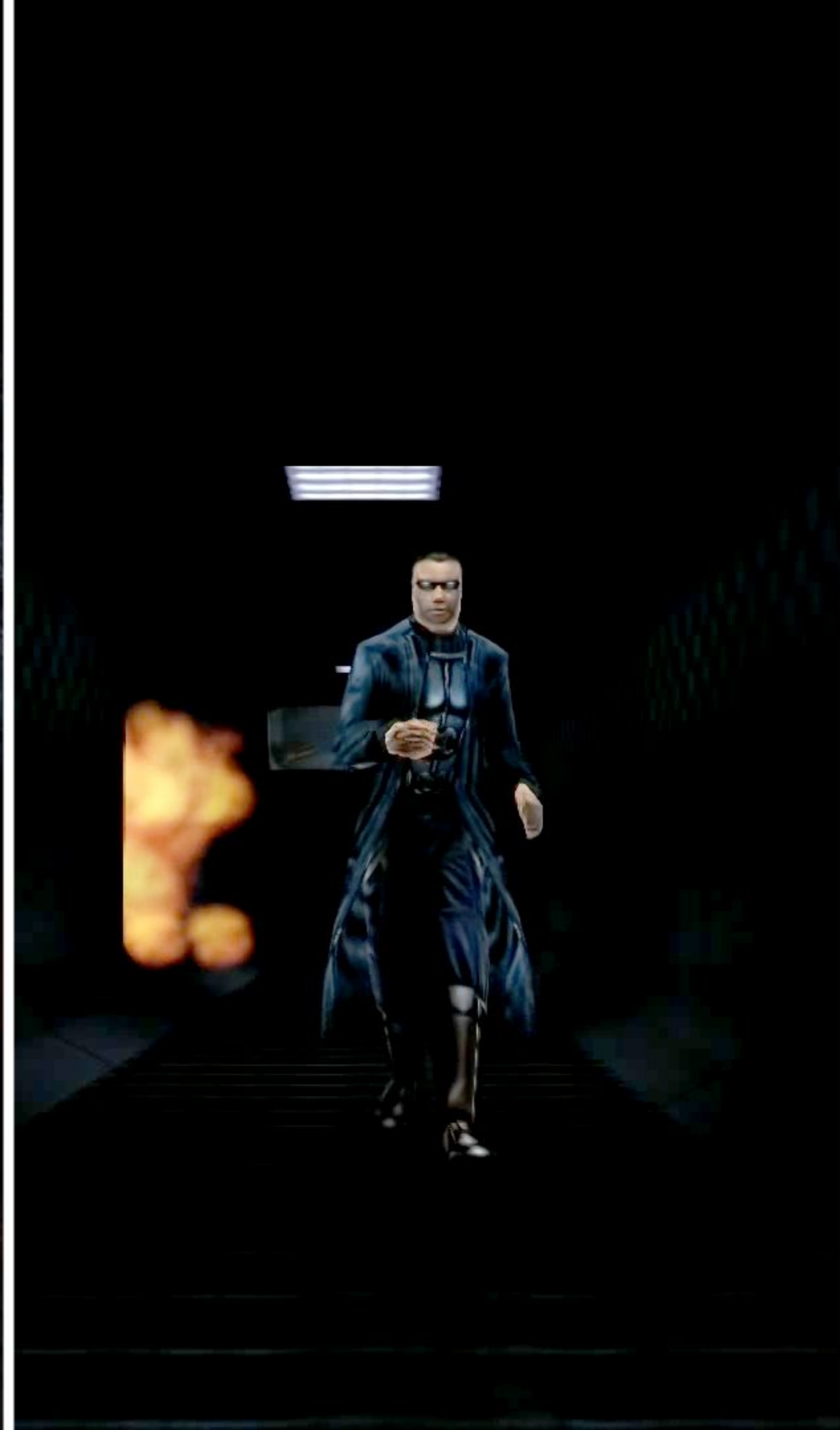
Process Intensity Theory

“Process intensity is the degree to which a program emphasizes processes instead of data. All programs use a mix of process and data. Process is reflected in algorithms equations, and branches. Data is reflected in data tables, images, sounds, and text. A process-intensive program spends a lot of time crunching numbers; a data-intensive program spends a lot of time moving bytes around.”

Player Agency



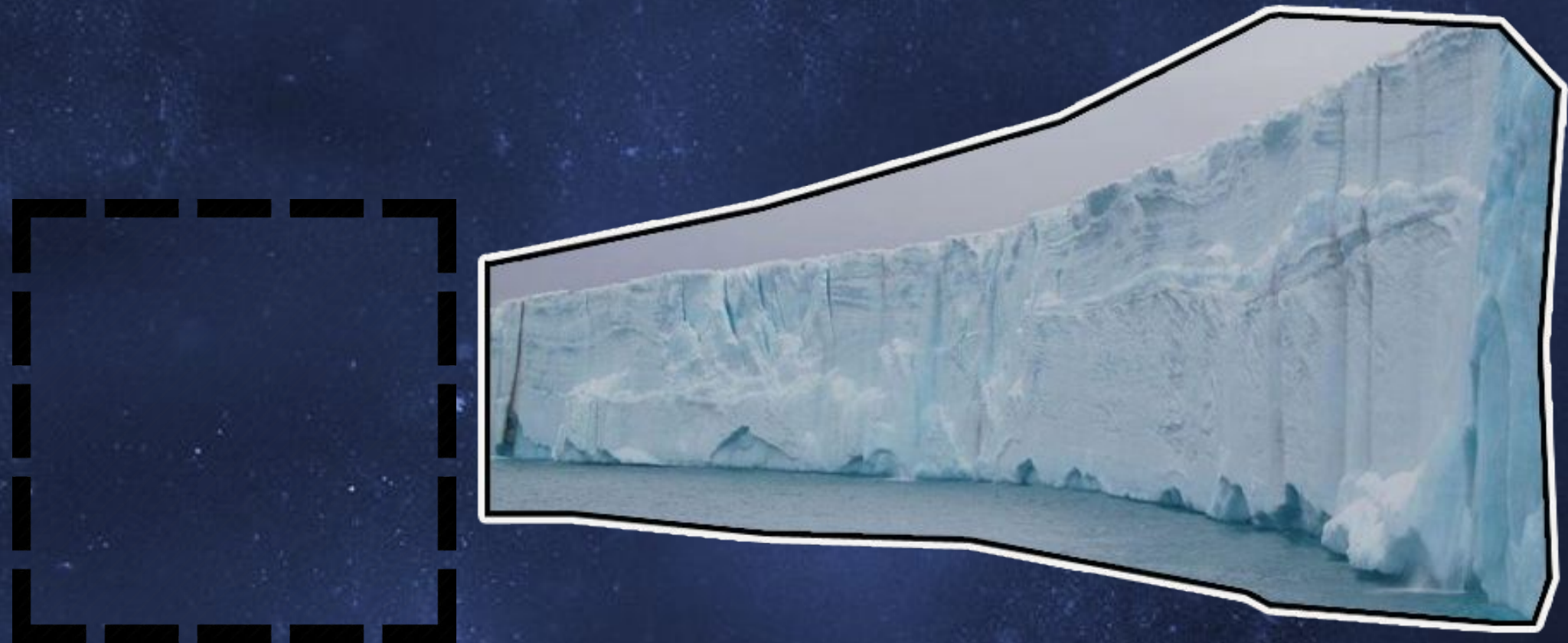
Player Agency



What is systemic design?



What is systemic design?



What is systemic design?



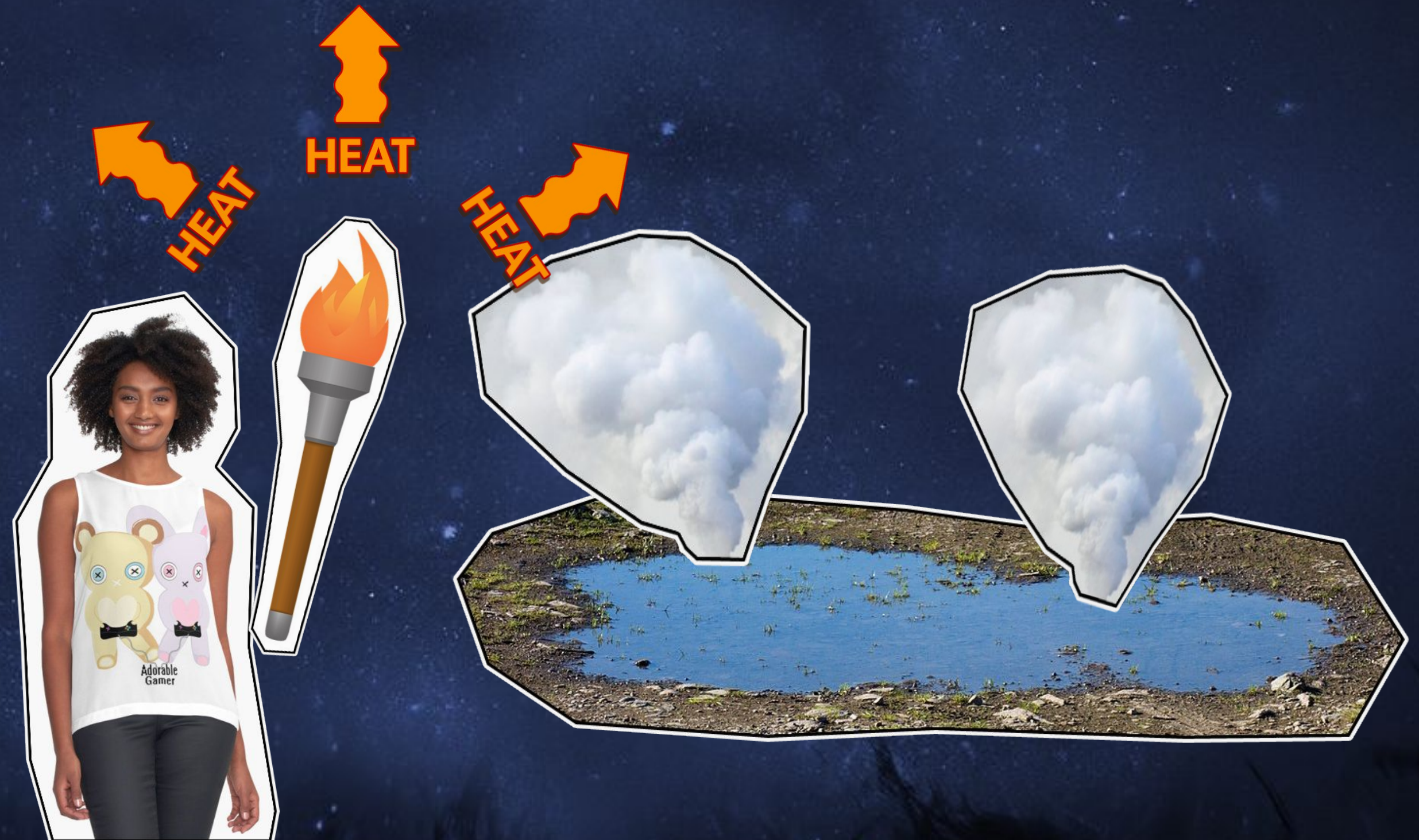
What is systemic design?



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What is systemic design?



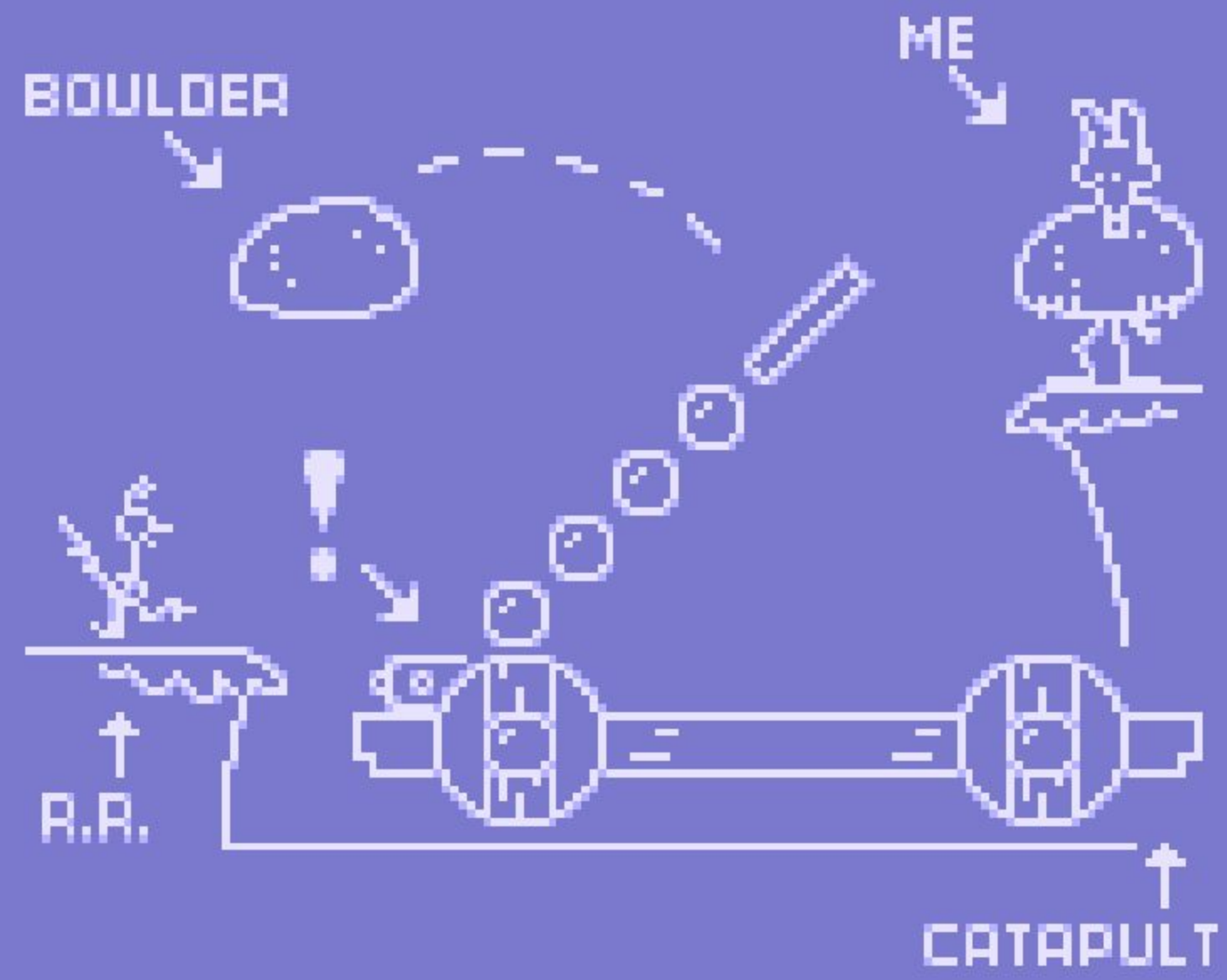
What is systemic design?



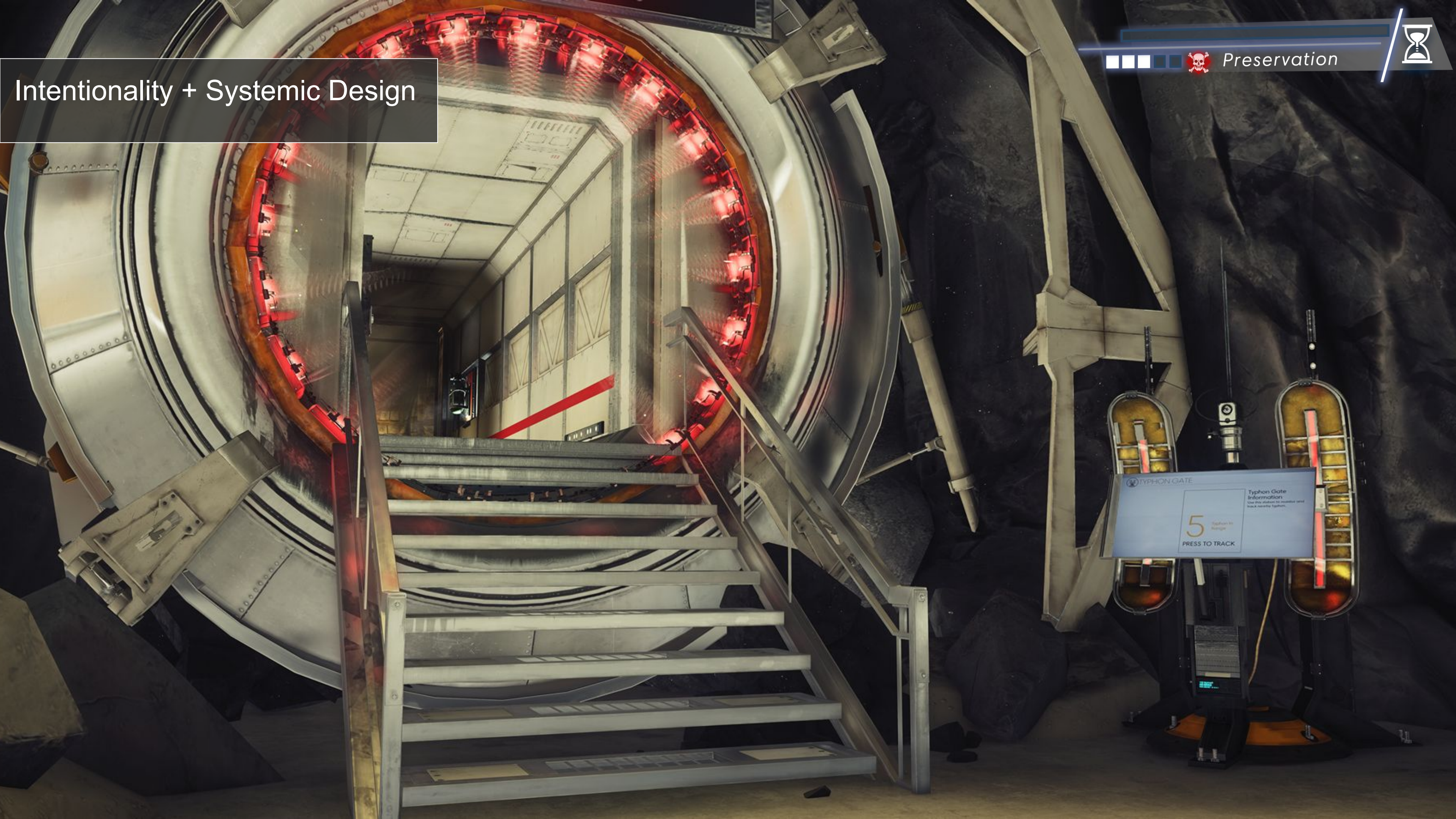
What is systemic design?



Intentionality + Systemic Design



1. LOAD CATAPULT.
2. LAUNCH BOULDERS.
3. FAST-FOOD.



Intentionality + Systemic Design

TYPHON GATE

Typhon Gate Information
Use this station to monitor and track nearby Typhons.

5 Typhon in Range

PRESS TO TRACK

Intentionality + Systemic Design



Intentionality + Systemic Design



Why make immersive sims?



Lucan Valerios

Did something happen?

What have you got for sale?

Do you sell spells?

B Exit



ADAPTATION

TO NEW PROBLEMS

Multiple Characters



Adaptation





L1 OBJECTIVES

MAP

INVENTORY

NEUROMODS

STATUS

Adaptation



Multiple Characters

SCIENTIST

ENGINEER

SECURITY

ENERGY

MORPH

TELEPATHY

- Combat choice paralysis
- Challenge comfort zones
- Break guilt driven gameplay



PSIONIC APTITUDE I

Installed

Increase your psi pool to 150.

Back

MORGAN YU

HEALTH

300 / 300

SUIT INTEGRITY

79 / 100

PSI

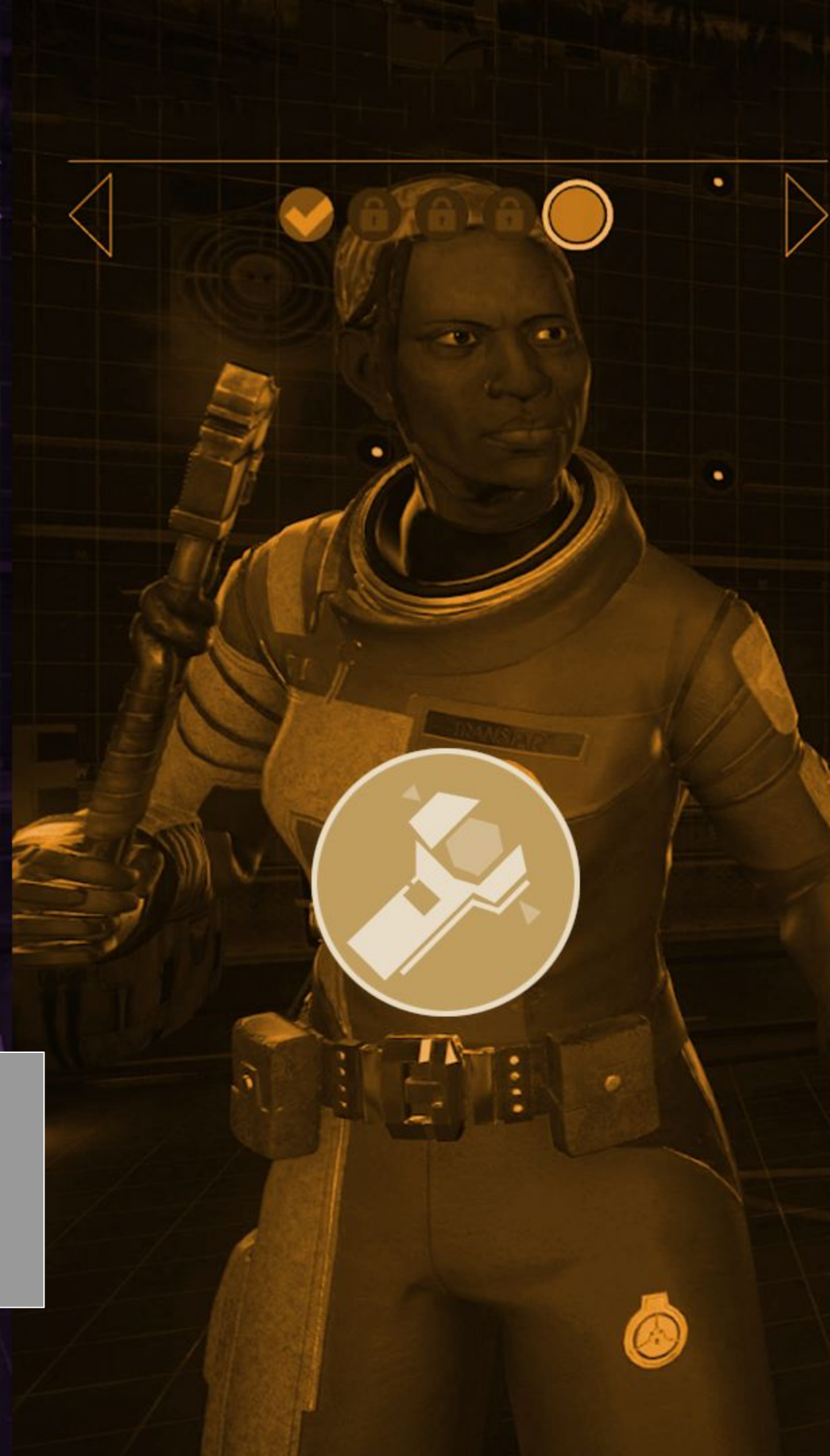
202 / 250

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Multiple Characters



- Combat choice paralysis
- Challenge comfort zones
- Break guilt driven gameplay





Character

Thankful Cassiopeia

Inventory

Multiple Characters

Rechargeable Extreme

1/1 Range Swapper

Breacher Pod

2

0 0

Personal mission

Rescue my kid from the...

Adaptation

Intel Cost: 200

Progress: 1%

Lifetime stats

Kills: 0

Knockouts: 0

Injuries suffered: 0

Alarms: 0

Living Witnesses: 0

Missions Completed: 0/0

Clauses Completed: 0/0

Average Pay: 0

Choose a character for this life:

Corvus Boden

Thankful Cassiopeia

Corona Gibbs

Sader Love

Unique Shipment - 7 days left!

A unique item is being transported through this nebula, until the 5th of October. If you can steal it before then, it'll also be unlocked to find in crates in this and all future galaxies. You can try as many times as you like until then - look out for a ship with a flashing light.

- Combat choice paralysis
- Challenge comfort zones
- Break guilt driven gameplay



Replay vs Persistence

Adaptation

Fairy Chest Objective:
Defeat All Enemies

Simulation Reset



RESETTING SIMULATION
COMPL

Persistence and the Afterlife

CREWMEMBER LINK TERMINATED

SCORING

Cystoids Destroyed	+ 50
Objects Repaired (Repair III)	+ 600
Keycards Collected	+ 100
Passwords Collected	+ 100
Simulation Deaths	+ 100



DECEASED

What you just did to yourself defies explanation.

Sim Points Earned

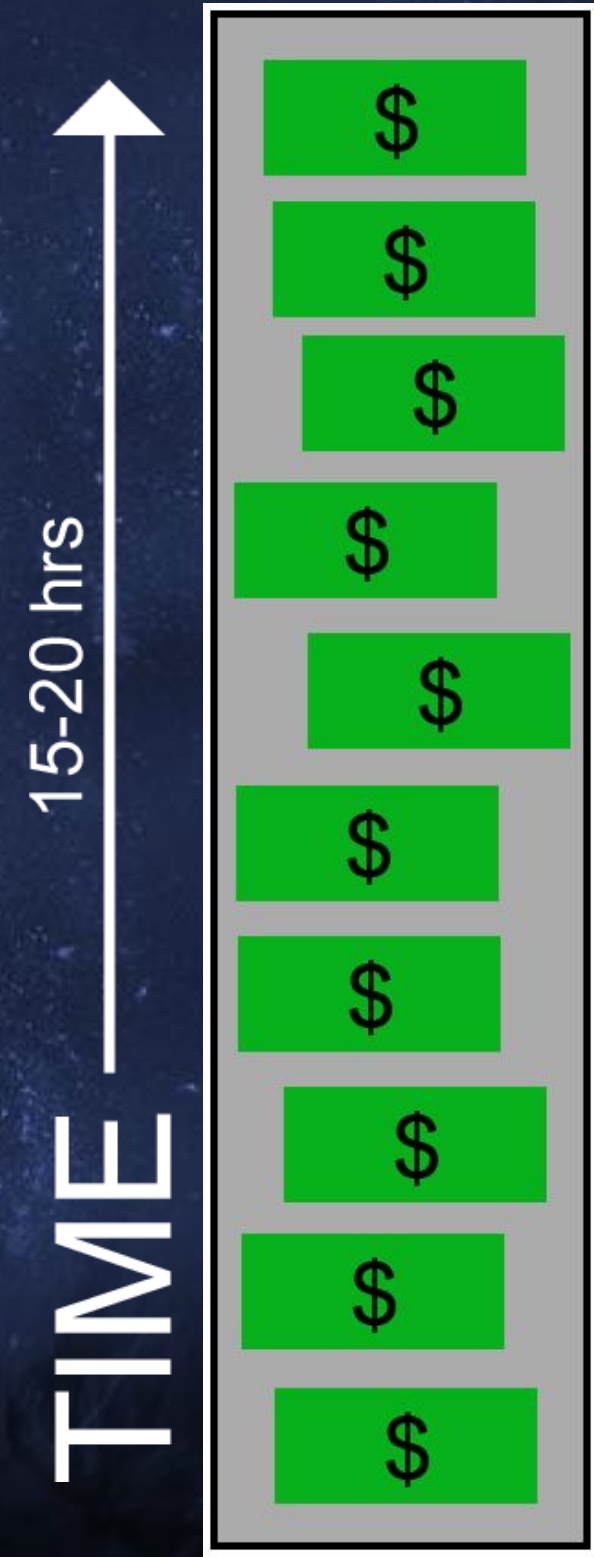
+ 950

Total Sim Points

118725

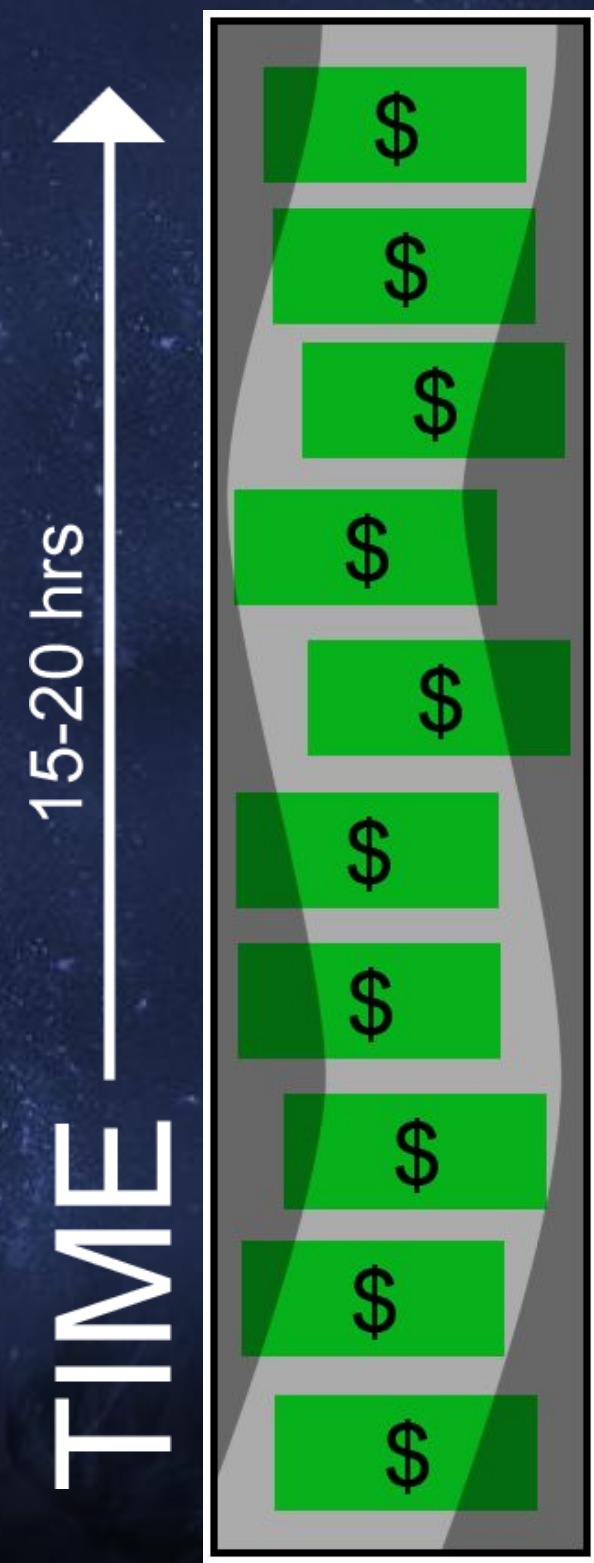
CONTINUE

Replayability and Game Duration



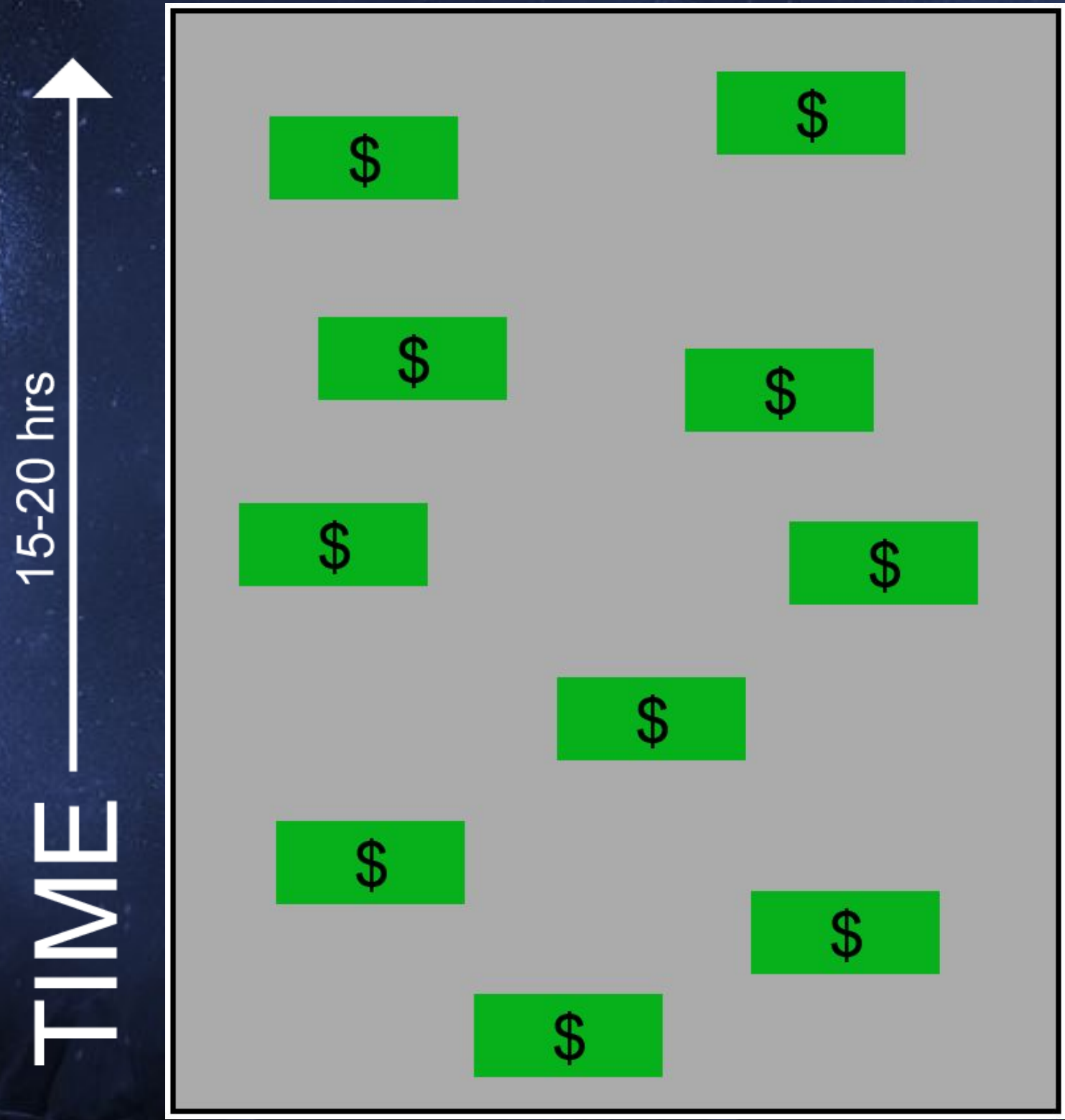
Linear Game

Replayability and Game Duration



Linear Game

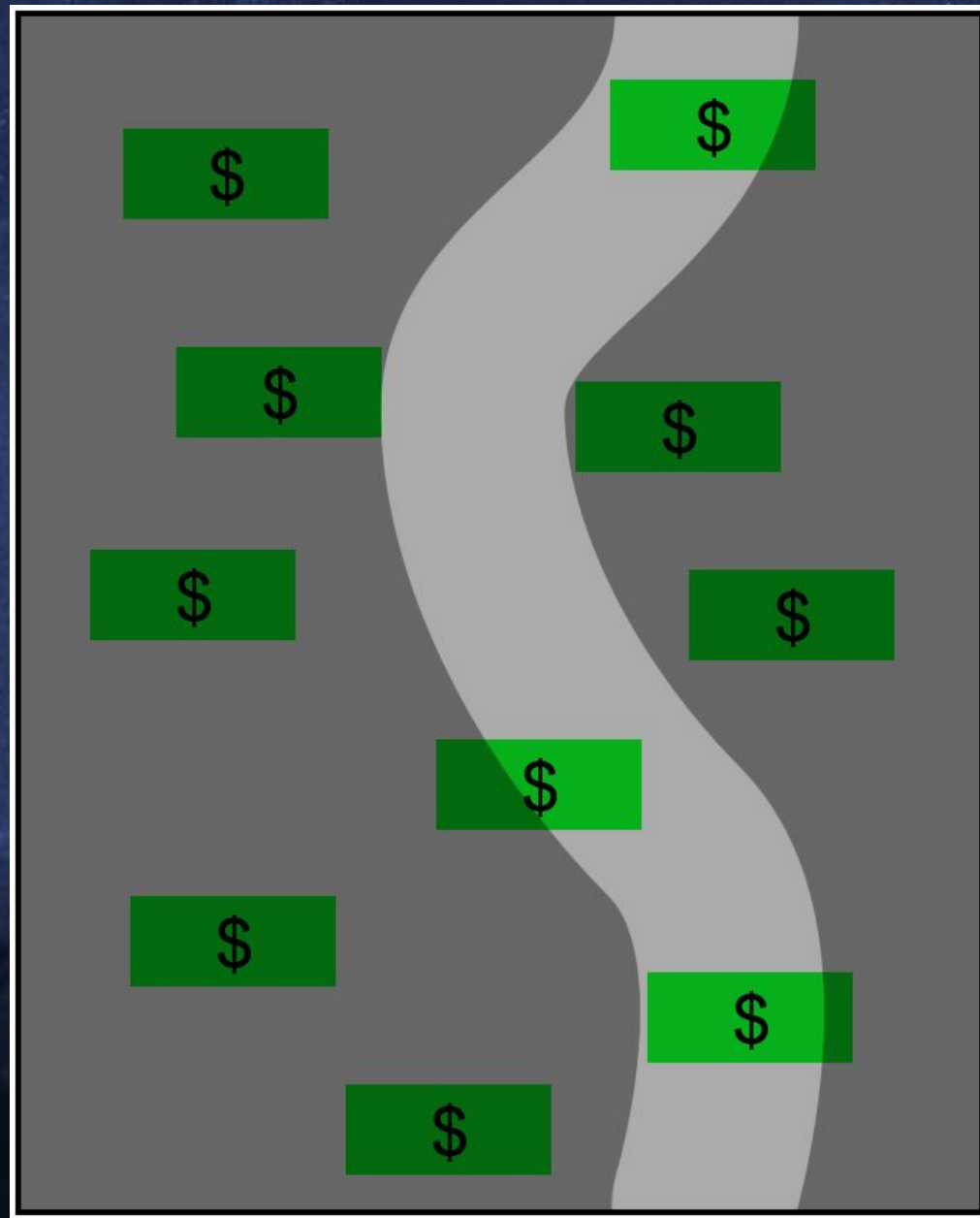
Replayability and Game Duration



Immersive
Sim

Replayability and Game Duration

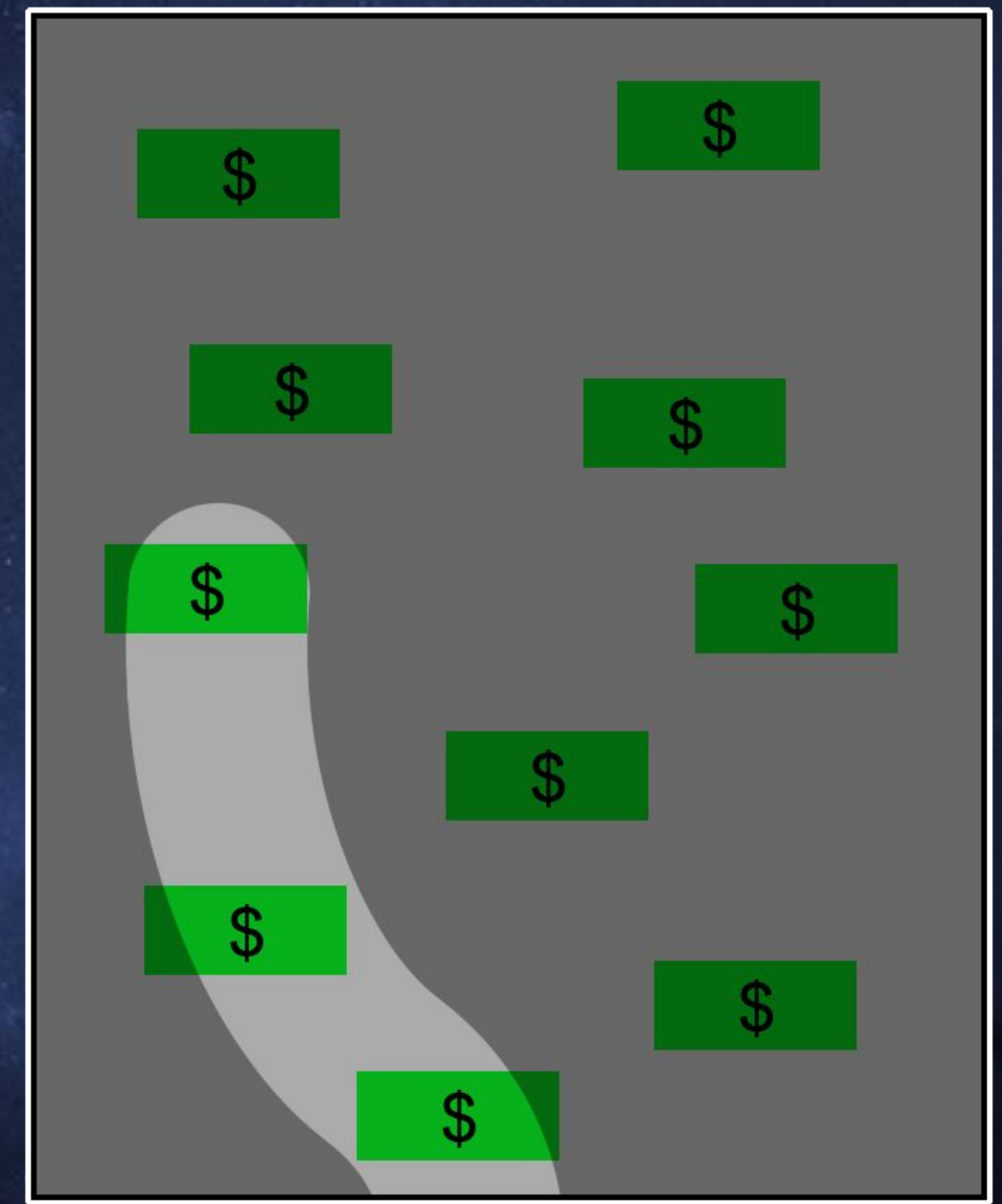
Player A



Player B



Player C

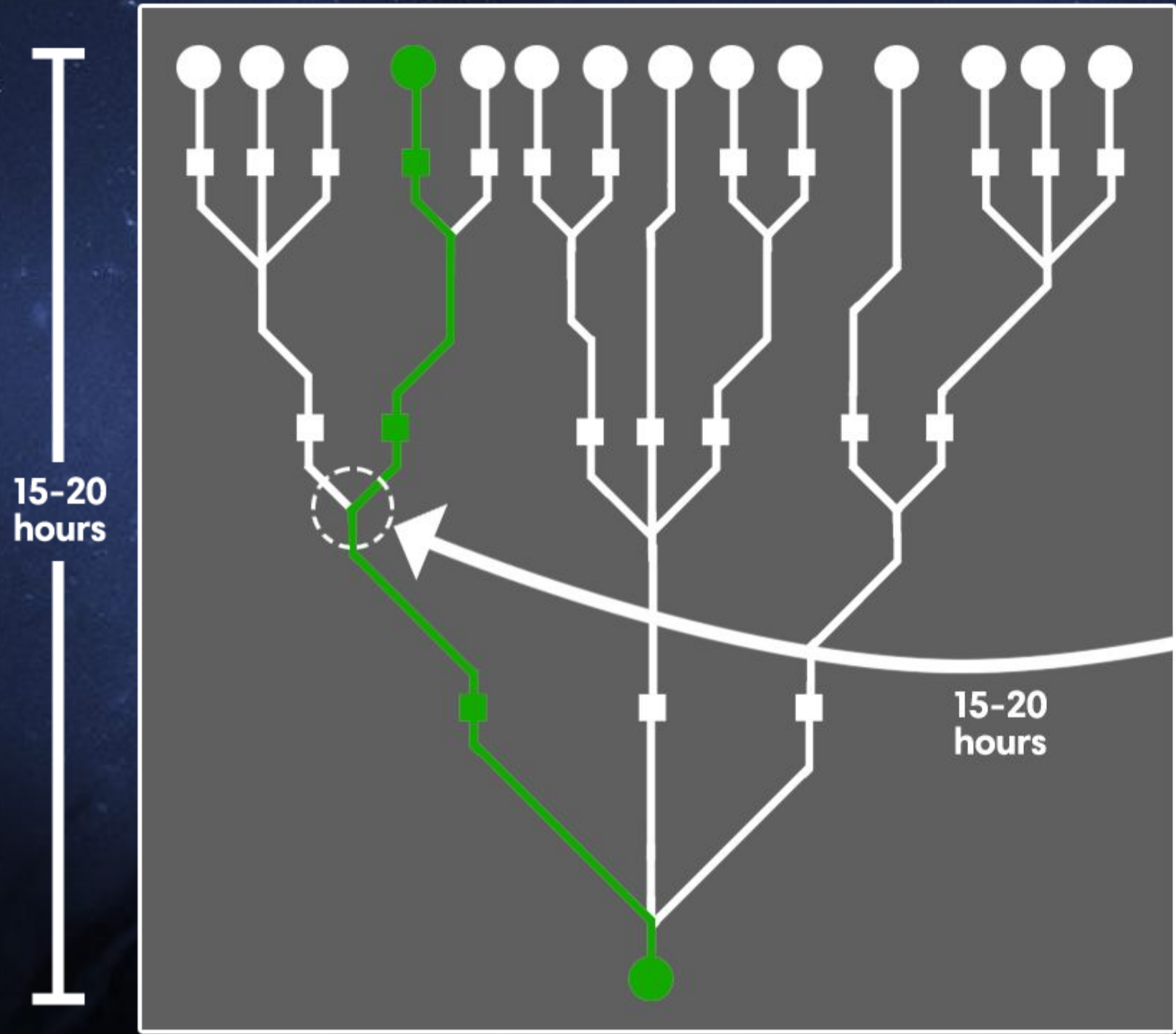


TIME

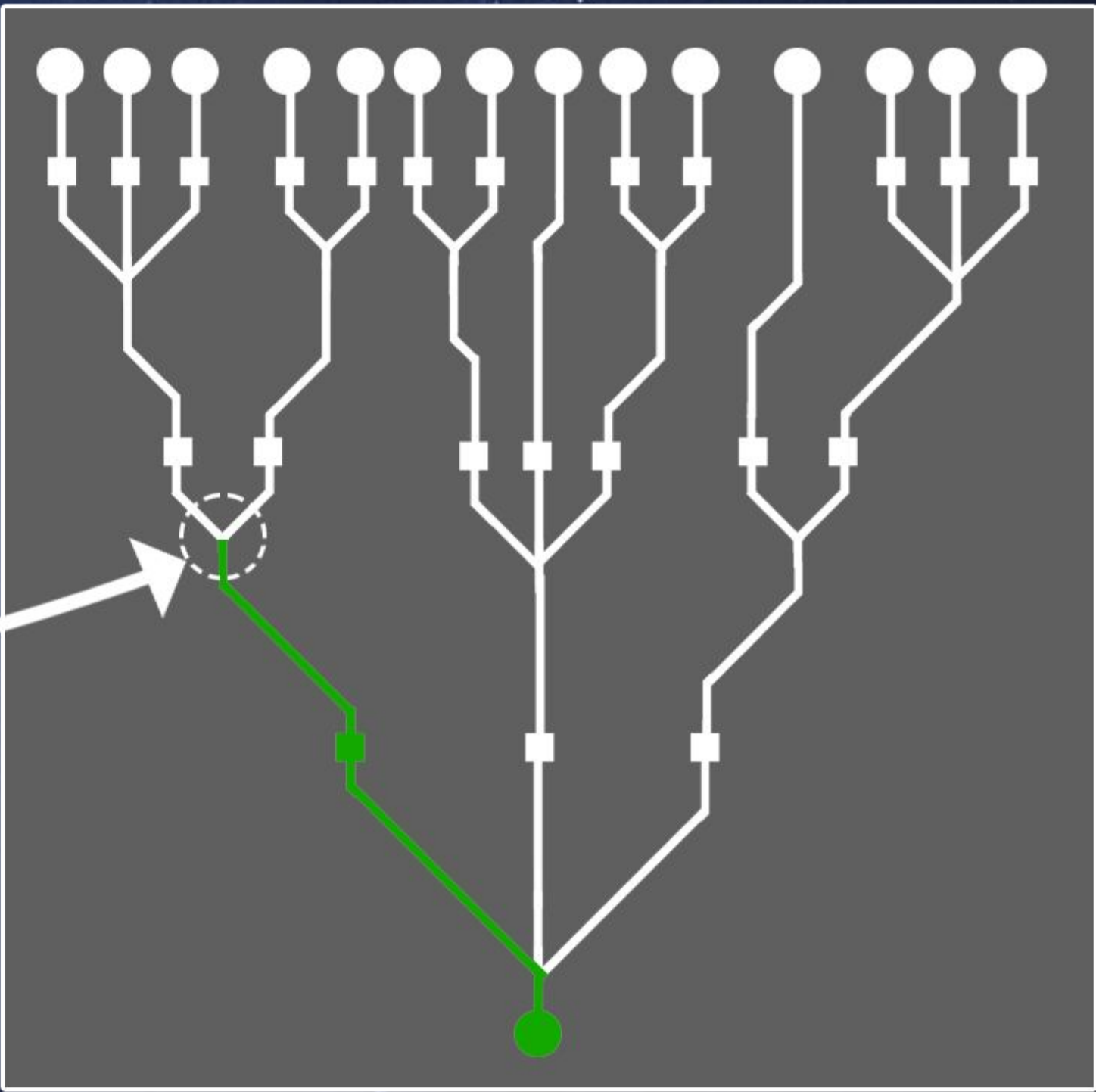
15-20 hrs



Replayability Surfacing Agency



Playthrough 1

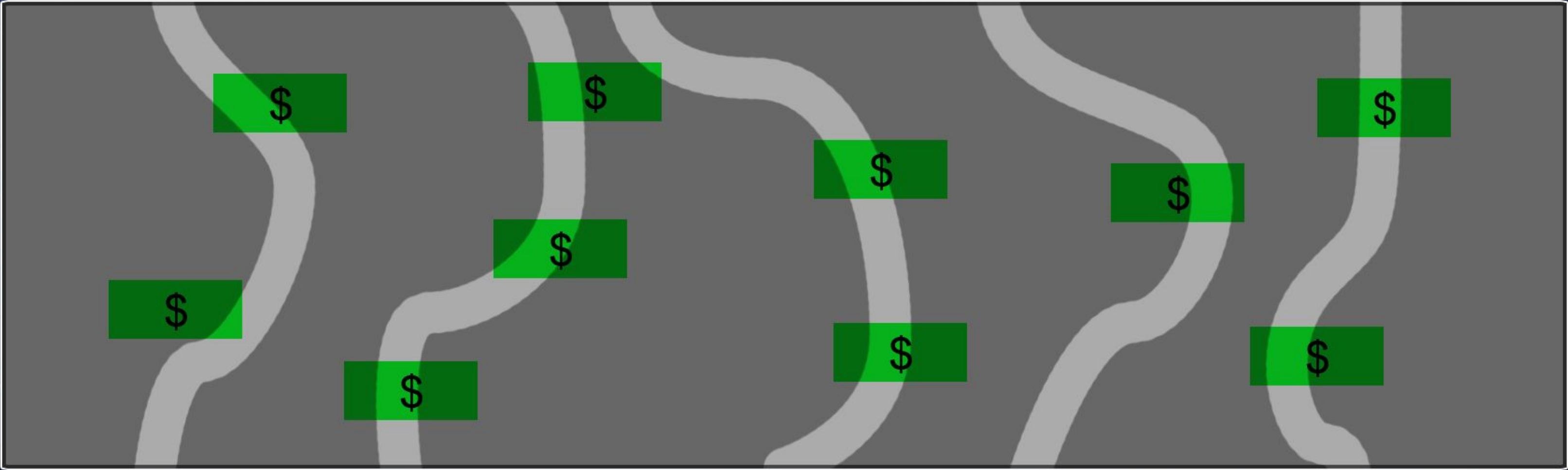


Playthrough 2

Replayability and Game Duration

Mooncrash

1-2 hrs
x 8-10



Session 1



The Threat of Infinite Content

Meaningful Variability

Environment Hazard “Channels”







Adaptation



ODs

 Adaptation



TYPHON CONTAINMENT
& CRATER ACCESS



Adaptation





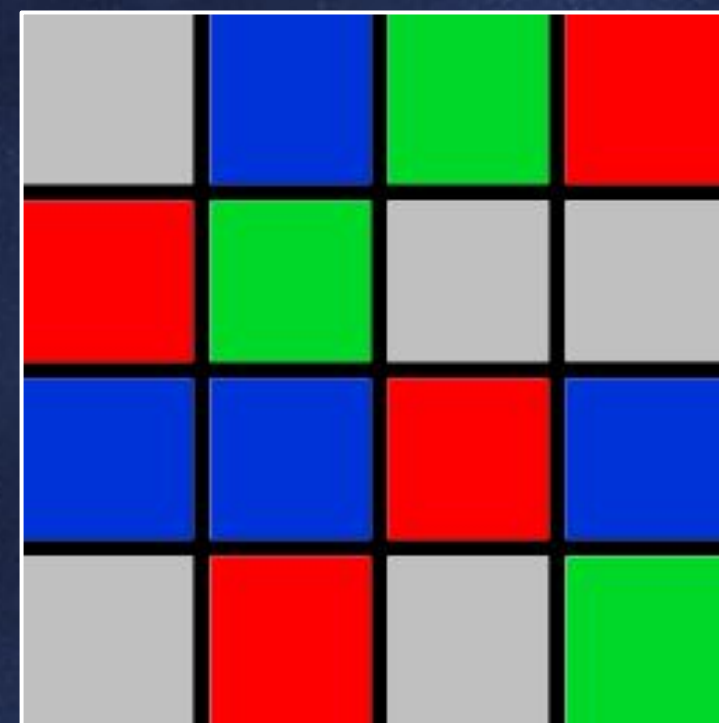
Adaptation



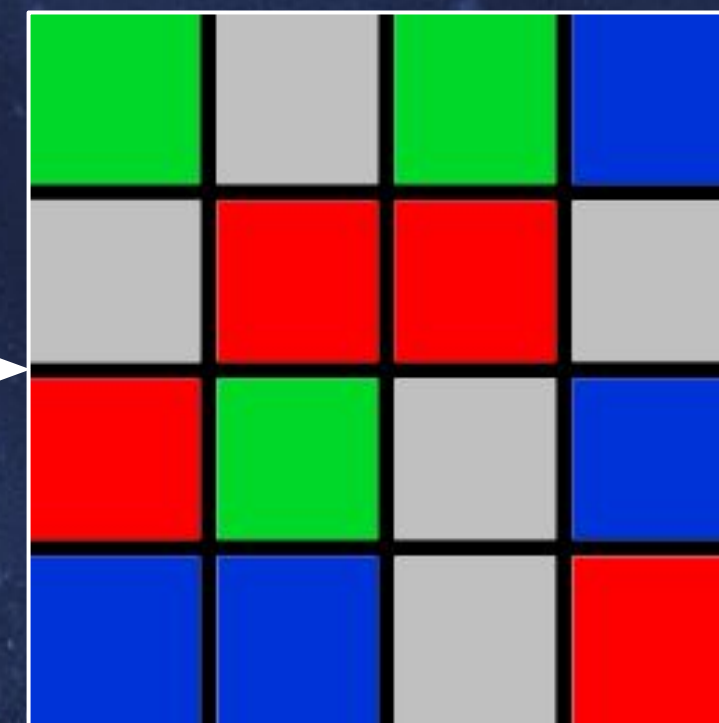


“Chunkiness” in Random Systems

- A little bit of everything in every level resulted in homogeneity
- Consolidating the elements leads to stronger theming
- Avoid the “chopped salad” effect



Level 1

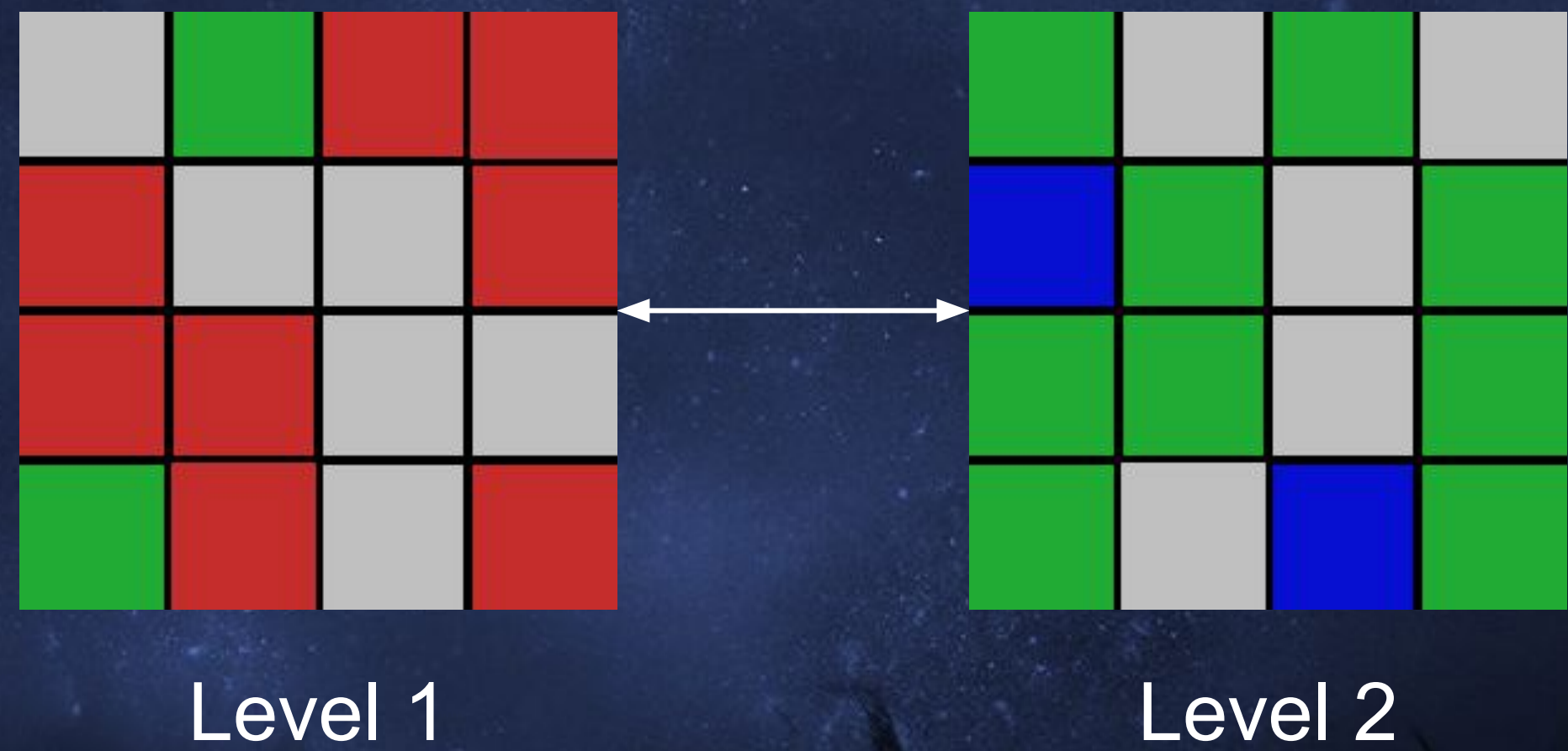


Level 2



“Chunkiness” in Random Systems

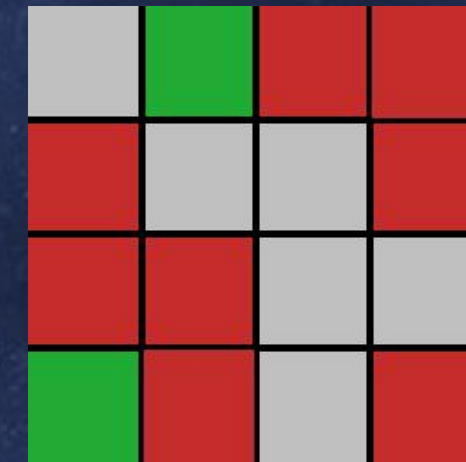
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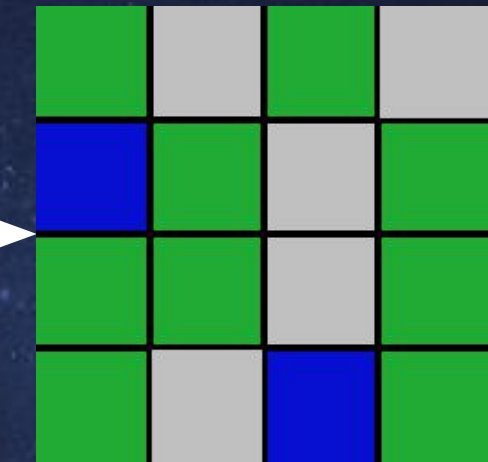
“Chunkiness” in Random Systems

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Session 1

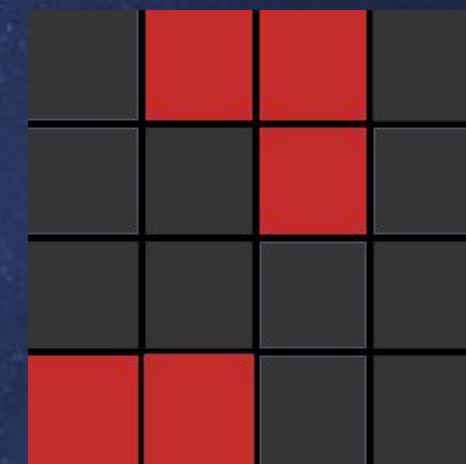


Level 1

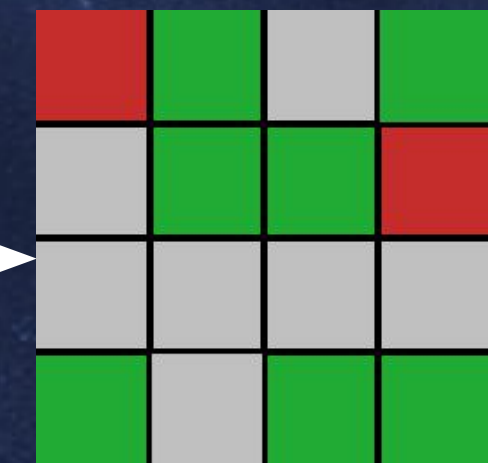


Level 2

Session 2

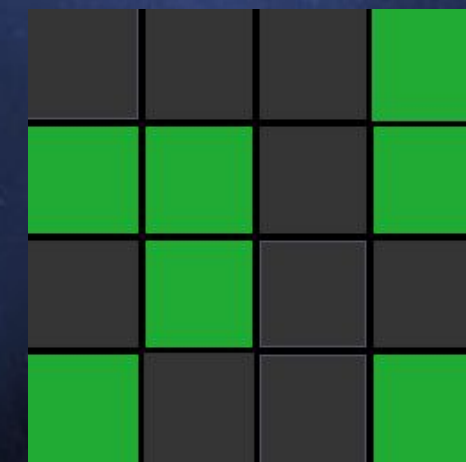


Level 1

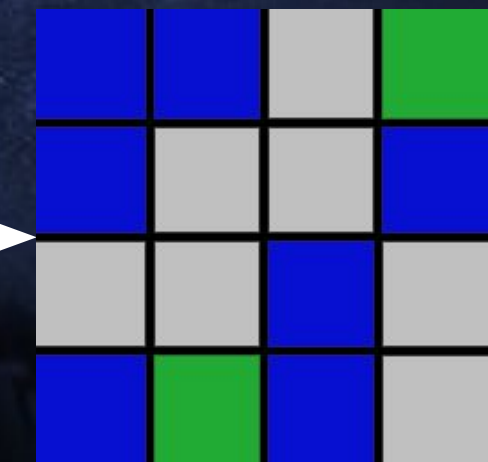


Level 2

Session 3

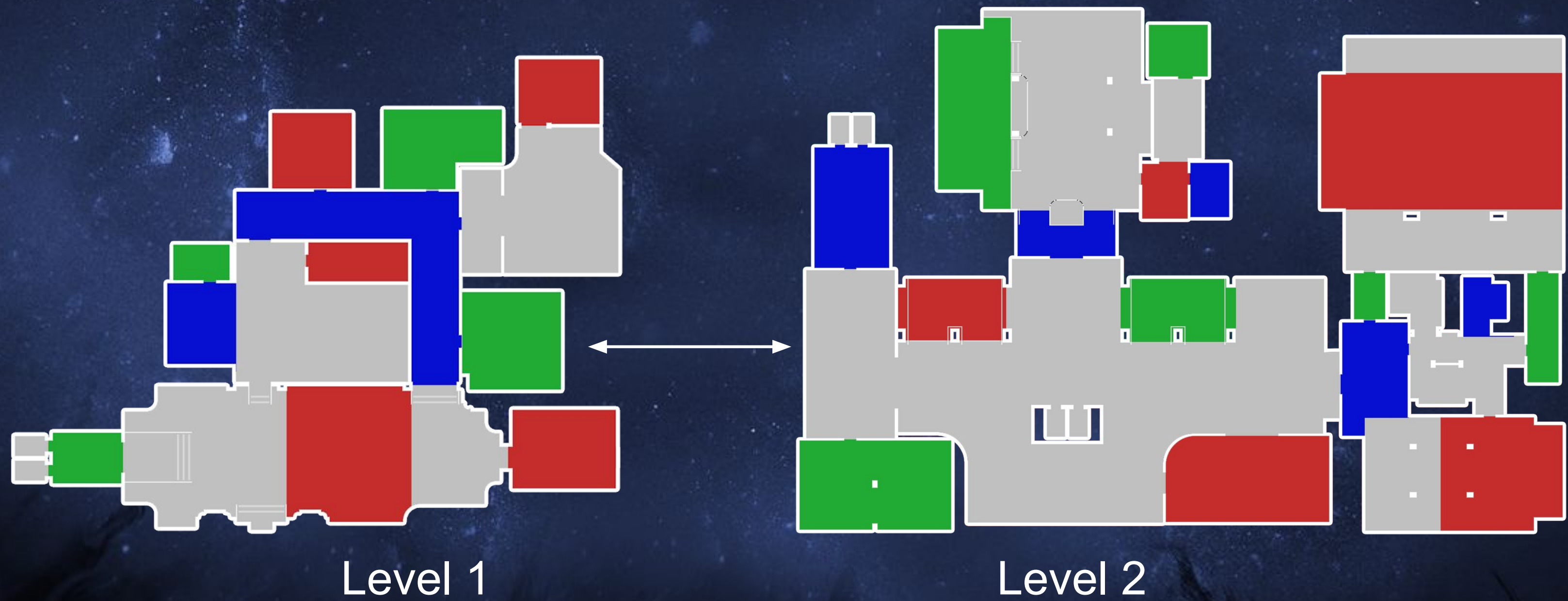


Level 1

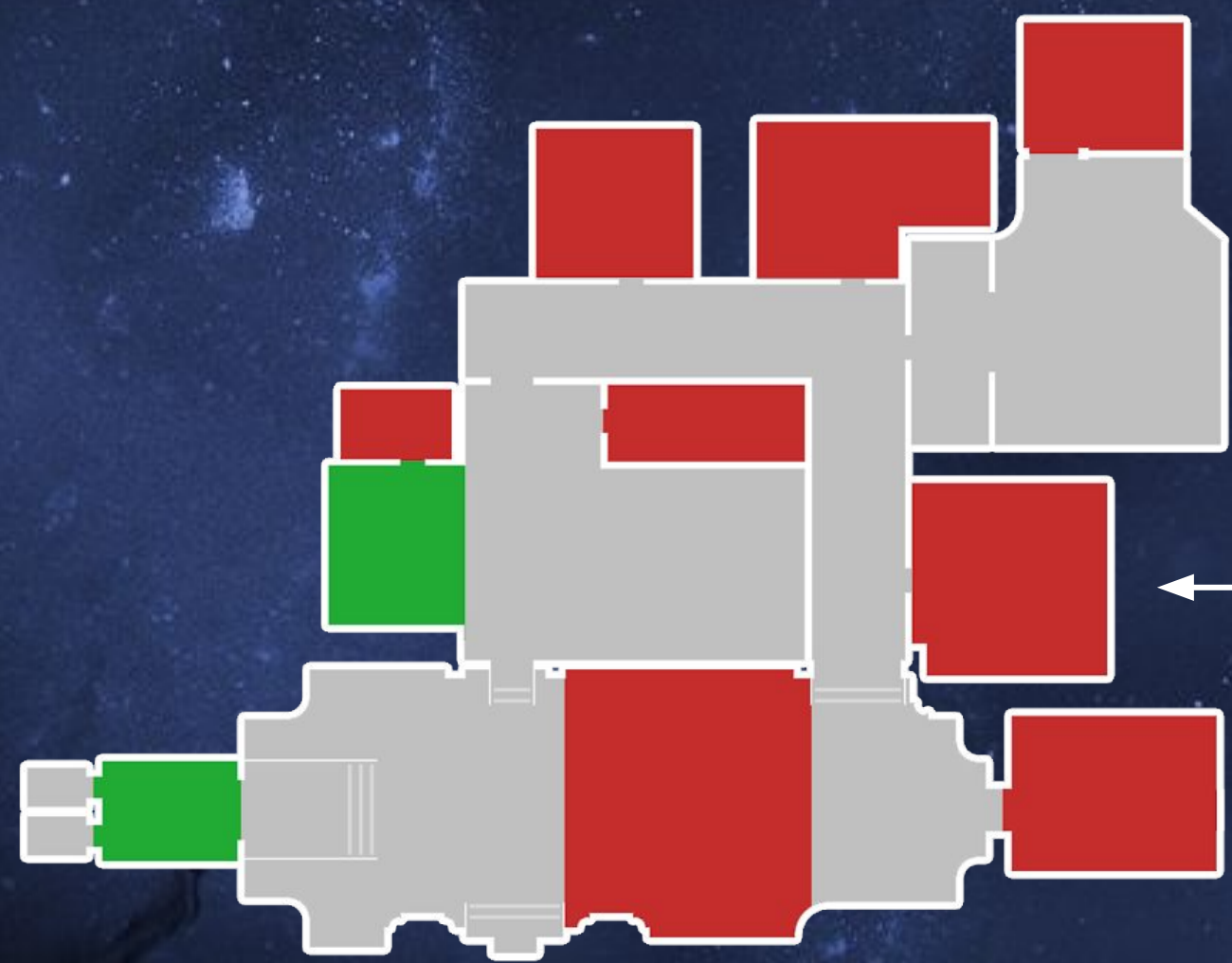


Level 2

“Chunkiness” in Random Systems



“Chunkiness” in Random Systems



Level 1



Level 2

The Corruption Meter

Adaptation



Corruption Level

The longer you remain in the simulation, the more dangerous it becomes. Over time, the simulation advances through five levels of corruption causing Typhon enemies to repopulate and grow stronger. Eventually, the simulation will crash and eject you.

You may review tutorial messages later in the pause menu.

Enter View Tutorial Library

Mouse 2 Close



Kasma Orders

KASMA ORDERS

Tab

Complete all of the following items to fulfill your contract to KASMA Corp. Terms not negotiable.

Orders Completed

5/27

(Collect the Psychoscope at the top of Pytheas Labs)

- ☒ Unlock Engineer, Joan Winslow
(Escape with the Volunteer)

Escape Attempts

- ☐ Escape using the Shuttle in Crew Annex
- ☐ Escape using the Mass Driver in MoonWorks
- ☒ Escape with an Escape Pod
- ☐ Escape through the Portal in Pytheas Labs
- ☐ Escape by Consciousness Emulation in Pytheas Labs
- ☒ Escape with the Volunteer
- ☐ Escape with the Security Officer
- ☐ Escape with the Engineer
- ☐ Escape with the Custodian
- ☐ Escape with the Director
- ☐ Escape with Five Crew Members in a Single Run (1/5)

Story Objectives

- ☐ Complete the Engineer's Story Objective
- ☐ Complete the Security Officer's Story Objective

Bksp Back

HEALTH

121 / 150

SUIT INTEGRITY

96 / 100

PSI

50 / 50

CORRUPTION LEVEL 3

The Escapes



 Adaptation



Escape Pod (12m)

55

76

40

The Escapes - Shuttle



Adaptation



The Escapes - Cargo Container



Adaptation



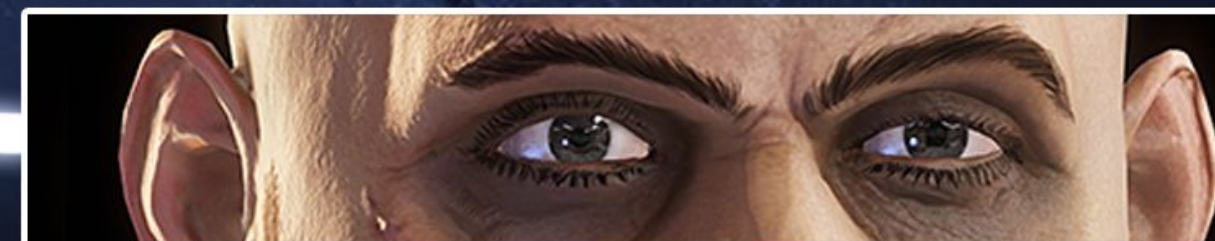
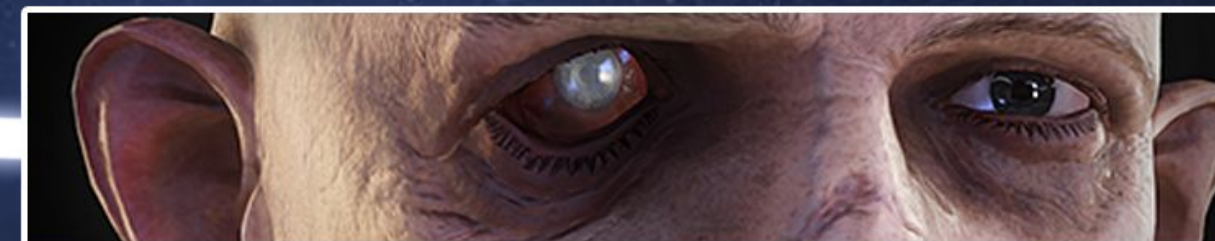
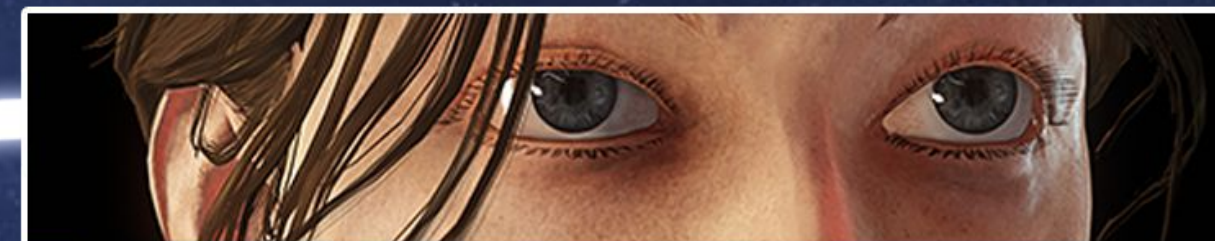
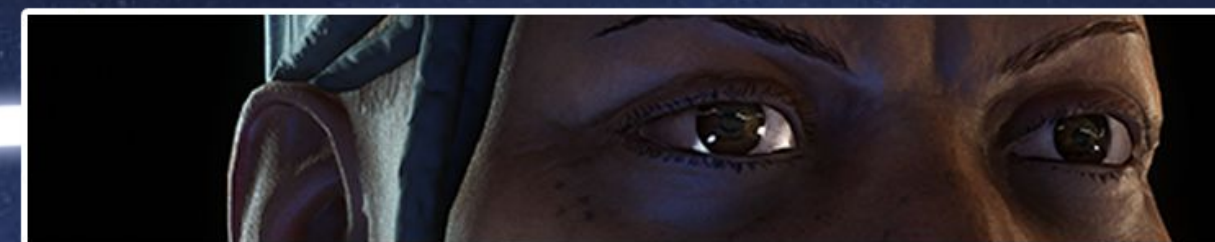
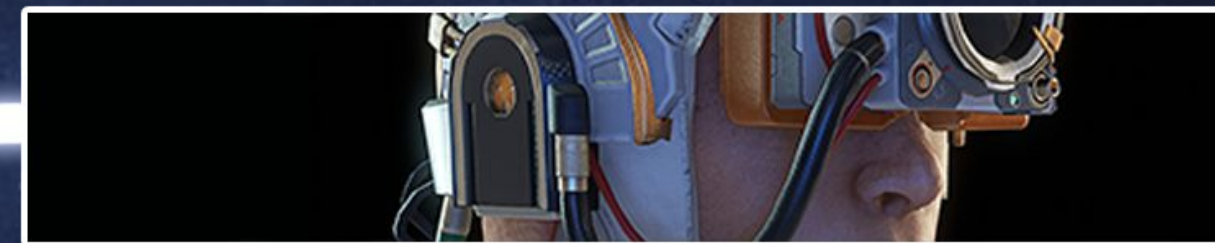
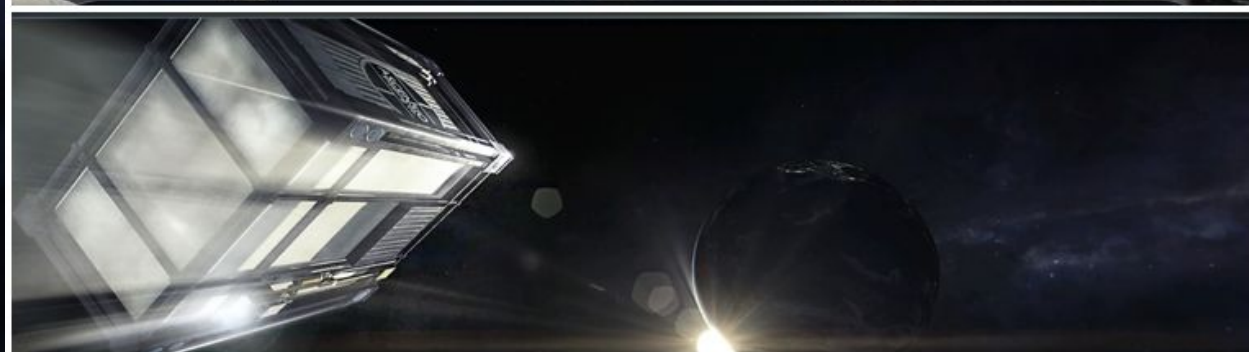
The Escapes - Portal



Adaptation



The Escapes



CONCLUSION



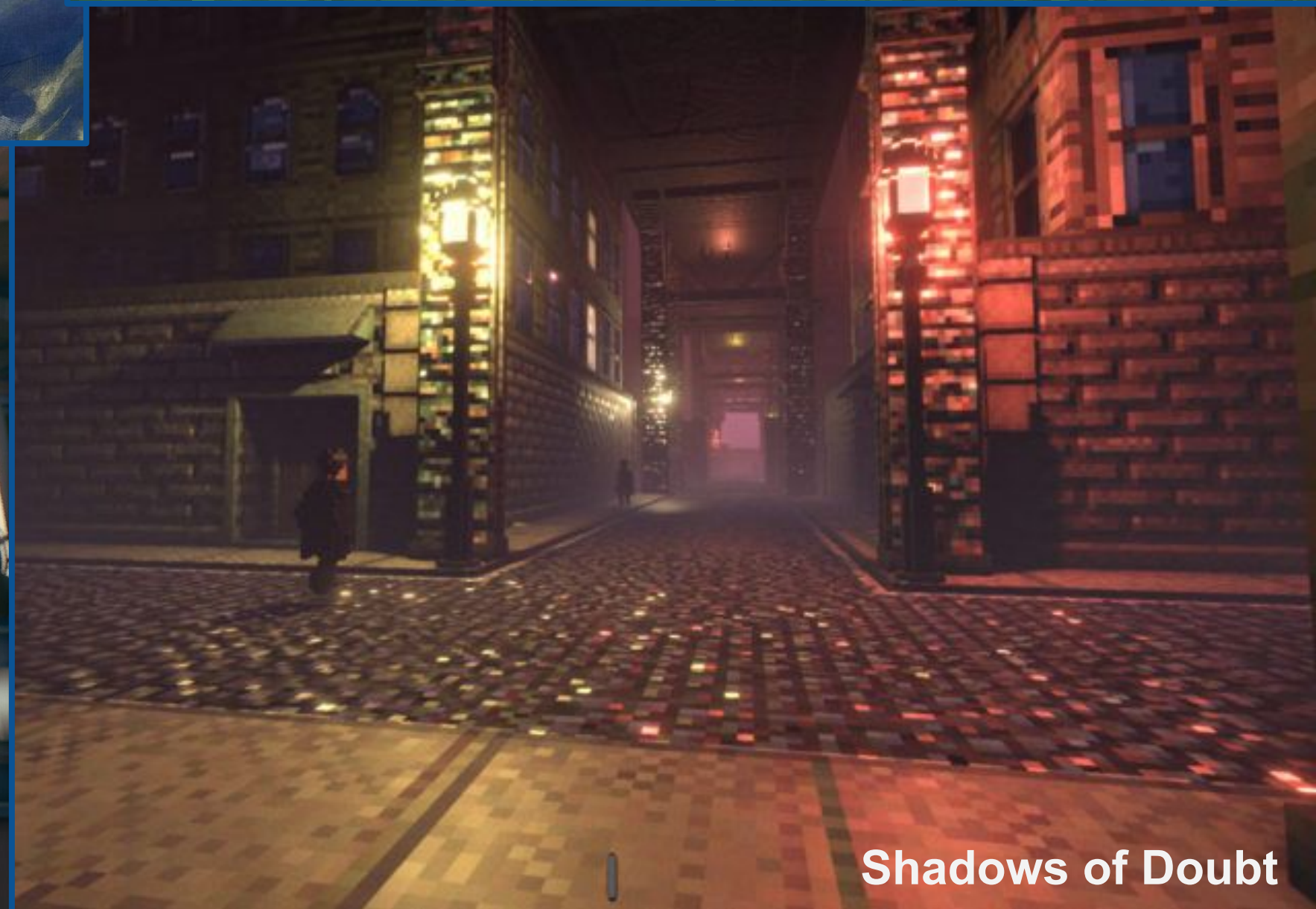
Breath of the Wild



Minecraft



The Occupation



Shadows of Doubt



Conclusion



Acknowledgements

Thanks to the Mooncrash dev team and to the design team for coming up with all of the cool stuff that I got to present.

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Test Subjects & Feedback

Walter Badgett
Ricardo Bare
Emily Beatty
Sadie Boyd
Jeremy Catlin
Ben Cooper
Steve Gaynor
Walker Hardin
Amber Hoffman
Jen Hollcroft
Ben Horne
Anthony Huso
Rachel Kittrell
Ricky Llamas
Ryan Mattson
Albert Meranda
Trent Polack
Steve Powers
George Royer
Rusty Sempstrott
Harvey Smith
Randy Smith
James Terry

Tisha Thompson
Sarah Witter

Student Test Subjects

Darius Ashley
Aaron Boehm
Jason Darholt
Chris Davenport
Eric Davis
Sebastian Gomez Sanchez
Weldon Hankton
Rick Herrera
Ven Jacobs
Tylan Limb
Albreyun McAfee
Chase Pugh
Joe Talbot



Questions?

■■■■■ 🦴 Conclusion



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How did it do?