LEVEL DESIGN

An overview

Created by Mårten Jonsson

marten@jm-j.com
linkedin.com/in/jmartenj/

PATHING & REVEALS

Level Loop

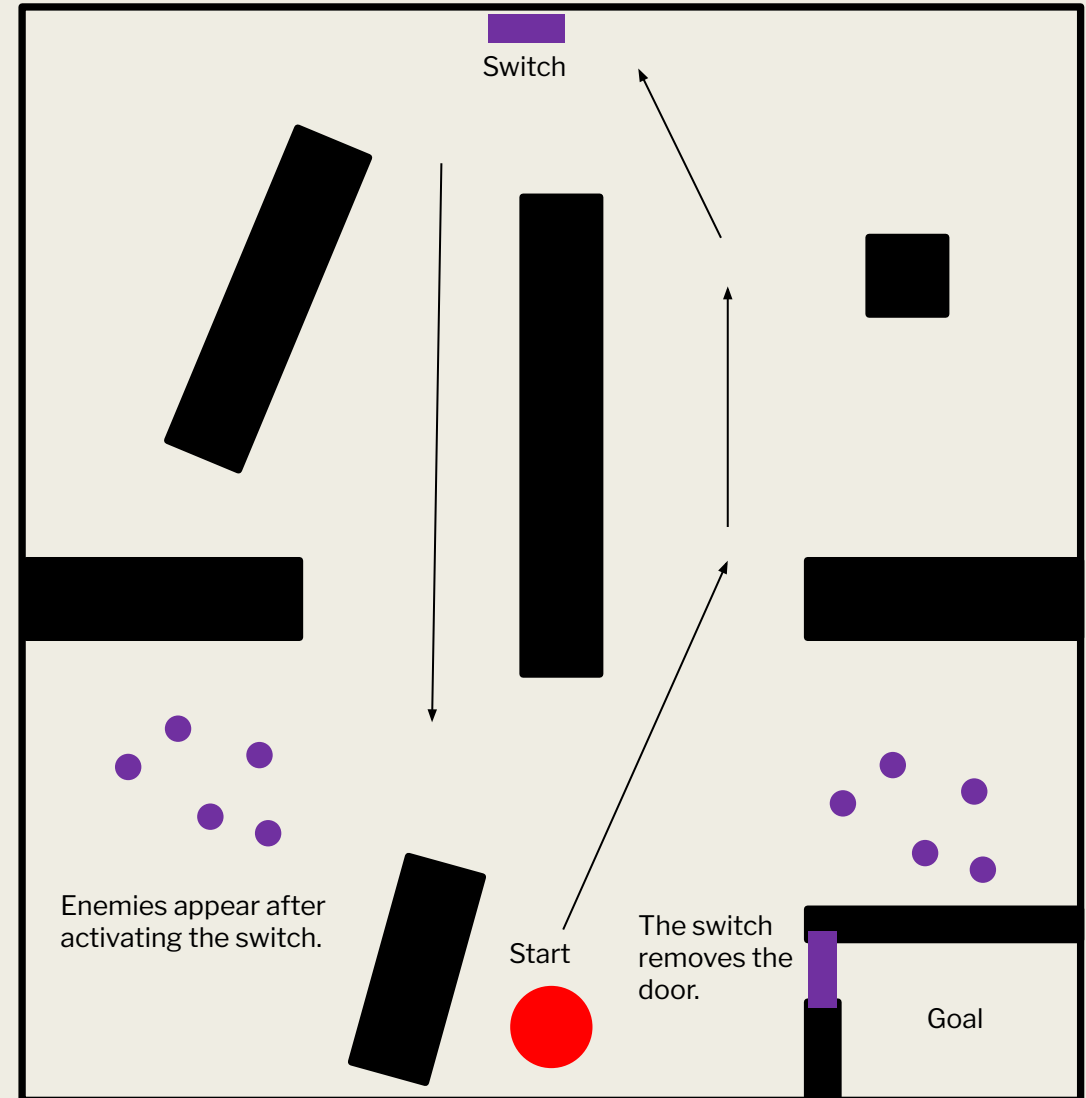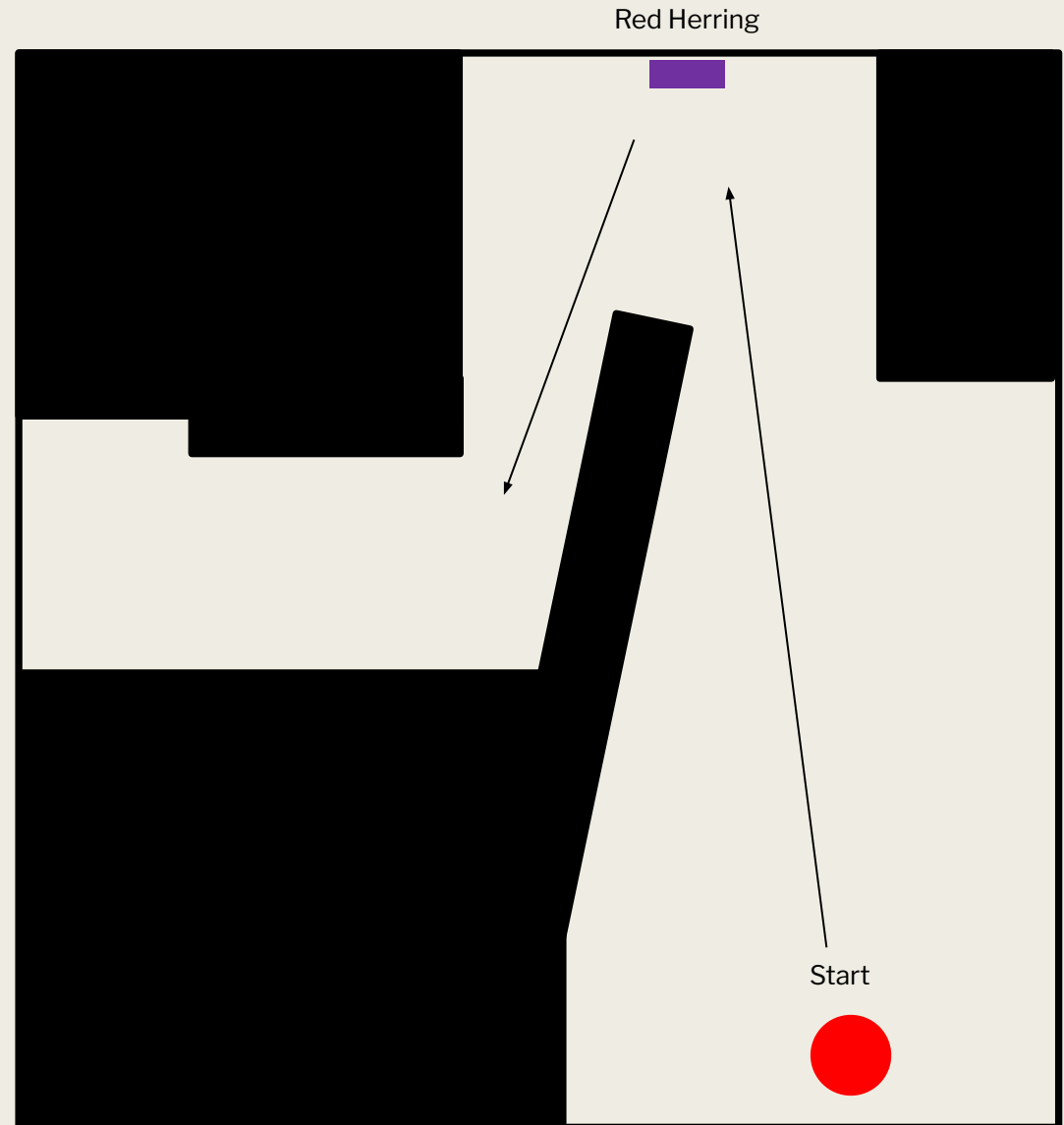- When a level or area brings the player back to the starting area without taking the same path.

Backtracking

- When a level or area takes you back or partly back through the same area, usually with changes.

Switch

Enemies appear after activating the switch.

The switch removes the door.

Start

Goal

Bait & Switch

- The player is lead towards an interesting point that turns out to be a dead end. The player then turns around and sees where to go.

Red Herring

Start

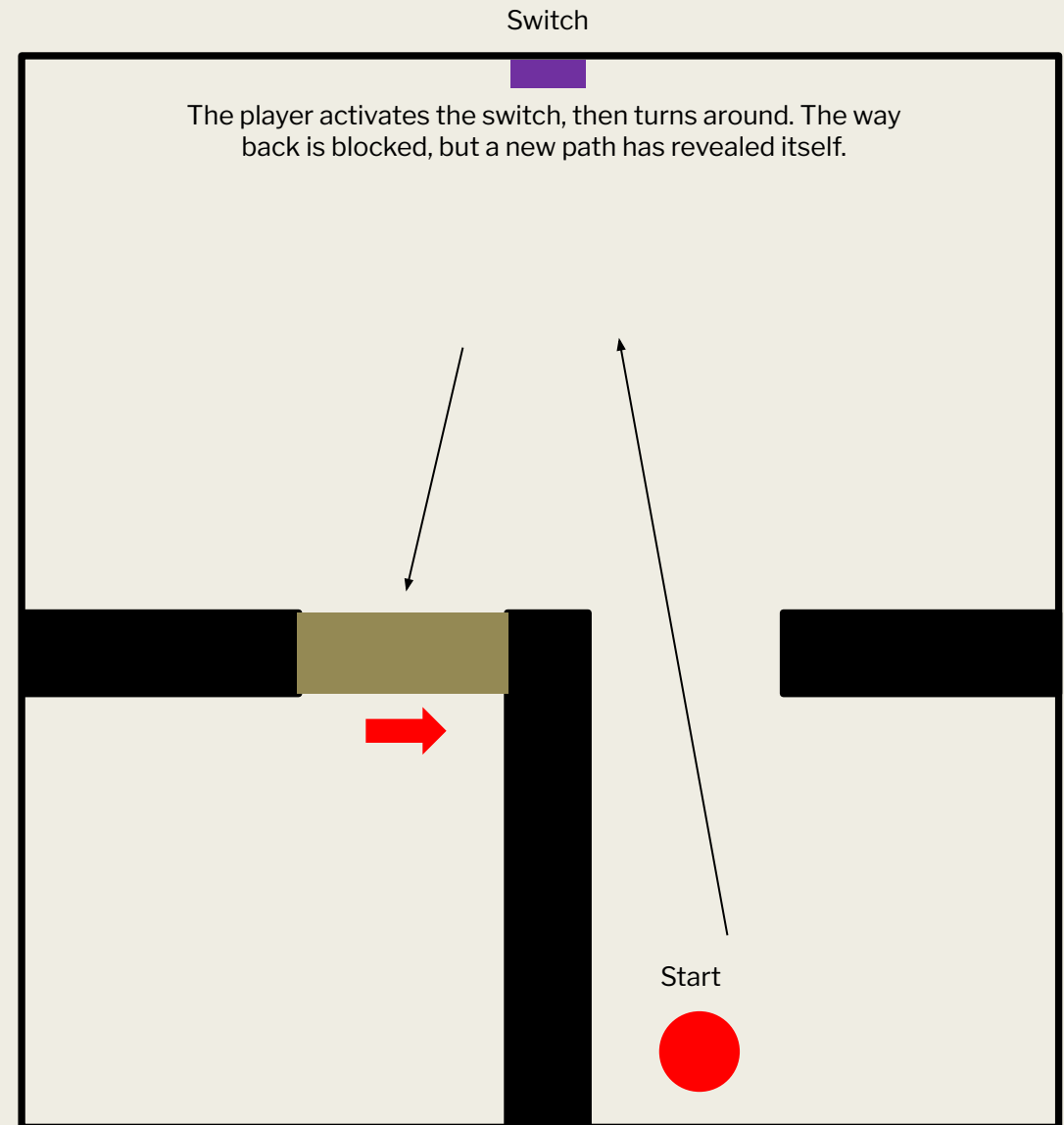# Bait & Switch

■ The player is lead towards an interesting point that turns out to be a dead end. The player then turns around and sees where to go.

Switch

The player activates the switch, then turns around. The way back is blocked, but a new path has revealed itself.

Start

Landmark

- Something in the composition that sticks out and gives the player something to navigate towards/around. Can also be called Point of Interest or Focal Point.

An extra large tree in another colour gives the player something to navigate towards in an otherwise monotone landscape.
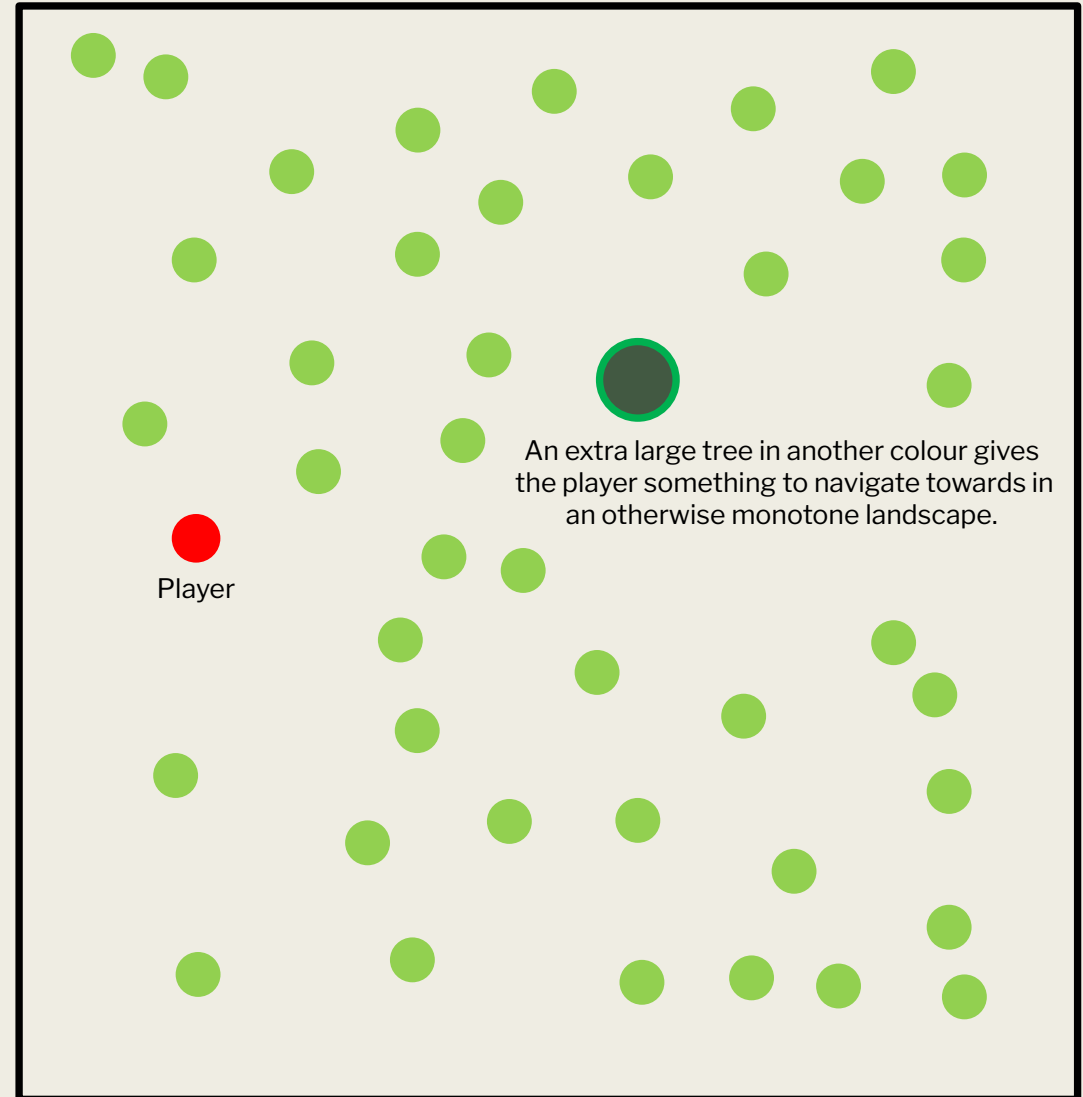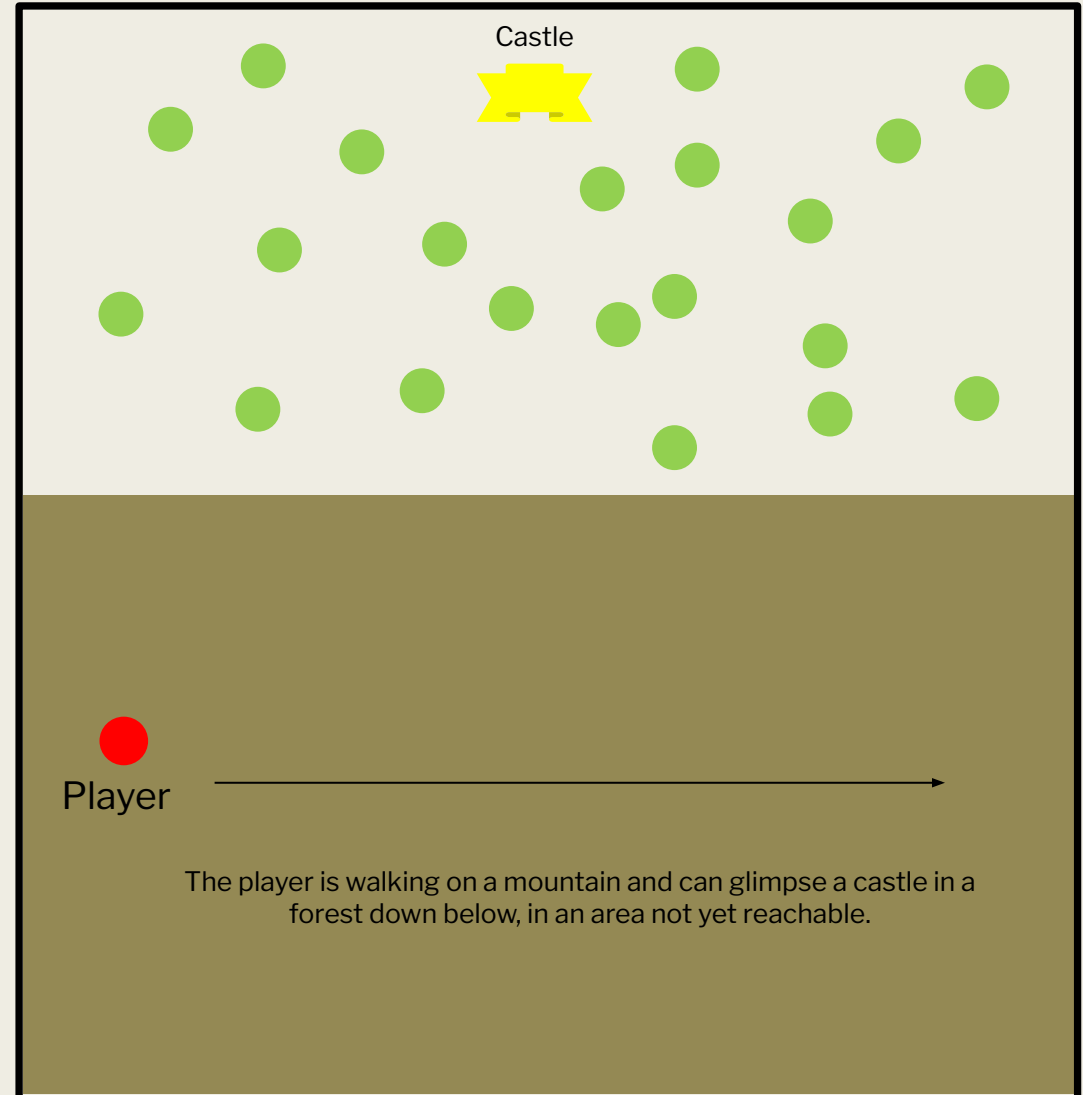
Player

Denial & Reward

- Can show the goal/way forward to player to increase the motivation to explore, as well as extending the gameplay in a natural way.

- Easy to combine with Level Loops or backtracking.

Castle

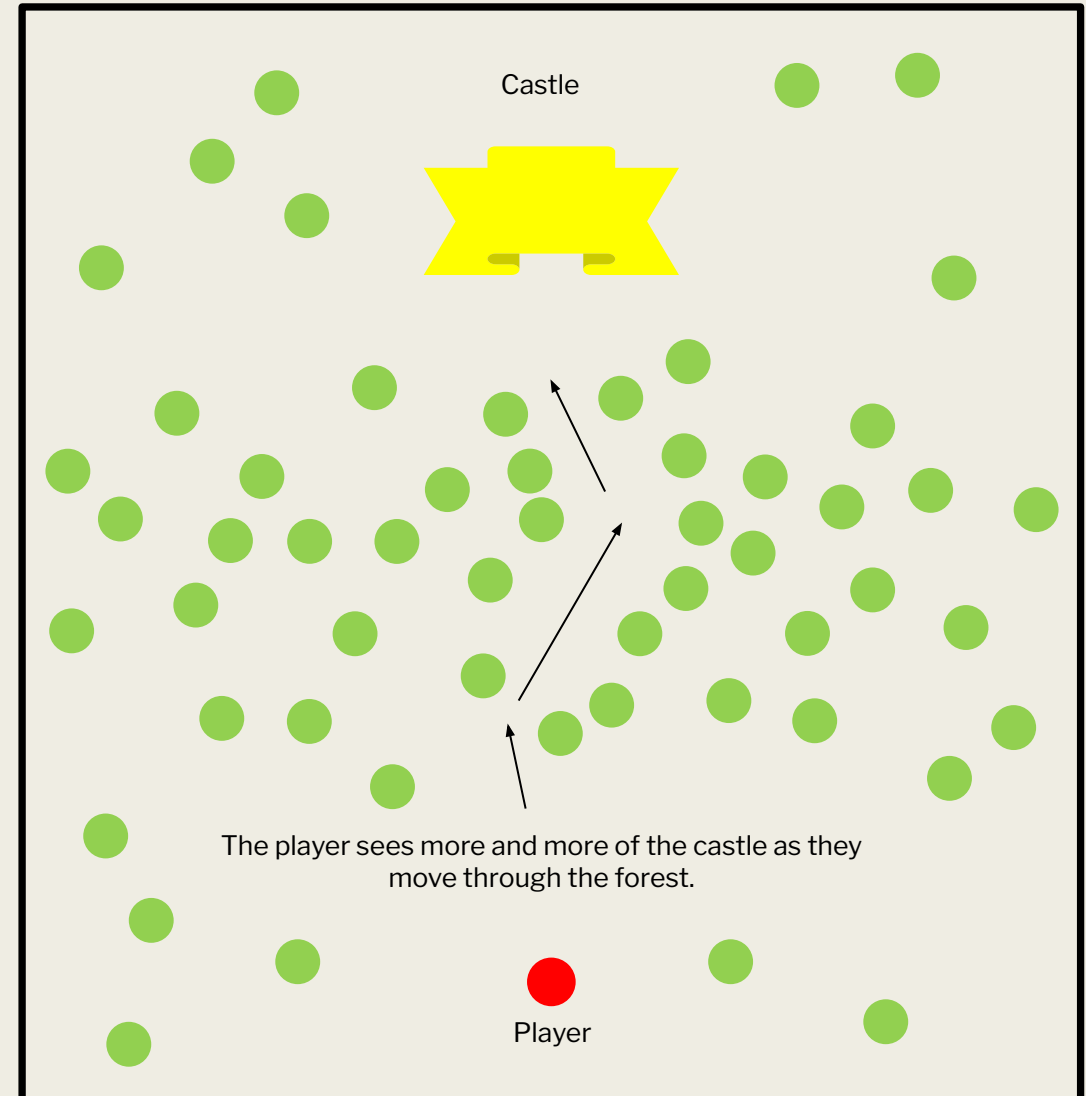The player passes a locked gate showing a castle.

Player

Key
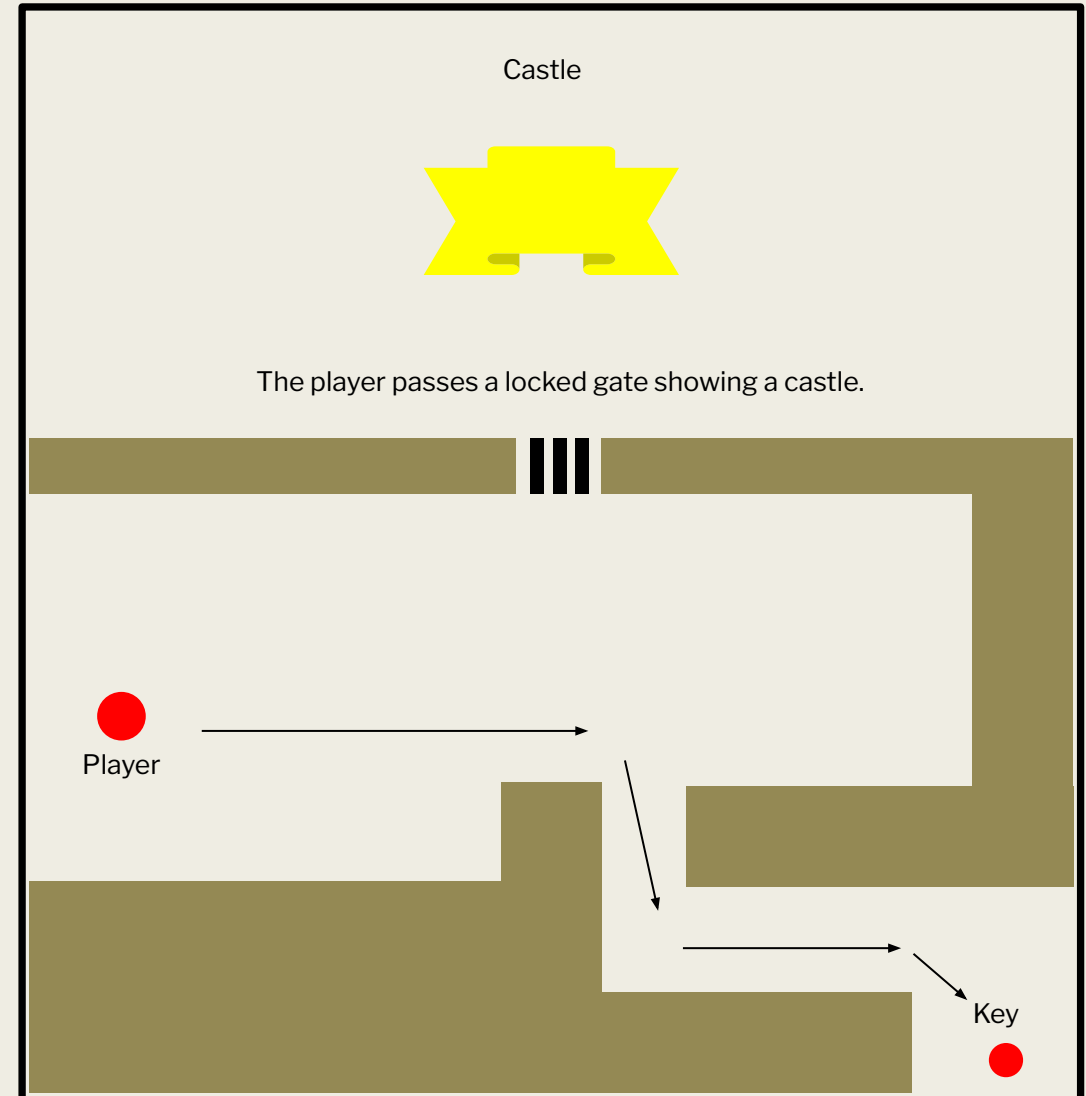
Foreshadowing

- Gives the player glimpses of areas that will be visited later in the game.

- Can also be used to give narrative hints about things that will happen later on.
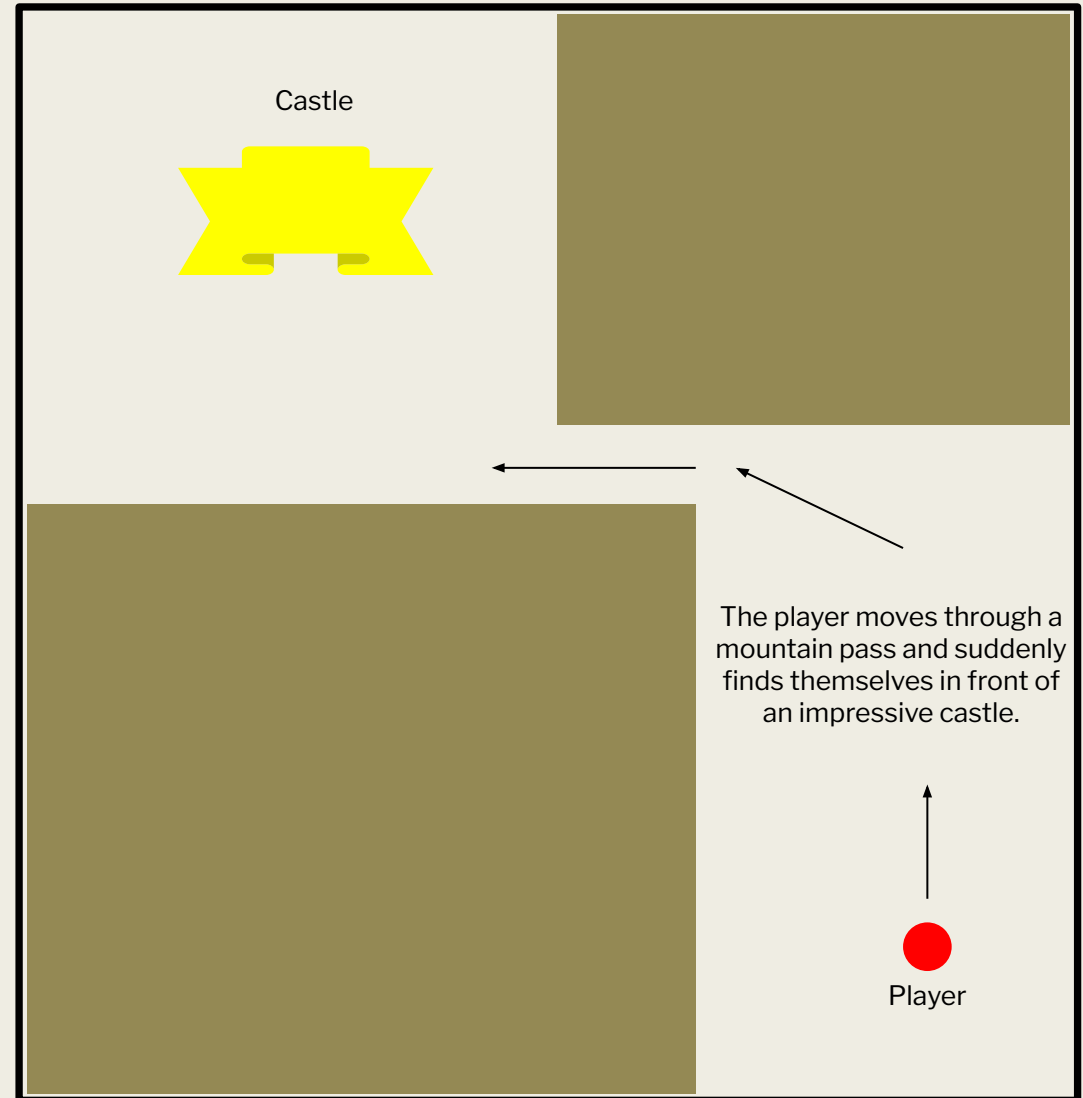
Castle

Player

The player is walking on a mountain and can glimpse a castle in a forest down below, in an area not yet reachable.

Soft Reveal

- When an interesting point or goal is slowly revealed as the player moves towards it. Often used with Landmarks.

Castle

The player sees more and more of the castle as they move through the forest.

Player

Hard Reveal

- When the goal or target is revealed in an impactful way for a wow-effect.

Castle

The player moves through a mountain pass and suddenly finds themselves in front of an impressive castle.
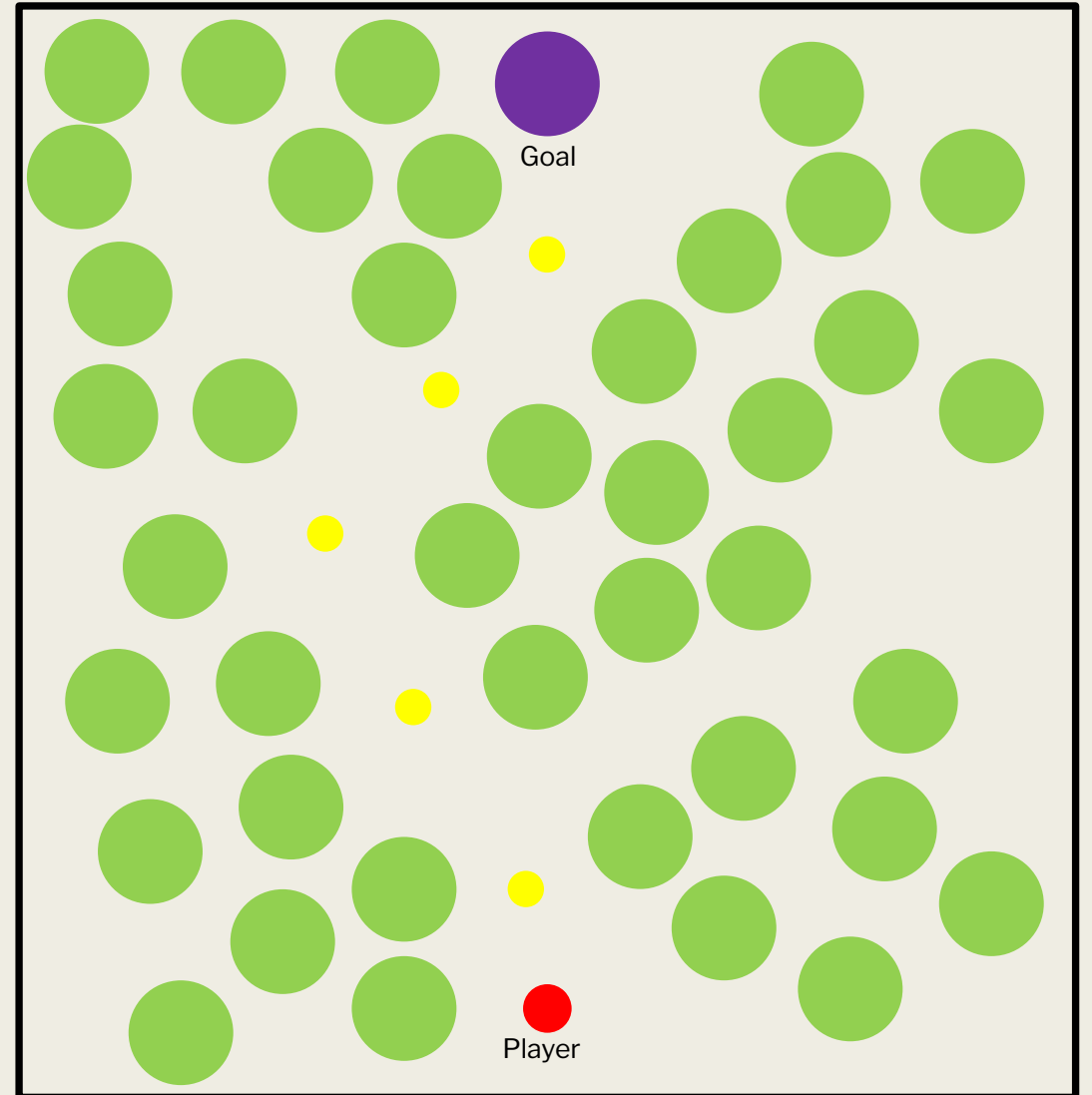
Player

Desired Path/ Implied Path

- The path the player is naturally guided through.

- Can be achieved with Spaceplanning.
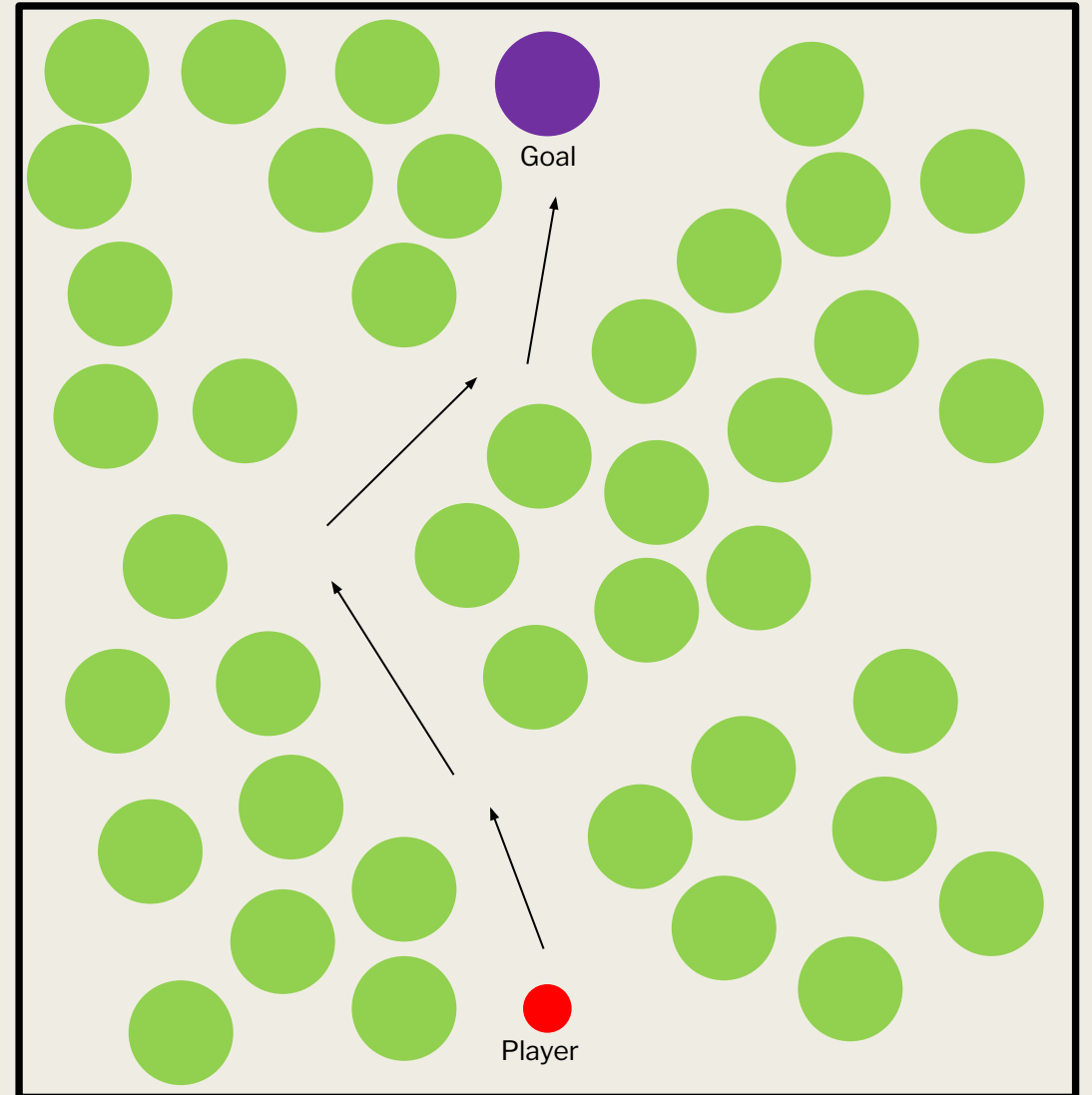
Desired Path/ Implied Path

■ The path the player is naturally guided through.

■ Can be done with pickups/collectibles.

– *This method is called Breadcrumbing.*

Goal

Player

Desired Path/ Implied Path

- The path the player is naturally guided through.
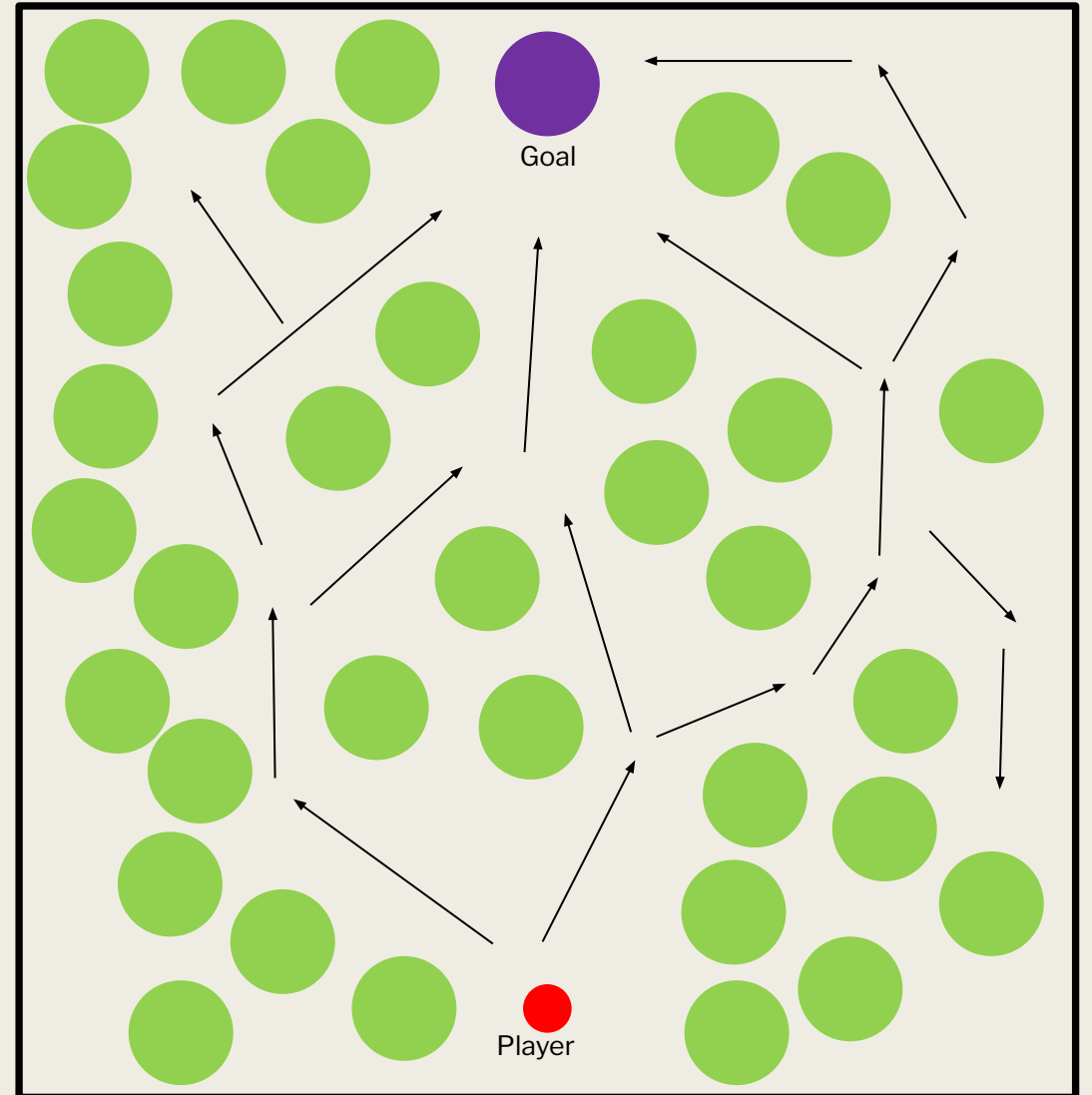
- Can be done with lighting and colouring.

Findability/ Discoverability

- The player can find what they are looking.

- There are elements in the design that encourages exploration and curiosity.
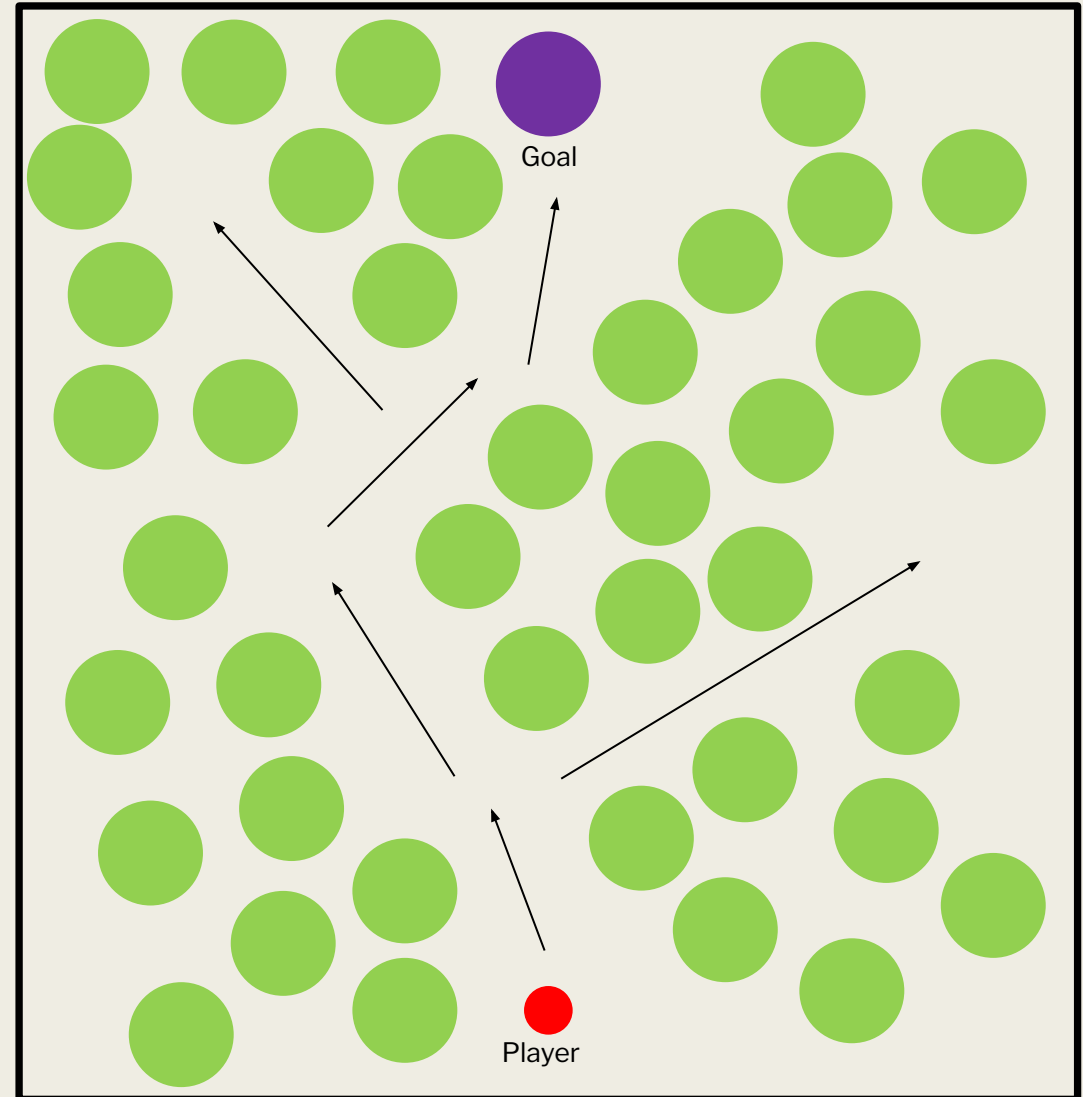
Findability/ Discoverability

- How linear the design is can vary greatly.

SPACEPLANNING & DESIGN

"THE WHITEBOARD TEST"

Level designers aspiring to work in the game industry are often asked to perform a "whiteboard test" – to sketch out a first person multiplayer level and explain it.

Below are some examples, and what they might say about you. (To "pass", you might have to be able to sketch at Advanced or Expert level)

A lot of this "progression" is tied to advances in CPU and GPU power. Also, I'm not saying the right-most is the best level, but it'd be the most "well-crafted."

BEGINNER
over-complicated structureless mess, has probably never tried to build this in a level editor tool, no clear flow or differentiation... no attempt to break lines of sight, no really discernable patterns

scrawled on the back of your history textbook during algebra class
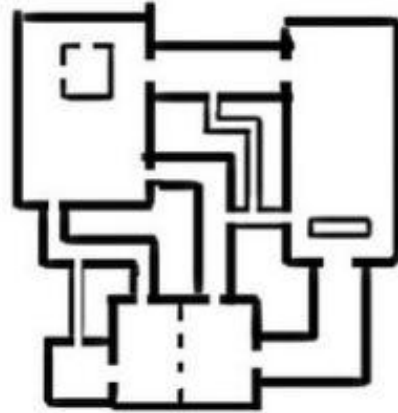
INTERMEDIATE
understands design theory but applies it very literally... very boxy floorplan that unimaginatively breaks line of sight, results in "room-hallway-room" syndrome... maybe you're an avid modder or a student with a lot of talent and potential, but you still need a lot more practice

huge Half-Life 1 Deathmatch levels your first Natural Selection map
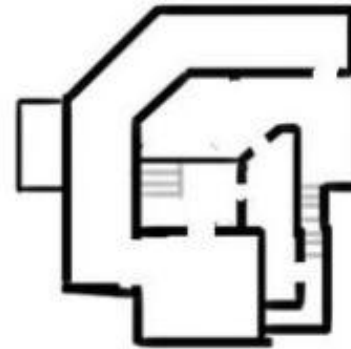
ADVANCED
simpler, more memorable floorplan, good use of patterns, good mix of narrow vs. open differentiation, and nice mix of height with stairs... but matchy-matchy 45 degree bends feel a lot like a "video game level" (though many designers and games would never really care about that)

graybox in a vacuum, probably sci-fi, Quake 3 levels, "pure gameplay"
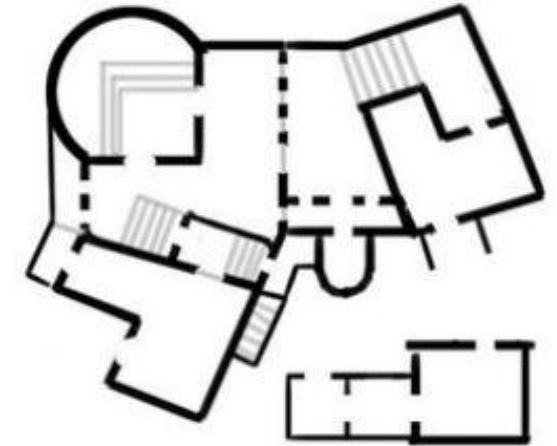
EXPERT
meaningfully breaks from grid, clear research of real-life buildings, imbues spatial differentiation with cultural differentiation, "tells a story", careful use of symmetry... still relatively simple and memorable floorplan, still breaks line of sight... still a "video game level" but it has non-abstract internal logic to it

an Uncharted 4 level, recent CS:GO maps, usually anything overtly concerned with a narrative aesthetic of photorealism and

Integrity - Spaceplanning

- How well does the design function in relation to what its supposed to be? Is the buildings layout logical in relation to how player is supposed to move through it?

- An architectural term often used in relation to Interior Design.

Coffee Shop

Emergency Exit

Storage Room

WC

Staff Breakroom

Entrance
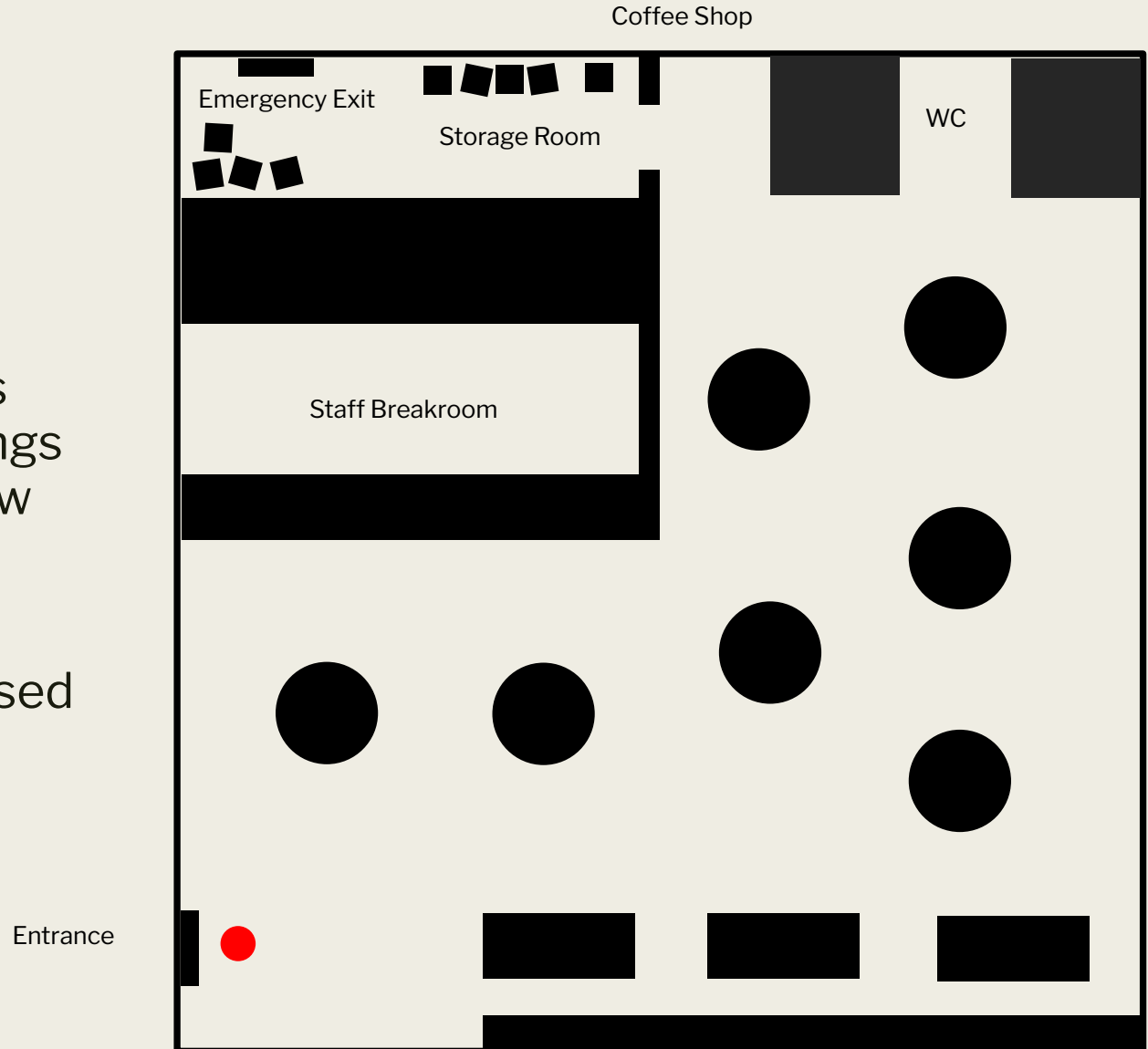
Integrity - Spaceplanning & Sightlines

- How are sightlines implemented?

- What do you want the player to see?
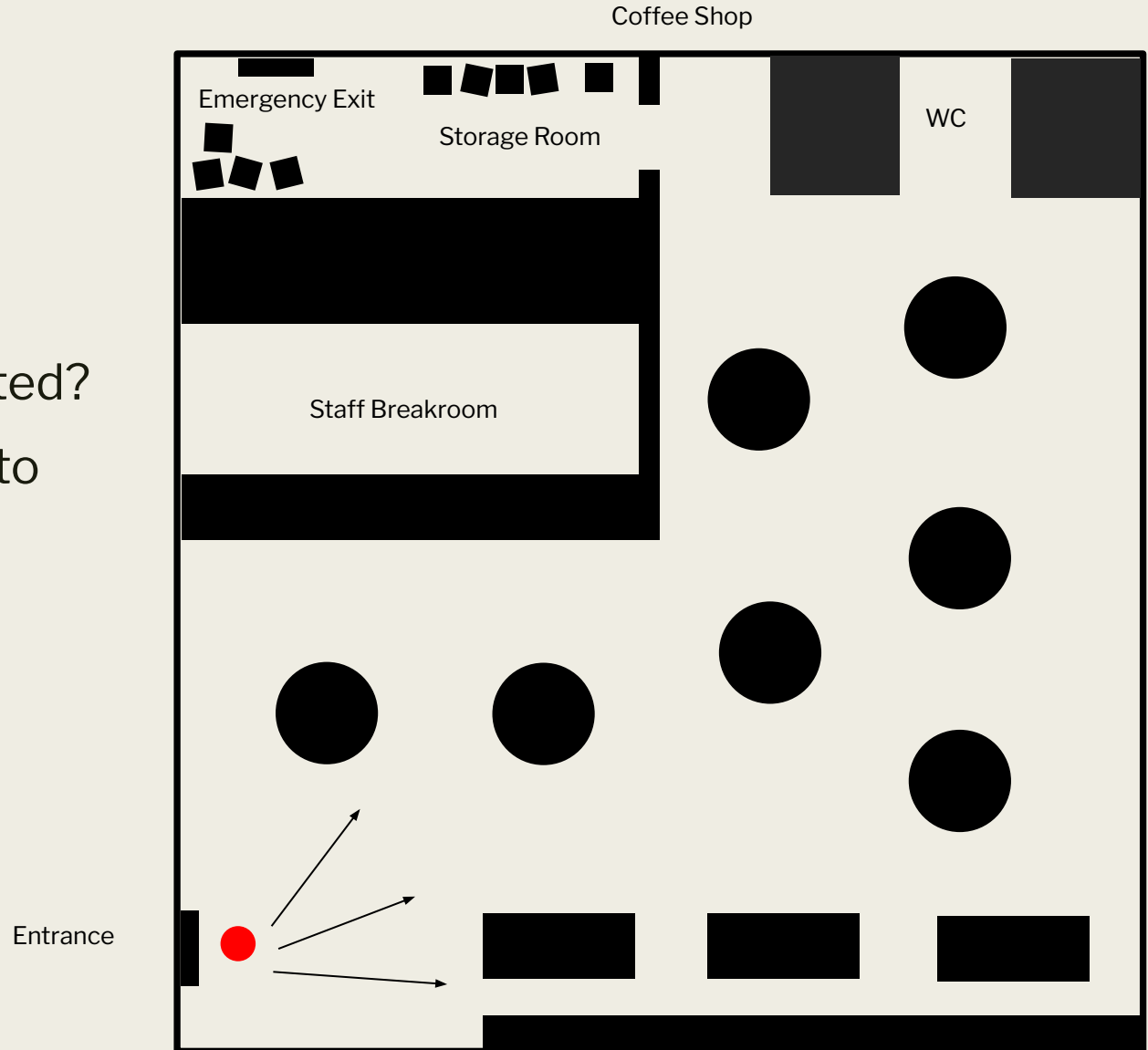
Gameplay - Flow & Rhythm

- How do you move around in the space?

- How well does the gameplay works in relation to the design and composition?

- How well are the player's actions affirmed?

Coffee Shop

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Entrance
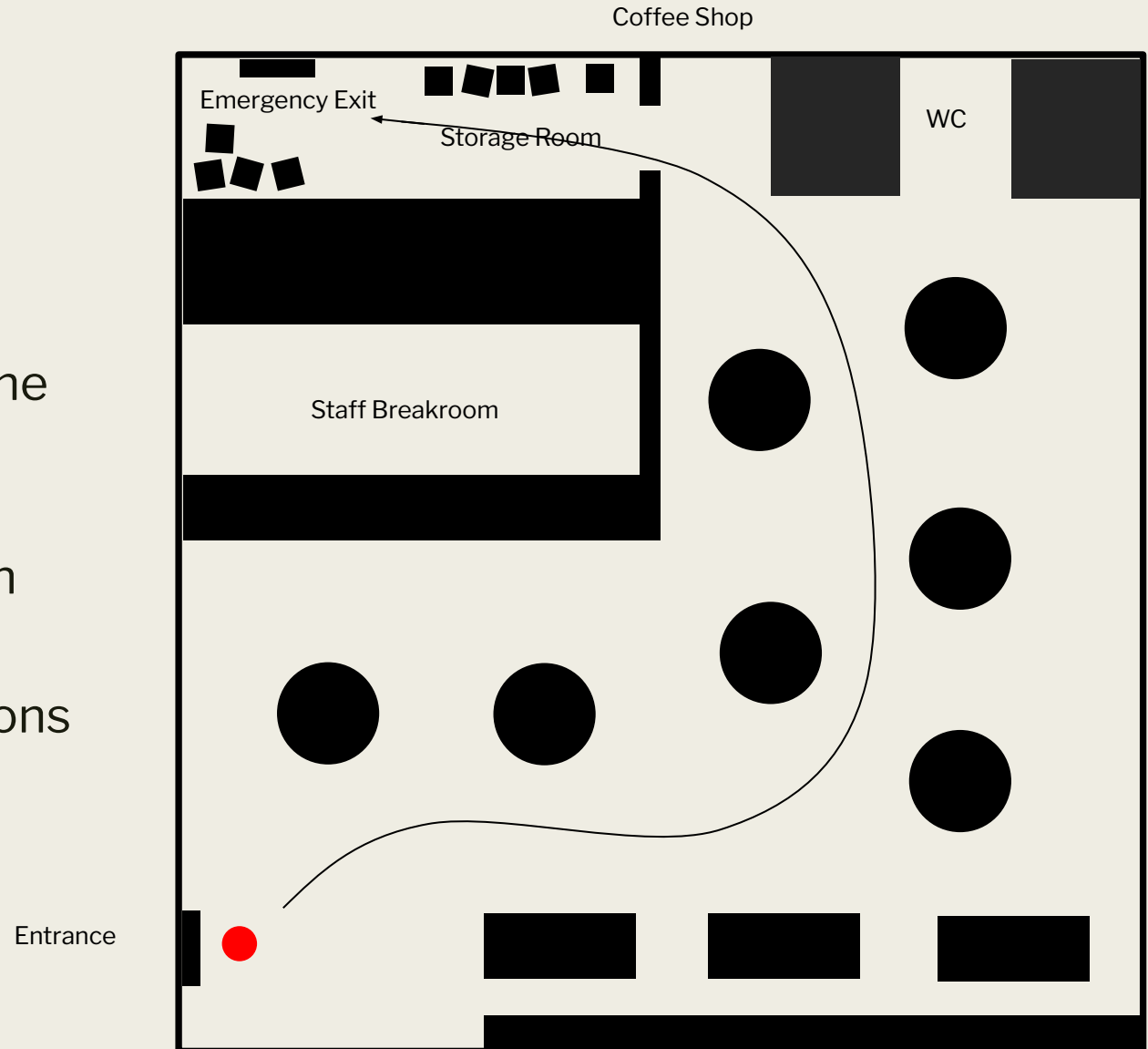
Aesthetics - Spaceplanning

- Visual aspects.

- Composition.

- Lighting.

- How well does the visual aspects support the game and its core concepts?

- How can a level designer use this?

Coffee Shop

Emergency Exit

Storage Room
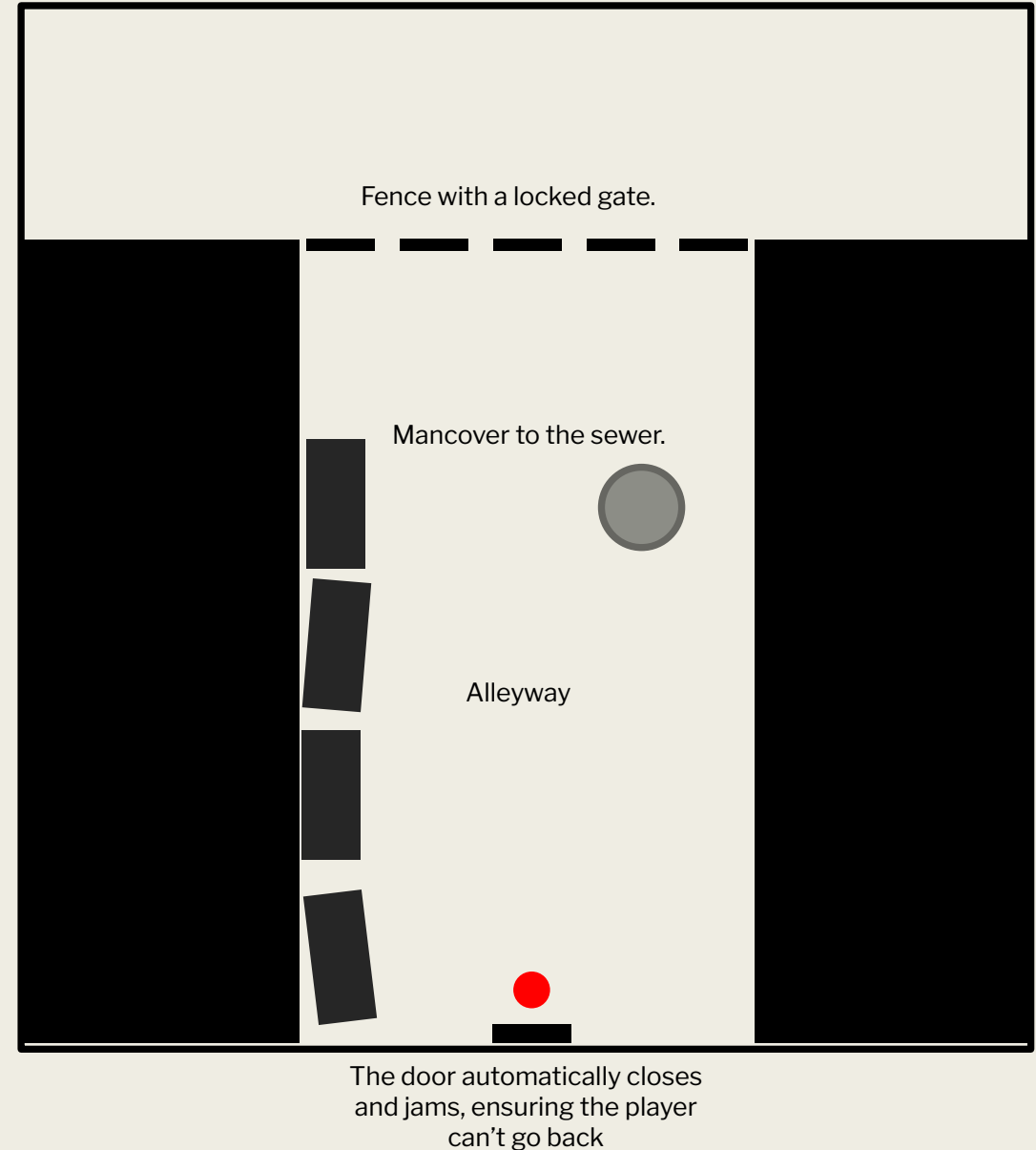
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Staff Breakroom

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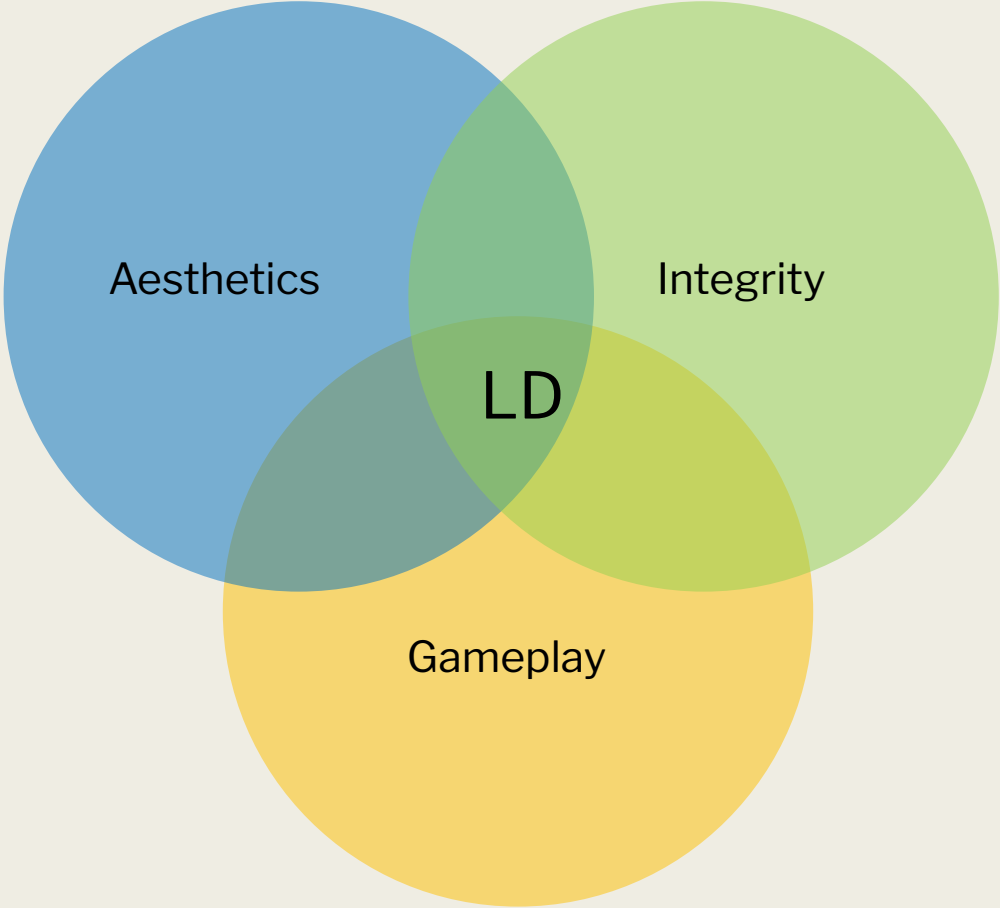
Gate/Gating/ Skill Gate

- A way to limit the players movement/block the path forward.

- Example: The door can't be opened until all the enemies in the room are defeated.

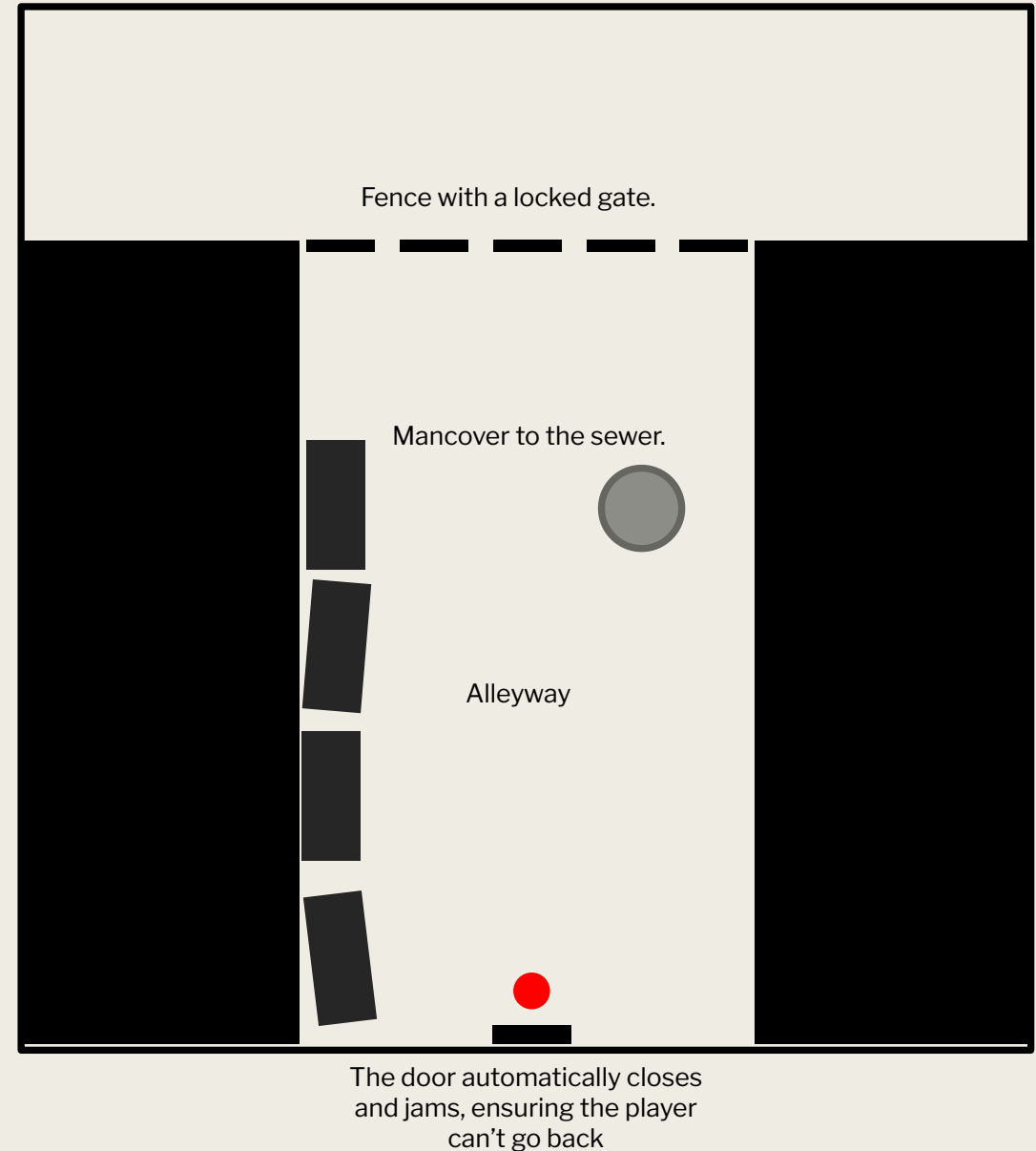- Example, the player must learn how to pick the lock or find the key to open the door.

Coffee Shop

Emergency Exit

WC

Storage Room

Staff Breakroom

Entrance
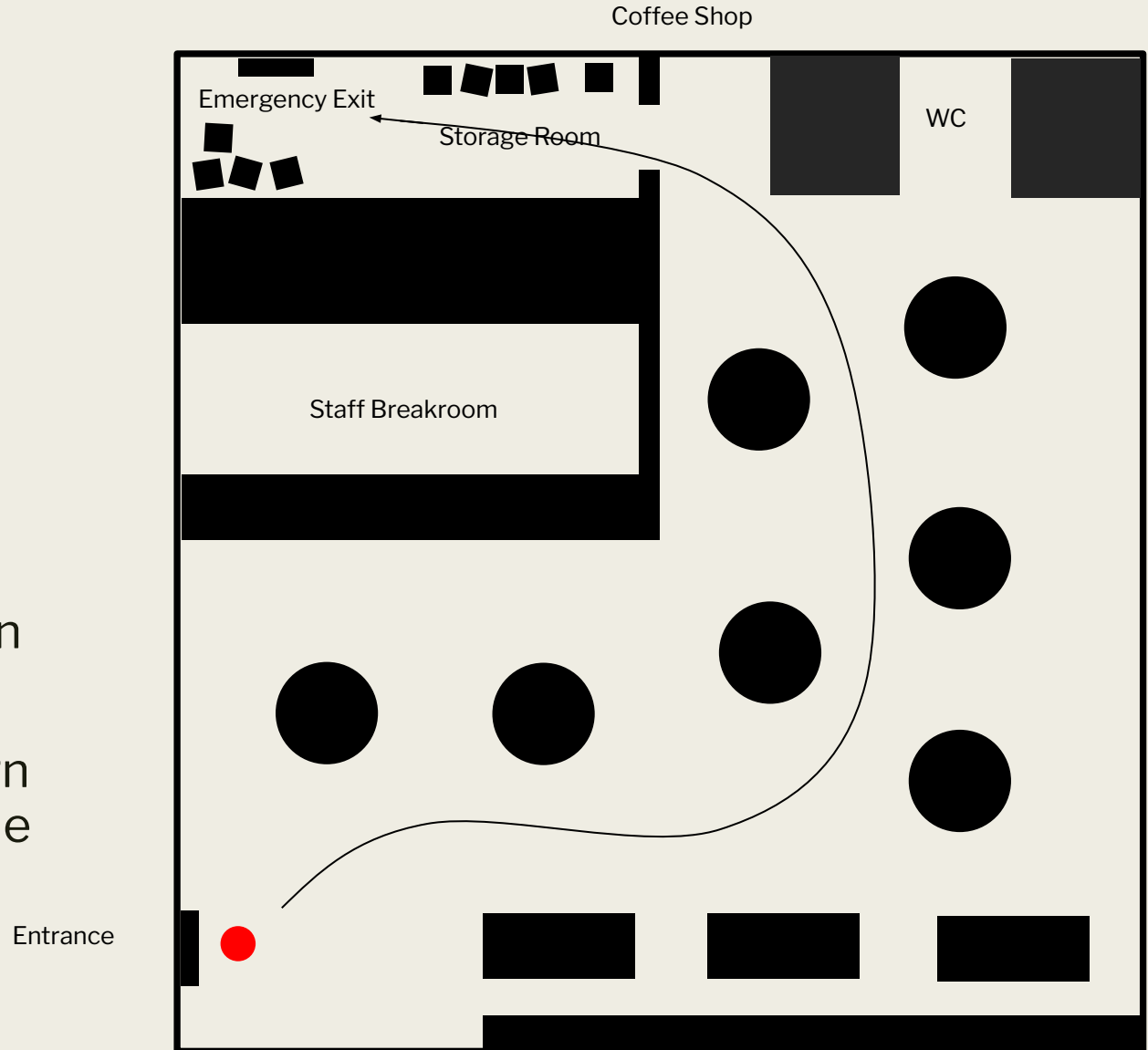
Point of No Return

- Example: A door deadlocks, forcing the player to move forwards.

- Used to limit player movement and to show/force progression.

- Also used in relation to optimisation from a technical standpoint.

Fence with a locked gate.

Mancover to the sewer.

Alleyway

The door automatically closes and jams, ensuring the player can't go back

Drop-Of/
Down the Rabbit Hole

- The player chooses to progress, but is shown that it is the correct way forward.

- A good way segment a game.

Fence with a locked gate.

Mancover to the sewer.

Alleyway

The door automatically closes
and jams, ensuring the player
can't go back

Onboarding

- Make the game/level accessible for new players.

- Teach the rules of the game to the player.

- Introduce mechanics in a intuitive way.

- A UX concept

- "Tutorial-level"

- Example: You enter a room with a powerup, and can't exit until you learn how to use it, or is shown how to use it.
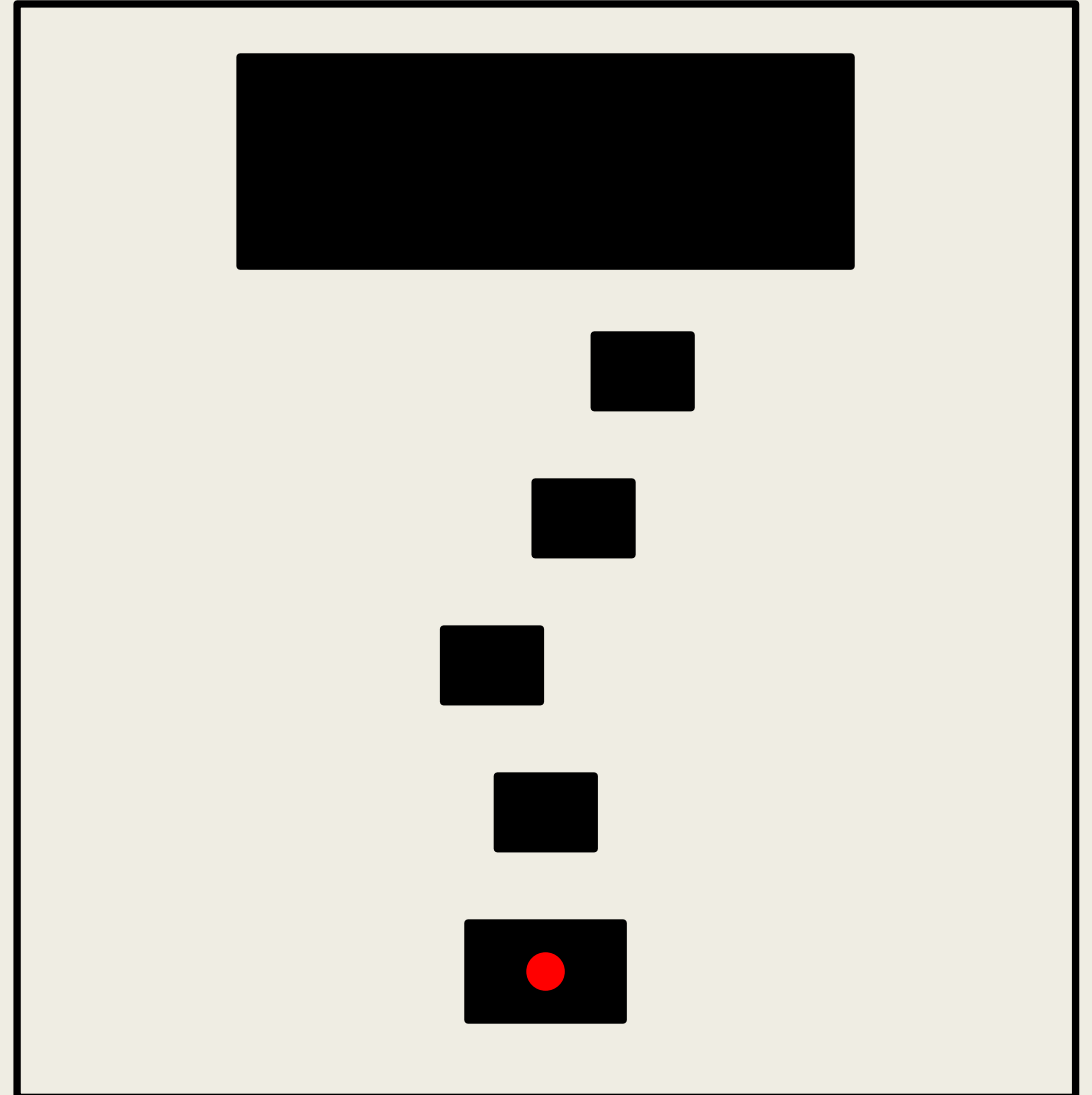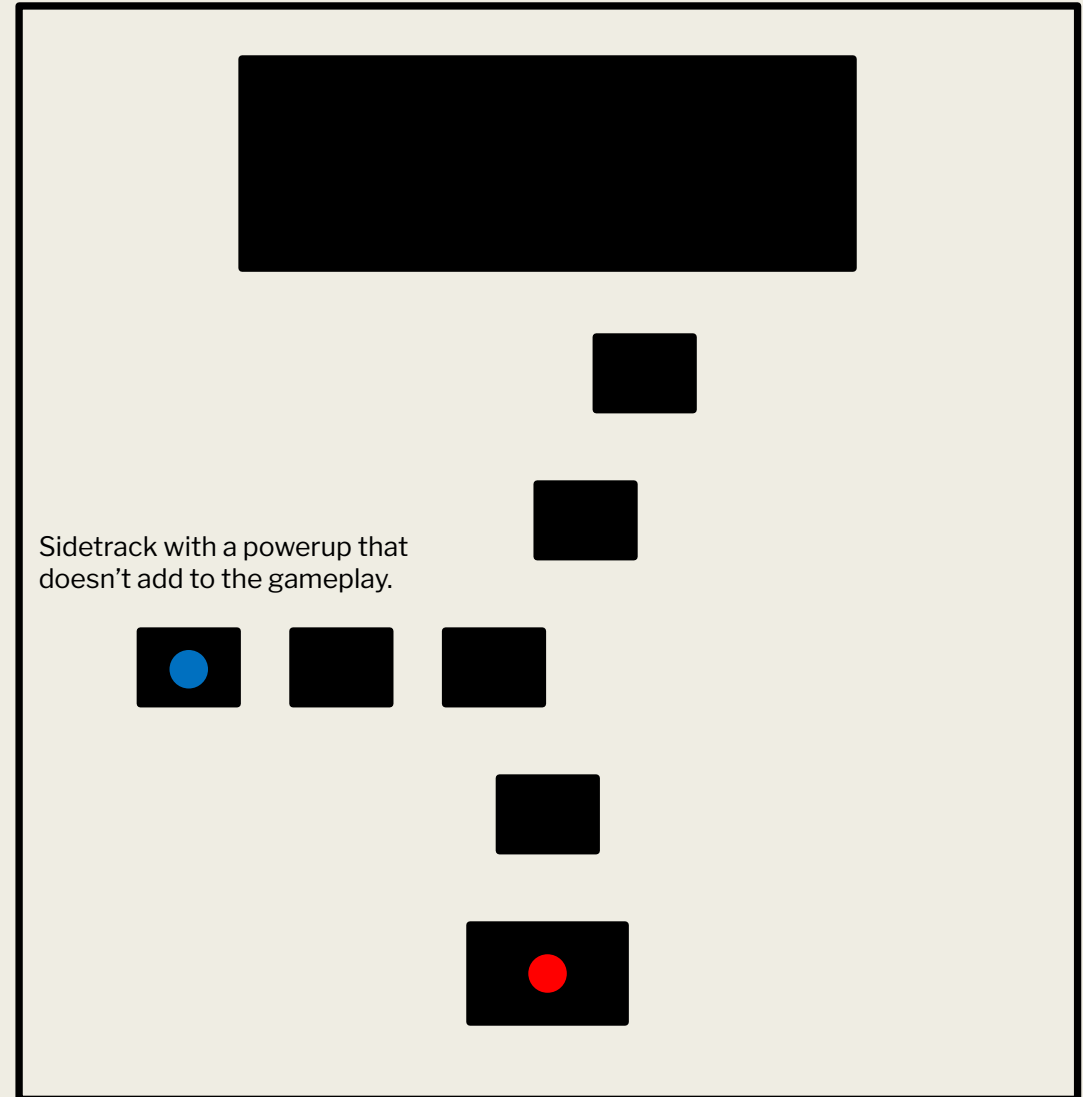
Kill Your Darlings

■ Never be afraid of removing or cutting something just because a lot of time was spent on it if it doesn't add or improve the game/level in anyway.

Sidetrack with a powerup that doesn't add to the gameplay.
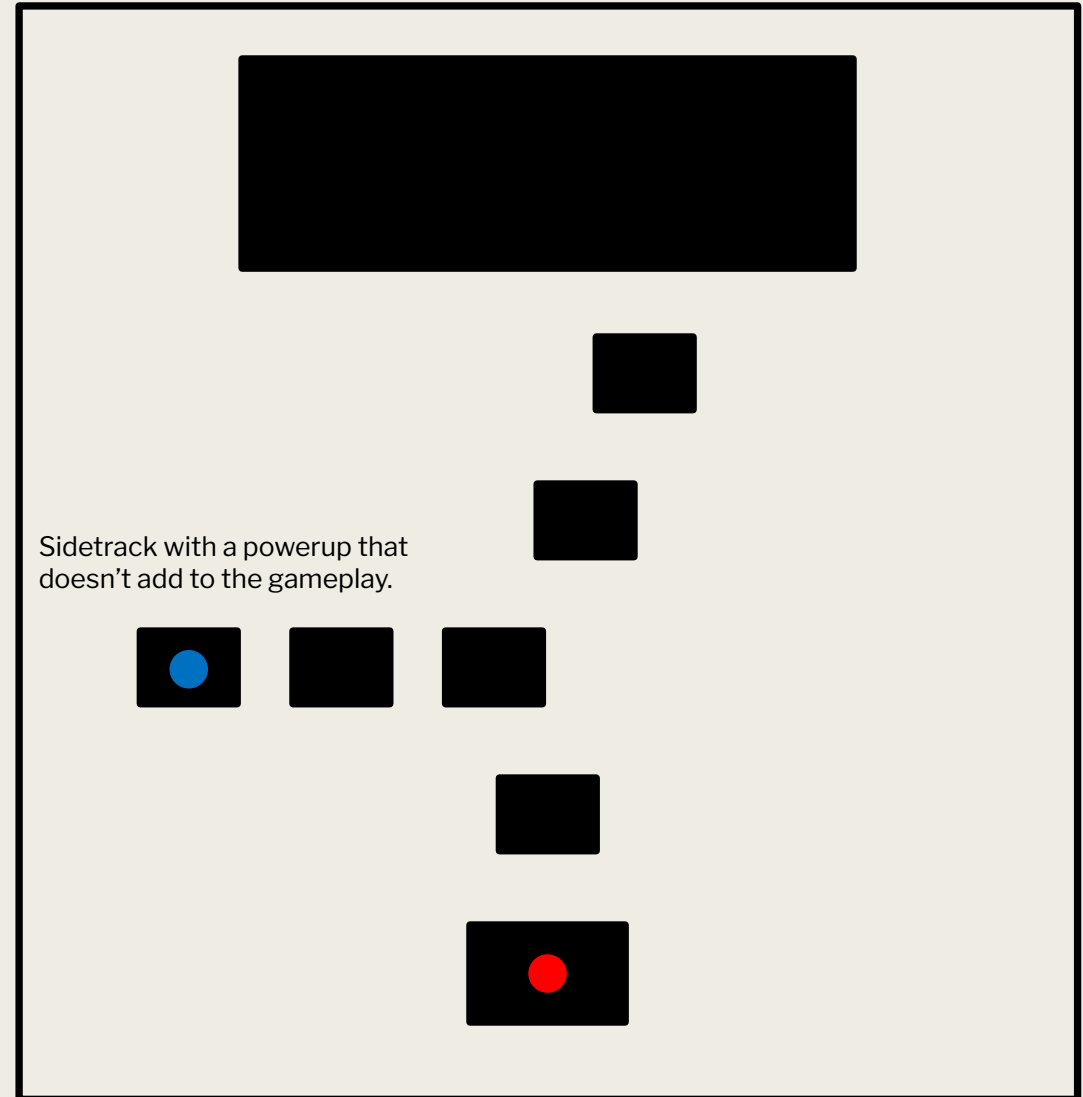
Design By Subtraction

- Cut everything that doesn't support the core gameplay.

Sidetrack with a powerup that doesn't add to the gameplay.

Ki-Sho-Ten-Ketsu

- A 4-step structure for narrative.

- Can be used for level design concepts and mechanics.

Example:
1. Introduce a jump mechanic.
2. Add to it with a double jump mechanic.
3. Add a twist with powerups needed to replenish the double jump.
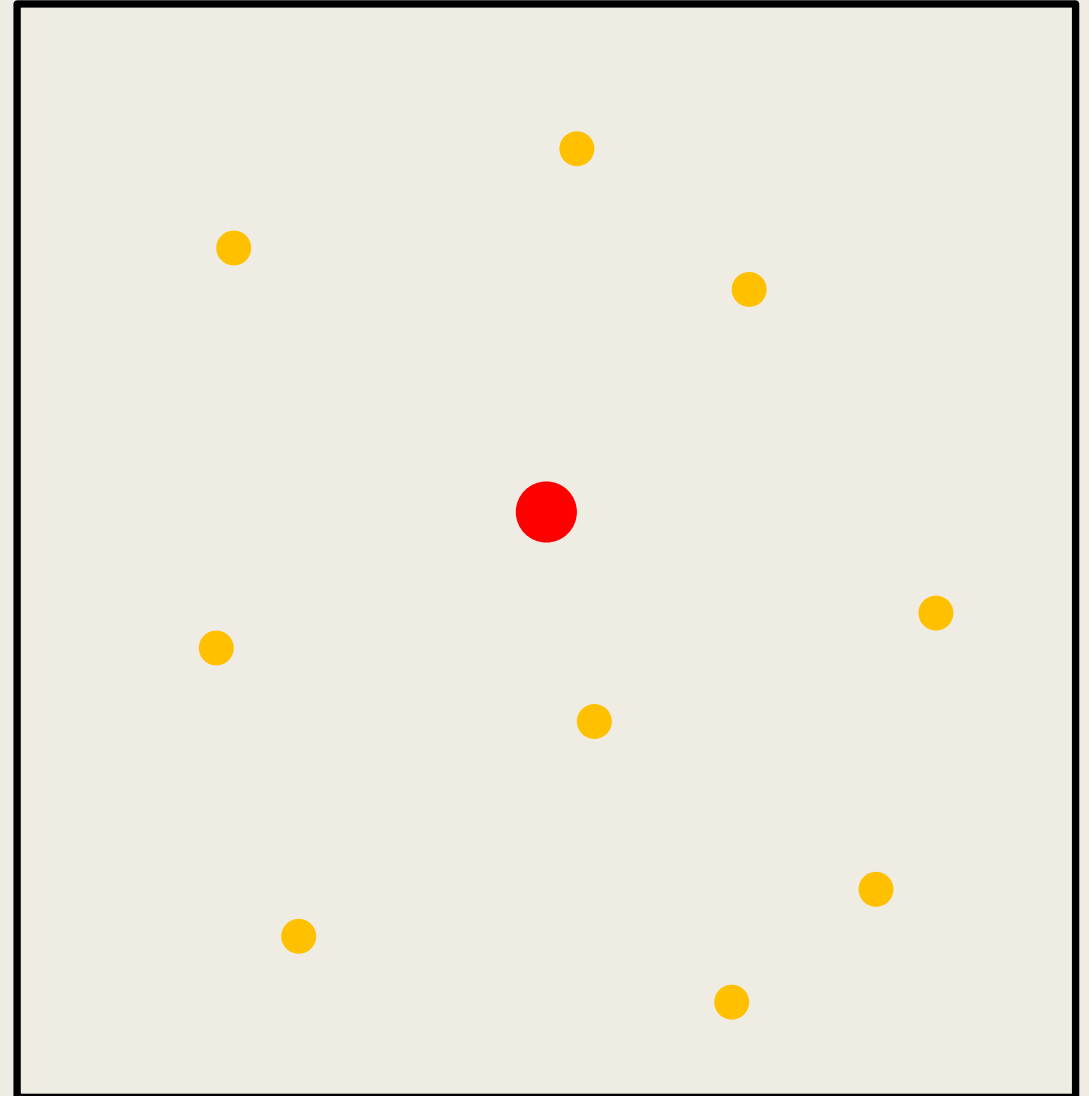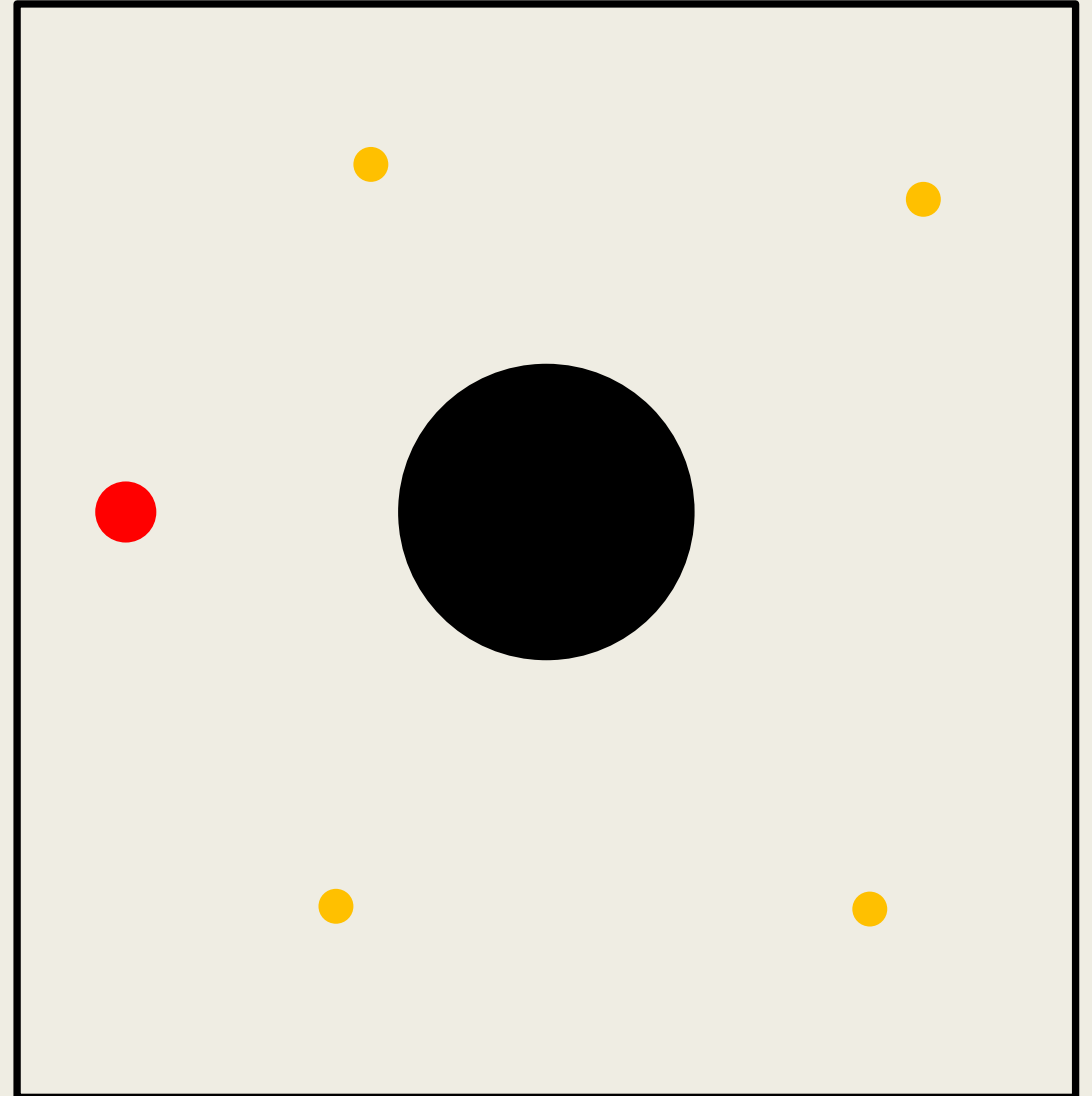4. A finishing segment where the player needs to utilise the mechanics fully.

Progression

Twist

Introduction

Conclusion
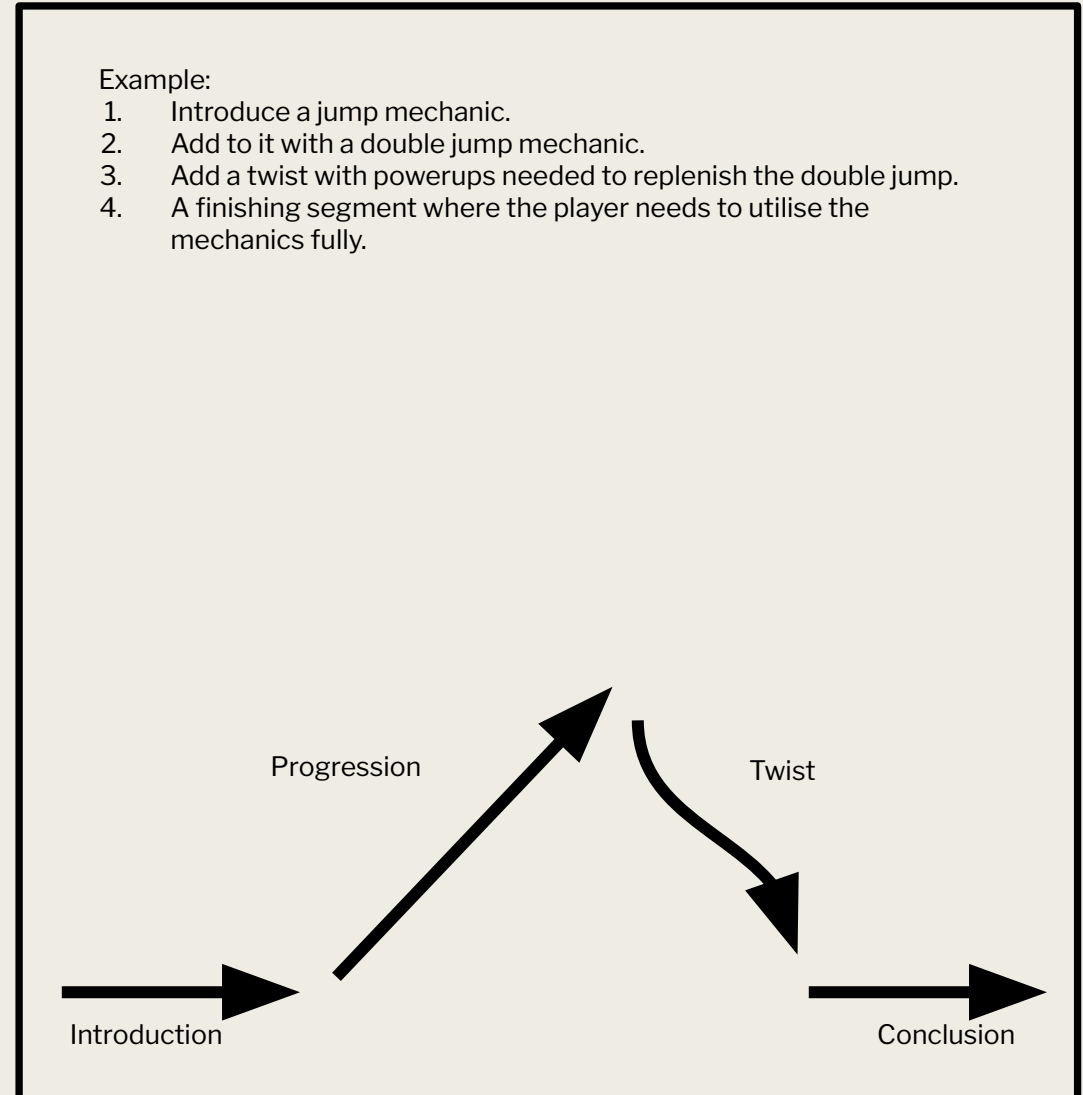
COMBAT

Combat Zone

- Completely open areas are rarely fun.

Combat Zone – Circle

- A classic part of the combat zone concept.

- Could be used as part of a larger design.

Combat Zone – 8

- A classic part of the combat zone concept.

- Could be used as part of a larger design.
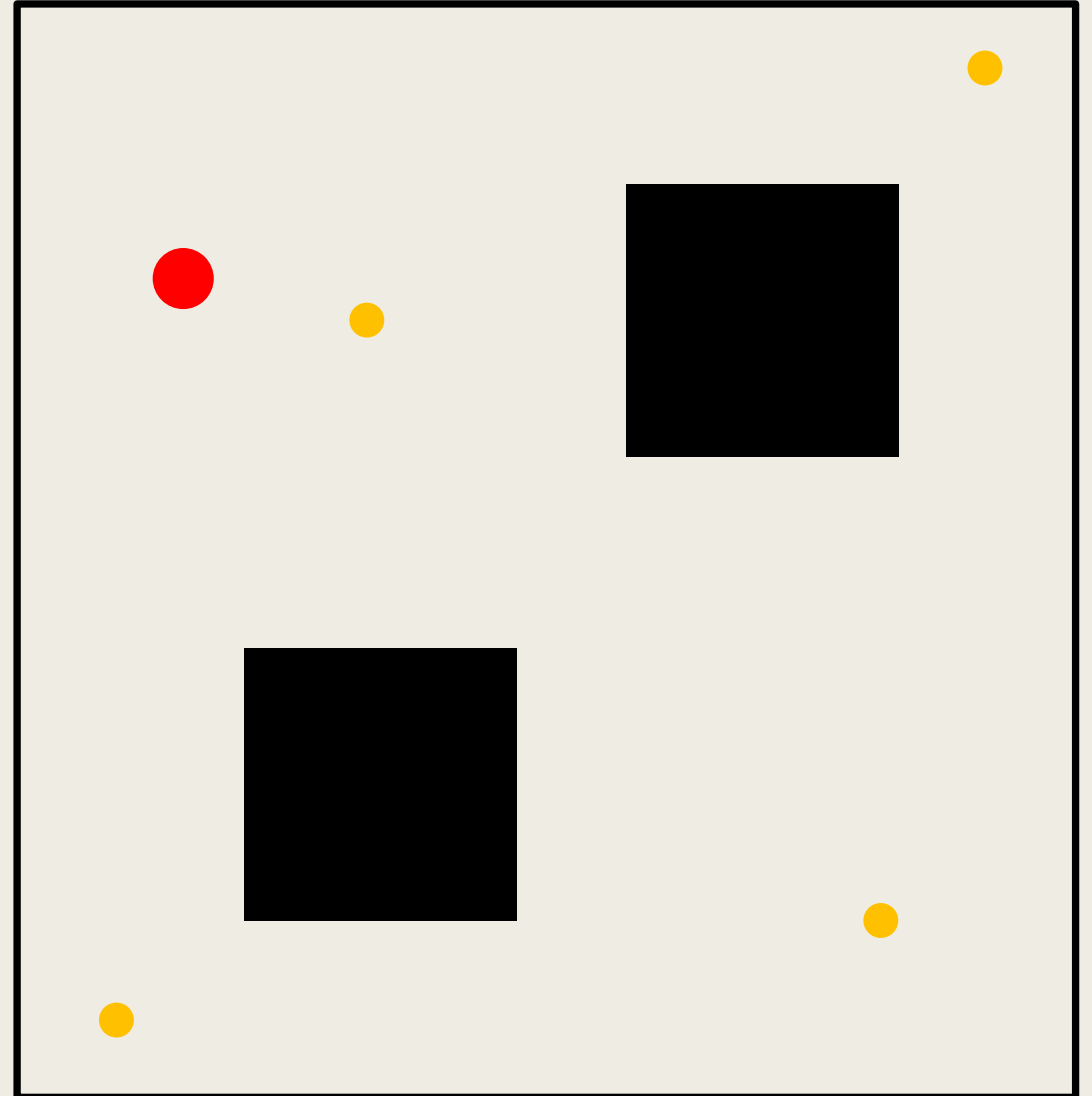
Combat Zone

- Take into consideration:
  - *Line of sight*
  - *Symmetry/Asymmetry*
  - *Internal logic*
  - *Spatial differentially*
  - *Height differentially*
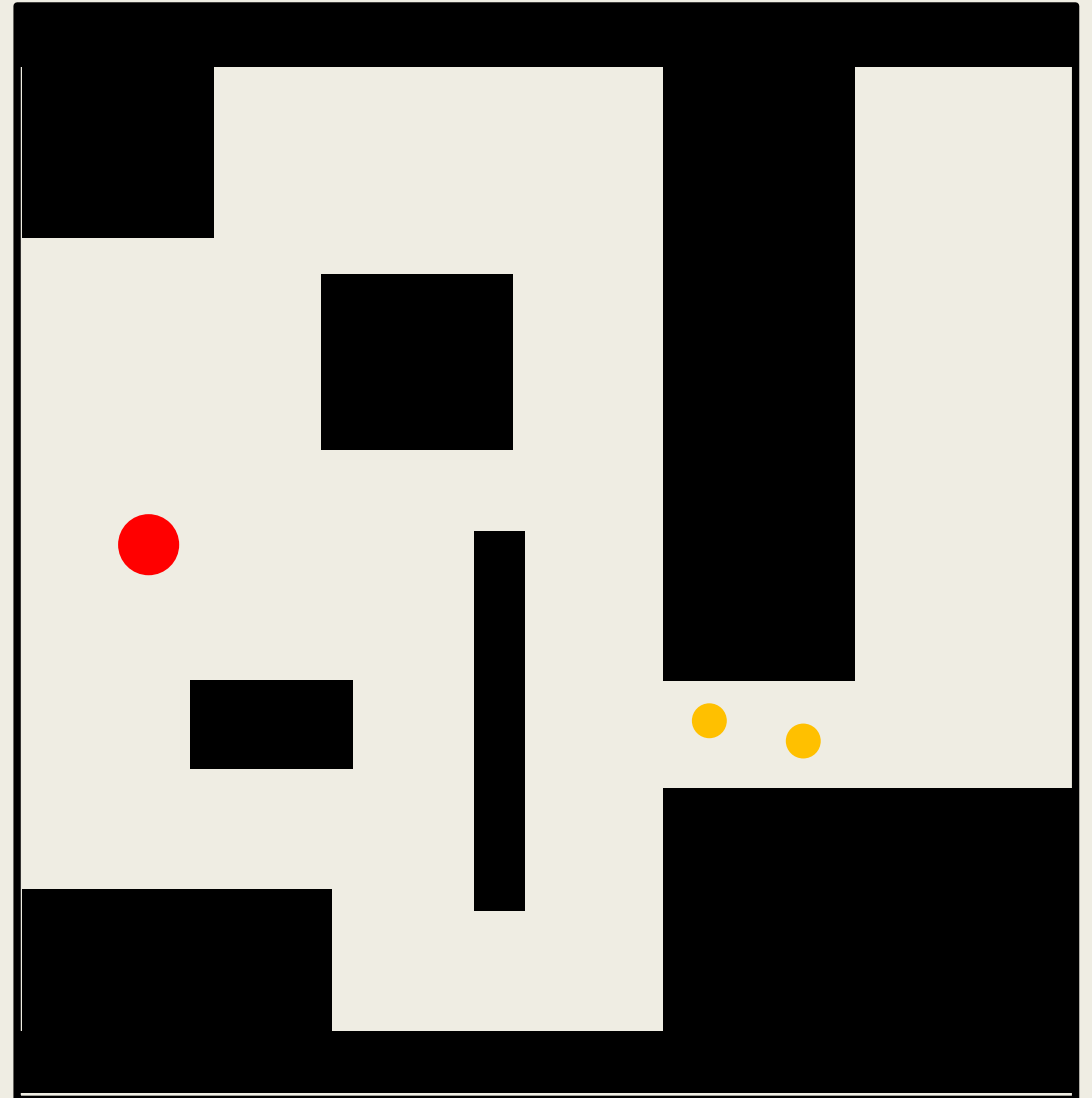 - *Floorplan*
  - *Realism/Non-realism*
  - *Etc*

?

Vantage Point

- Gives the player the ability to get an overview of the playfield, in terms of overview.
- Can provide a unique position for certain abilities. For example, a sniper position.

Plaza

Overview
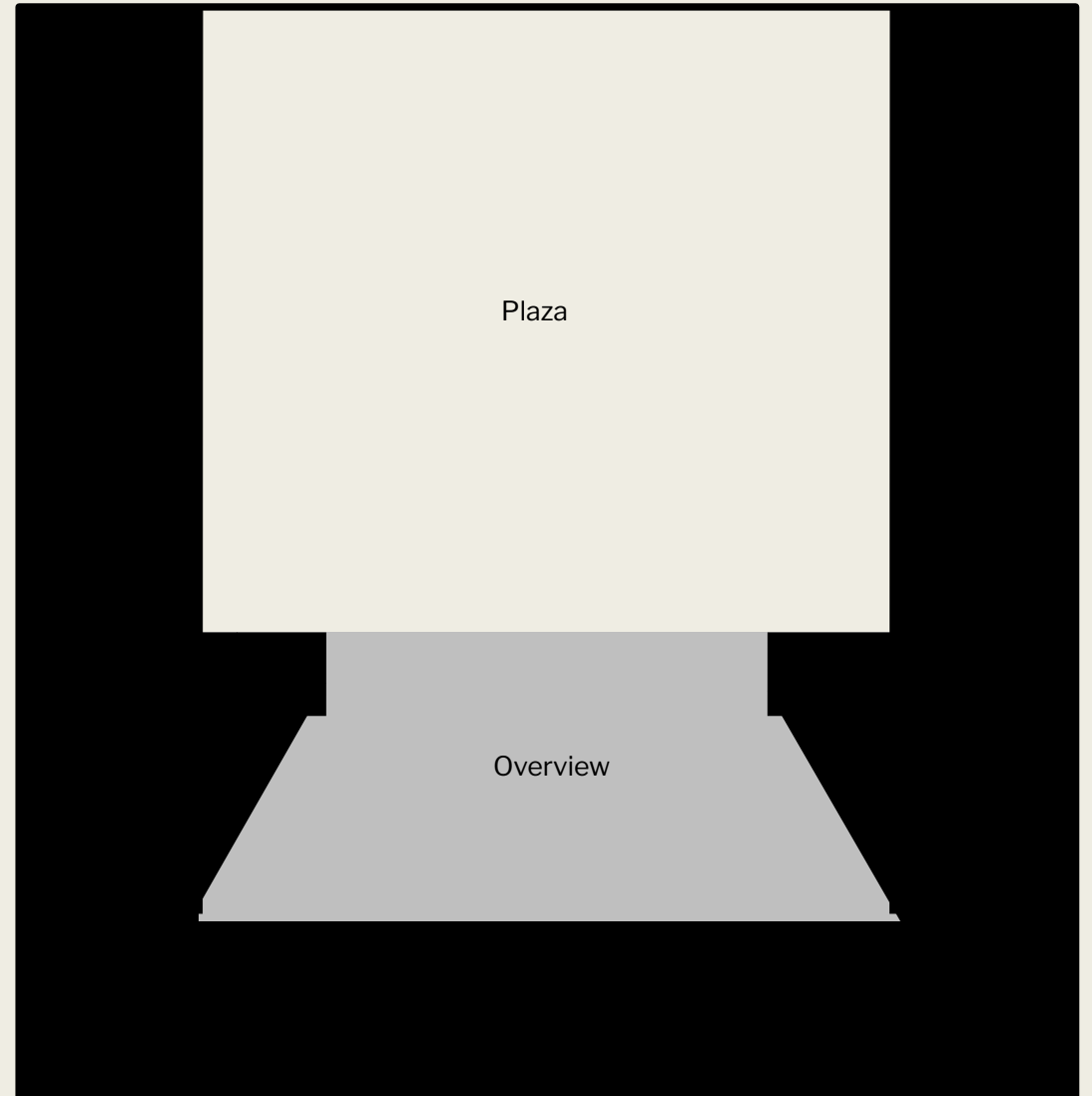
Bottleneck/ Chokepoint

- Passages where the combat becomes tighter.
 - *Especially useful in multiplayer games.*

No Man's Land

- An area where it is dangerous for both players and enemies to be.
  - *Make sure there are good cover opportunities.*
 - *Make sure there is an opportunity to explore the area.*
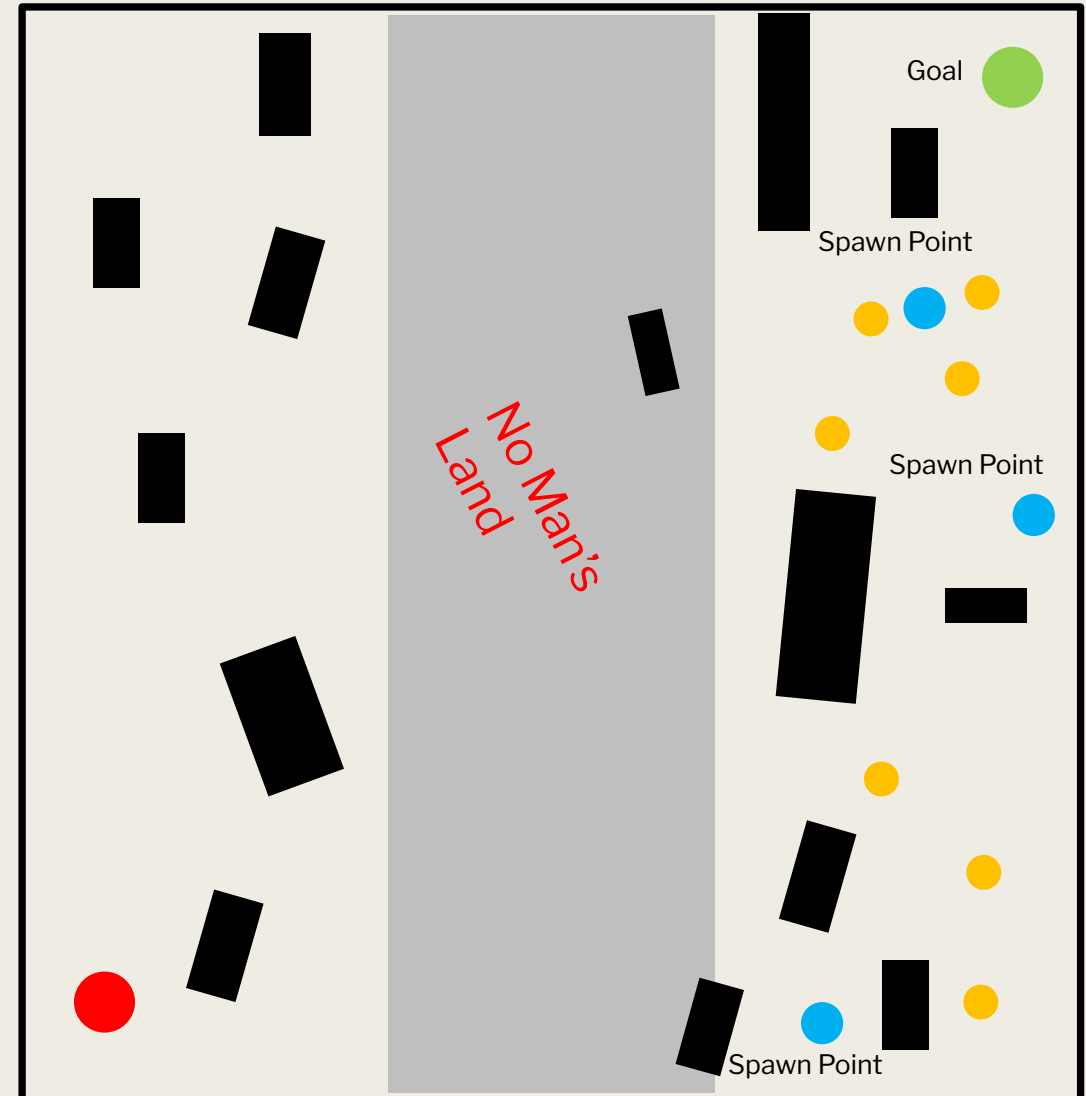
Cover

- Make use of the different principles to create useful and natural covers.

- Vary the sizes.

- Avoid too much symmetry.

- Avoid too much randomness.

- If possible, work with verticality.

- Keep in mind different player strategies.
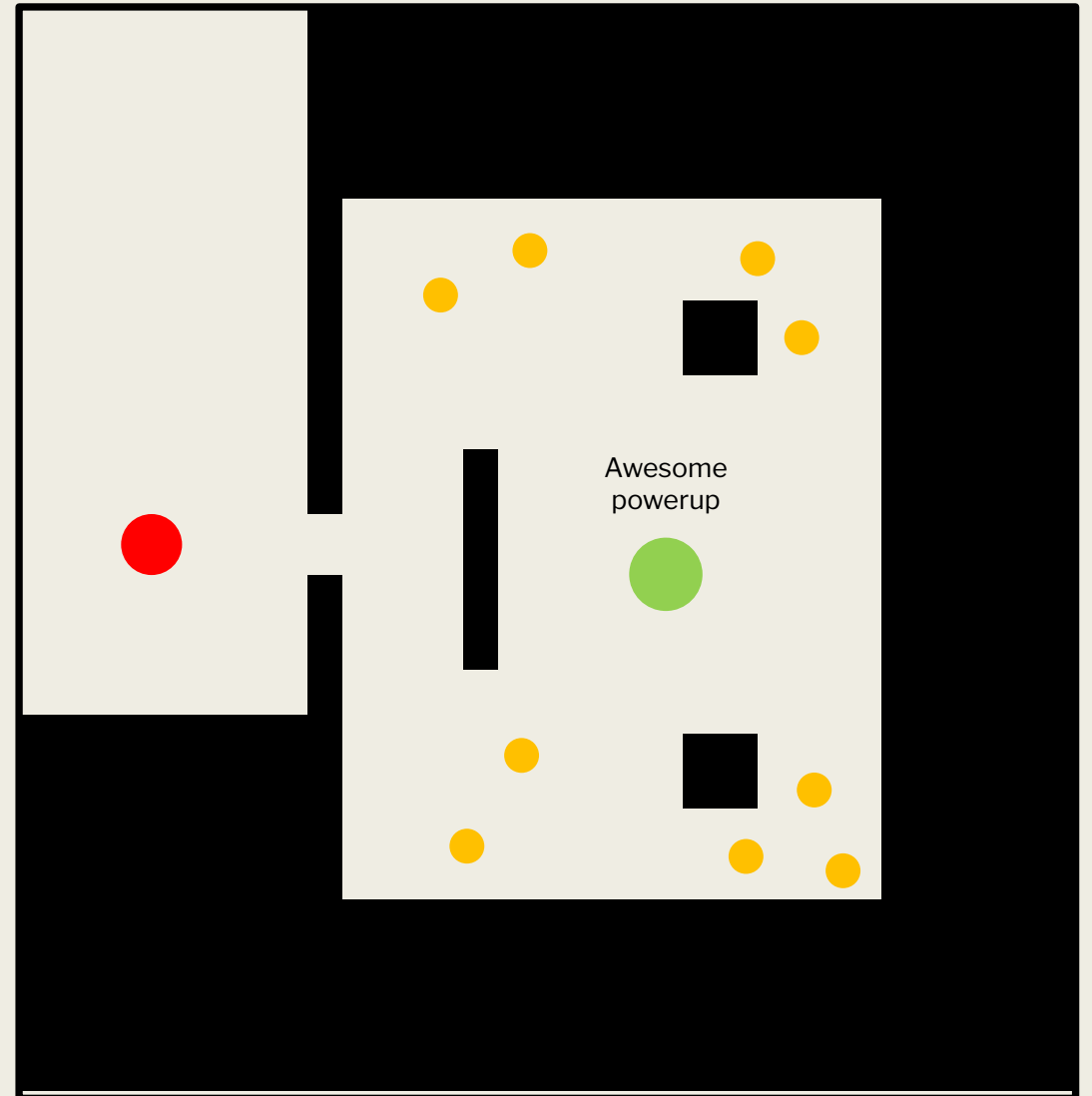
- Mind the spaceplanning.
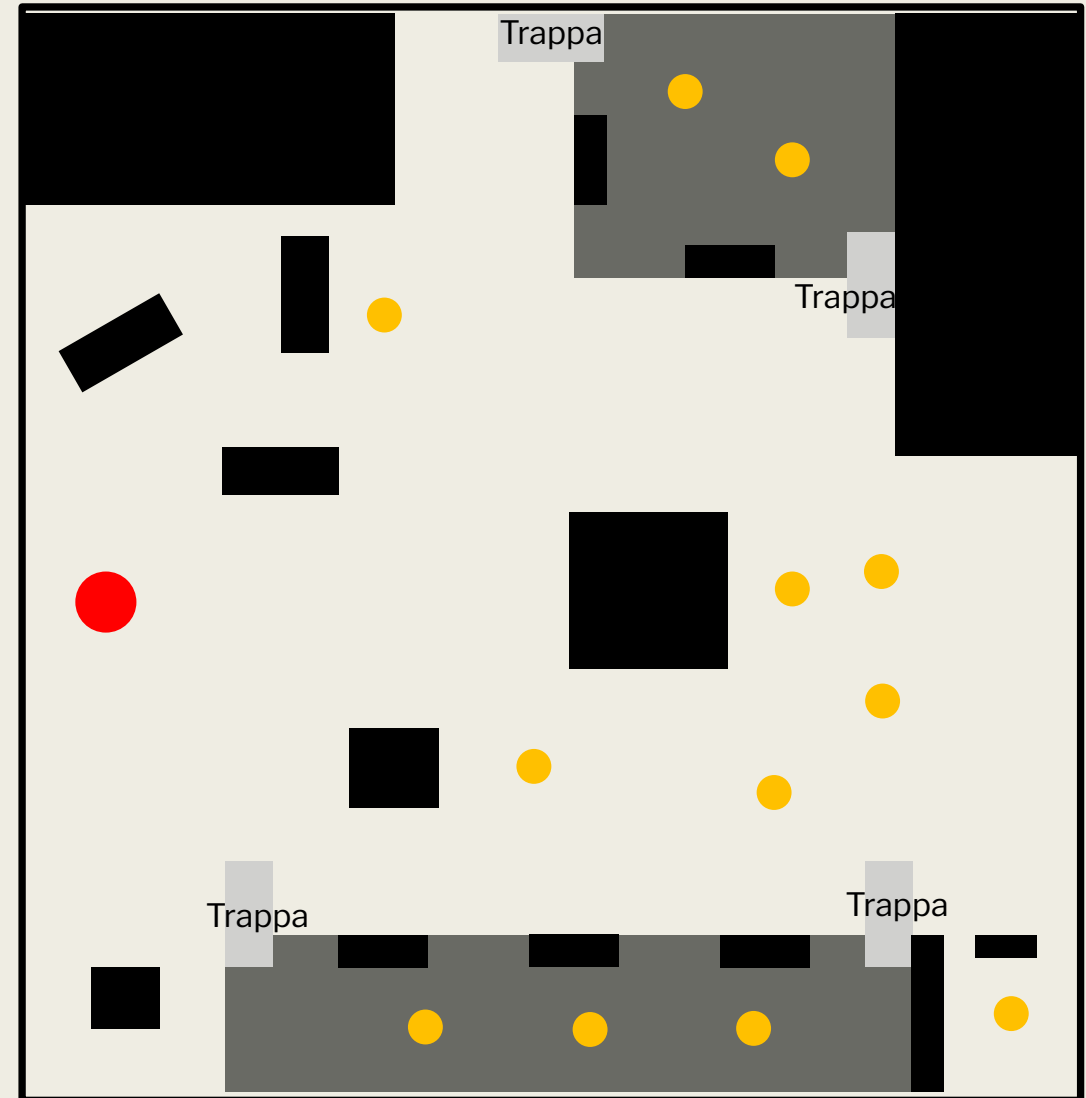
The Door

- How do you avoid it so the player can simply stand in a room/opening and just back in/out?
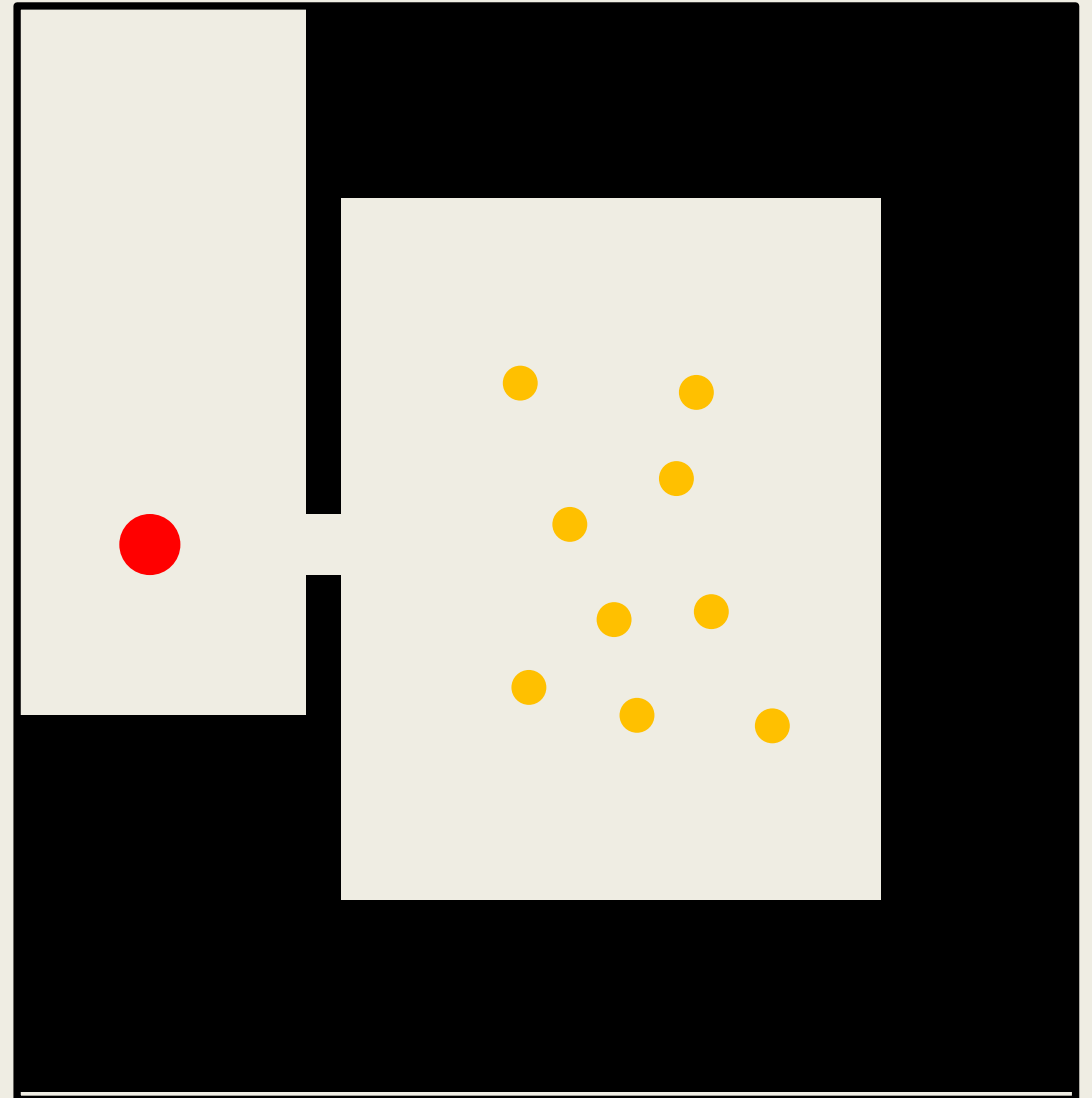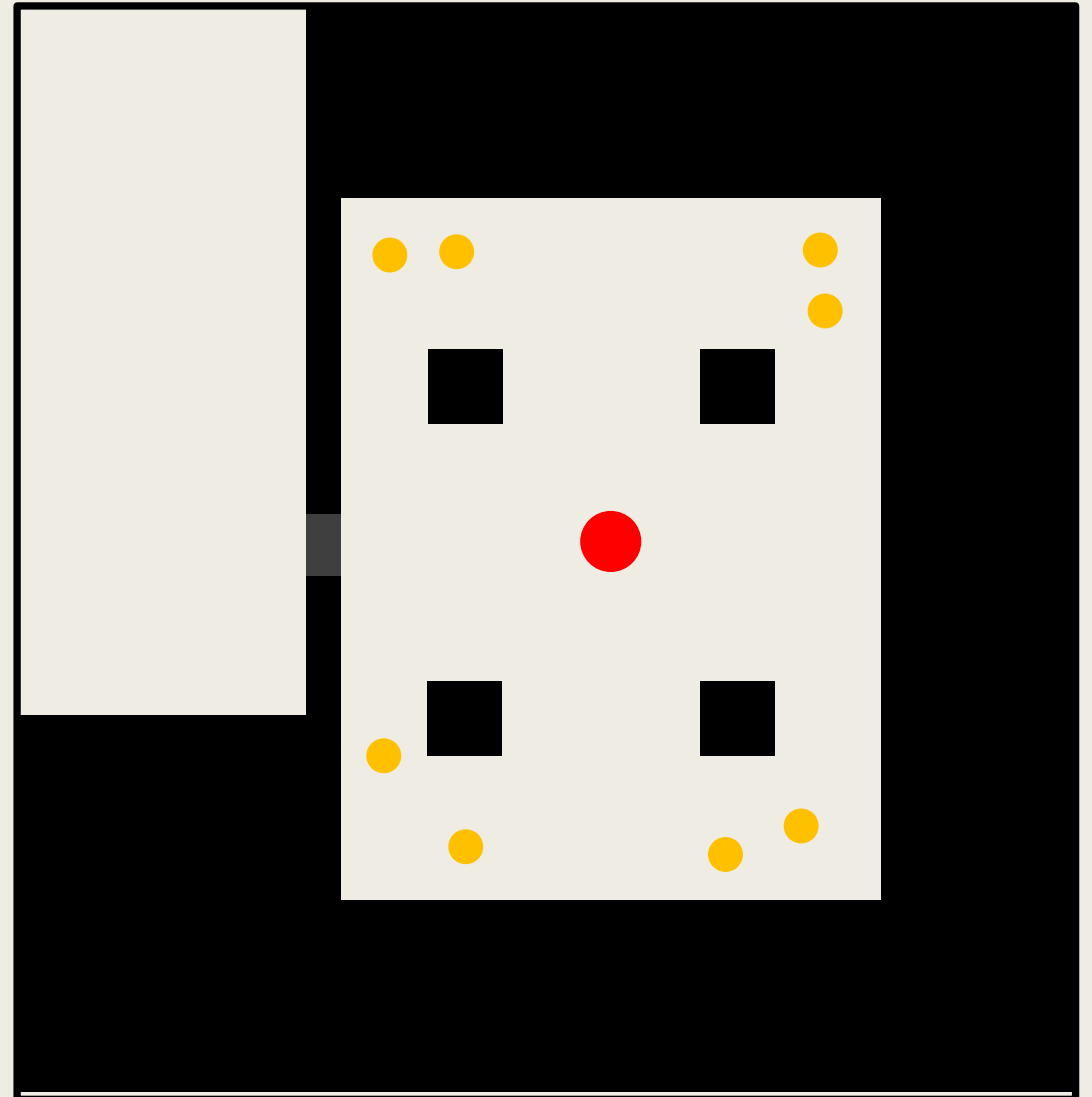
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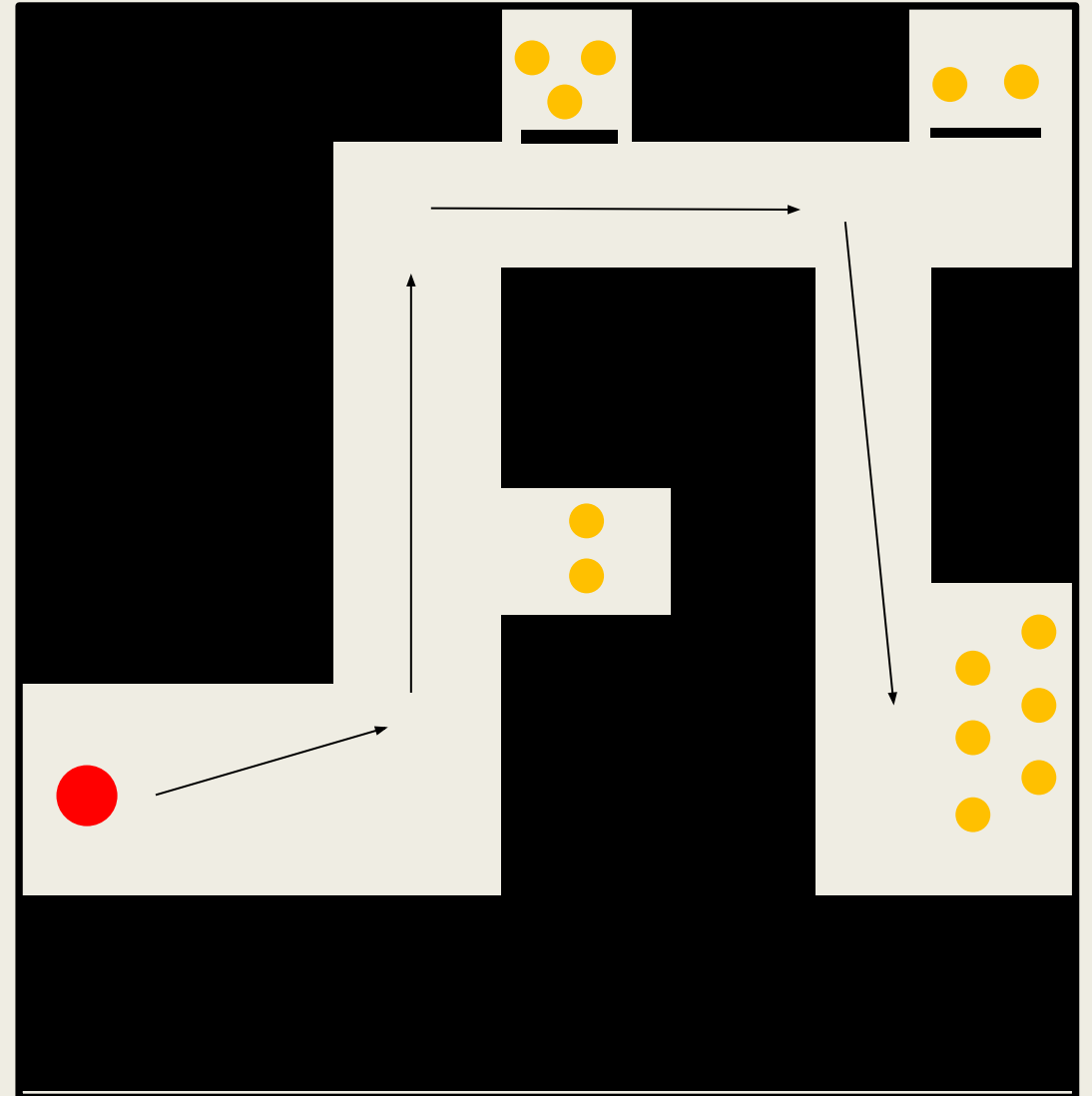 - *Place something in the room the player wants.*

Awesome powerup

The Door

- How do you avoid it so the player can simply stand in a room/opening and just back in/out?
    - *The enemies doesn't appear until the player is in the room, and the door closes behind them.*
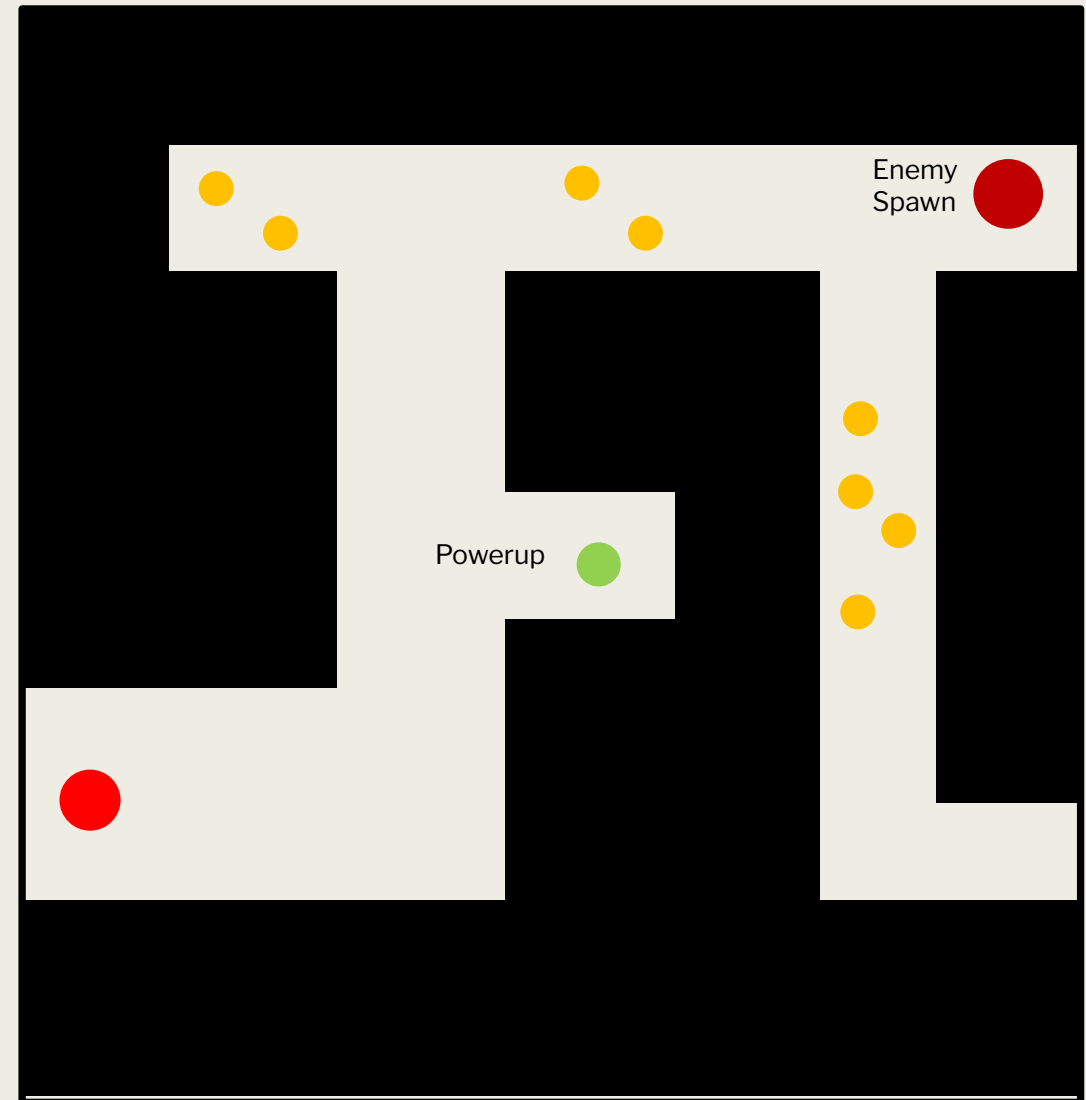
Monster Closet

- When enemies are standing around in groups waiting to attack the player.
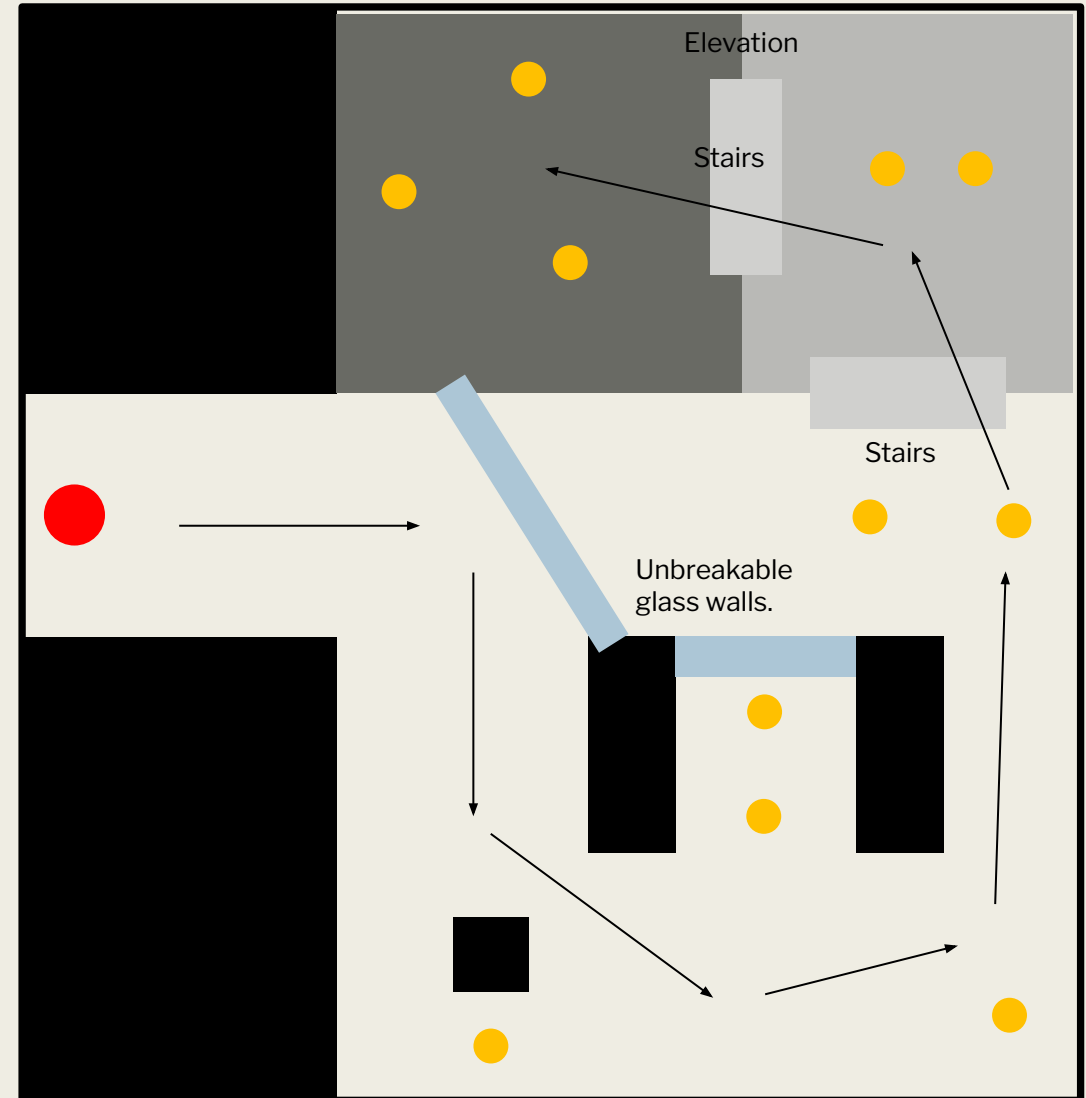
- Easily becomes boring.

Monster Closet

- Use the environment.

- Use the corners to make enemy attacks a surprise.

Monster Closet

- Make the environments more interesting.

- Have variation in the spaceplanning.
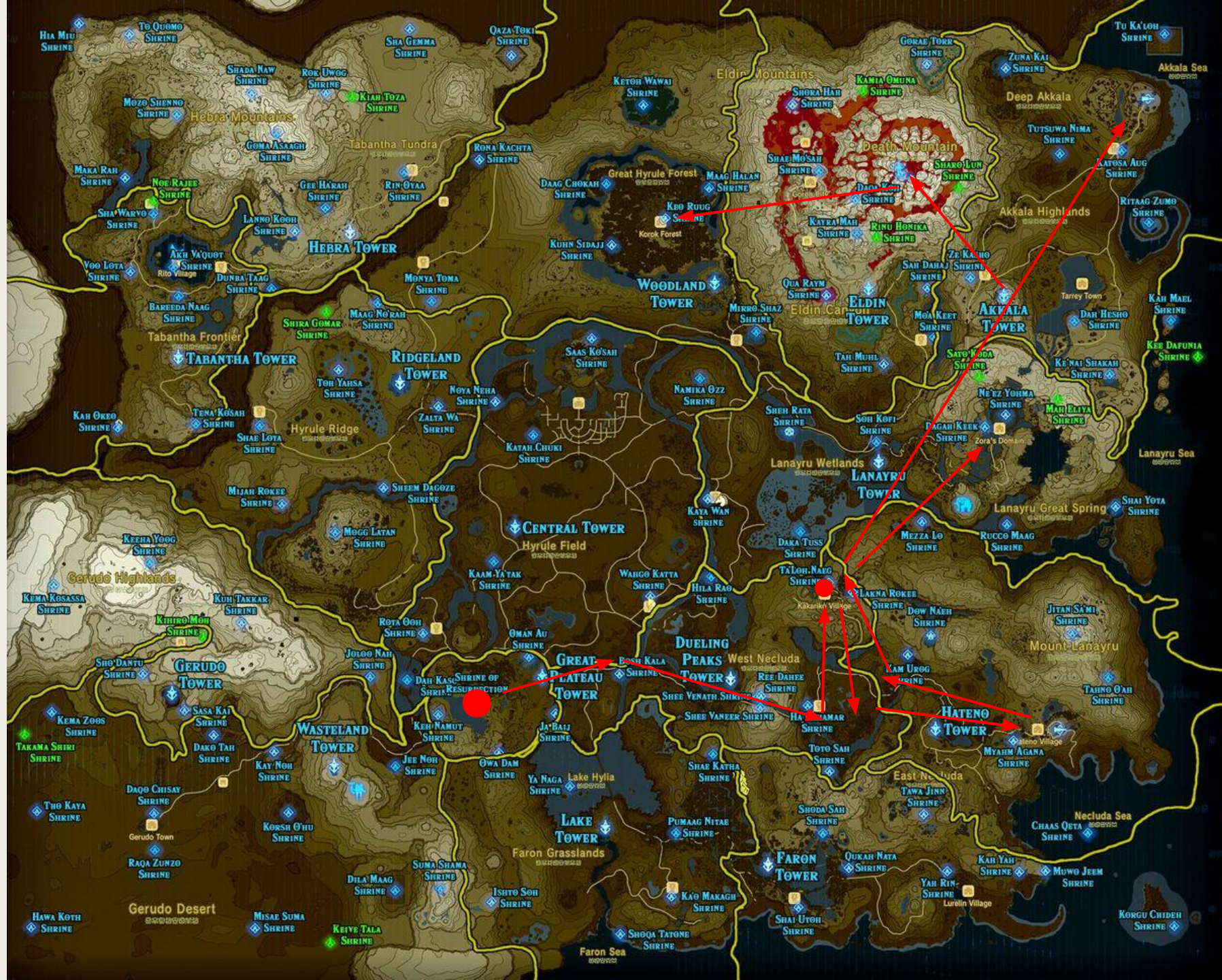
- Mind the verticality.

Elevation

Stairs

Stairs

Unbreakable
glass walls.

OPEN WORLD

What to think about?

- Why is the game Open World? Does it improve the game?
- What is the goal?
  - *How clear is the goal?*

What to think about?

- How do you guide the player?
  - Do you want/need to?
  - Skill Gates?
  - Narrative design?
  - Landmarks?
  - Pathing?

What is the goal?

- There should always be somewhere to go.
  - *Narratively?*
  - *Visually?*
- Mind the sightlines!
- Mind the navigational aspect.
  - *Compass?*
  - *Points of Interests?*

Narrative

- Make sure the world has a rich history.
  - *Who's lived there?*
  - *What's the history?*
  - *What does it look like?*
- Use the backstory of the world to populate it.
- Write an LDD.

Pitfalls

- Hard to navigate.
  - *How do you block the player?*
  - *Unclear navigable areas.*
  - *Unclear vertical layers.*
- Unclear skill gates.
- Fast Travel.
  - *Can make the player miss interesting/important Landmarks.*

Vista

- A Vista can be an observational point where the player gets an overview over the landscape.

- Can be used to create a wow-moment.

- Can be used in combination with Landmarks to guide the player.

GAMEPLAY BEATS & NARRATIV

What are Gameplay Beats?

- A way to plan and structure different sections of a level.
- Example: What does a level need?

| 1. Arrive at a base. | 2. Sneak through the base, find a keycard. | 3. Used the keycard in a separate part of the base. | 4. End fight. |

Timeline

Introduction of controls and mechanics.

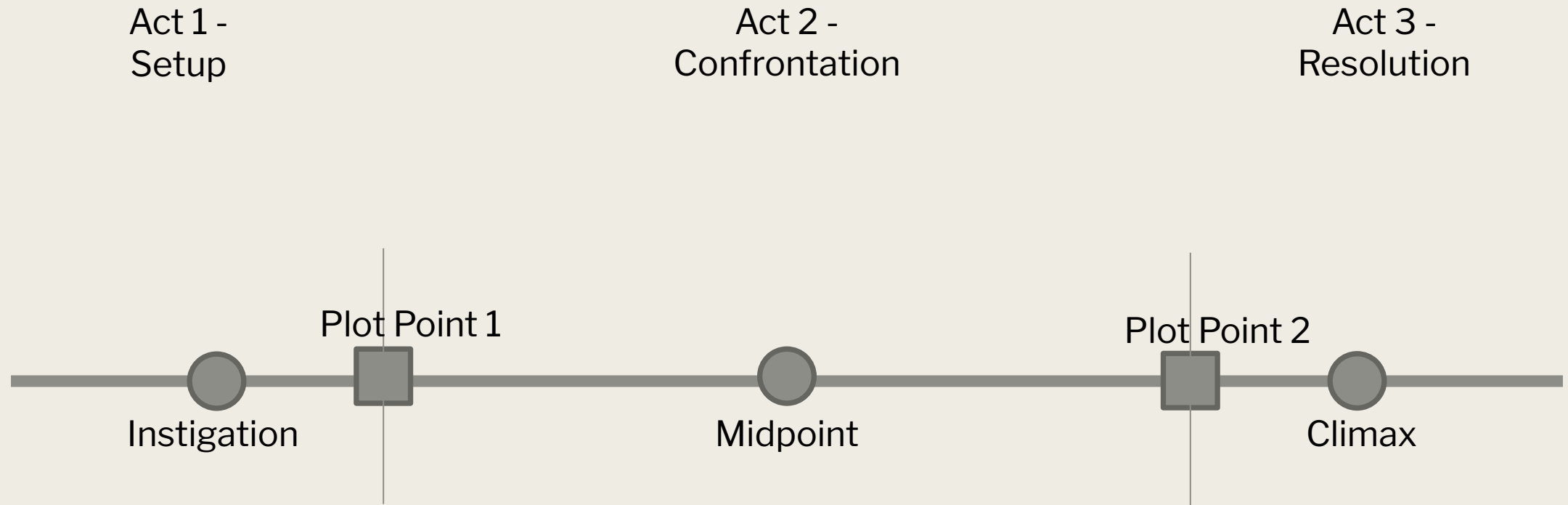Explore the base without getting caught. Find a keycard.

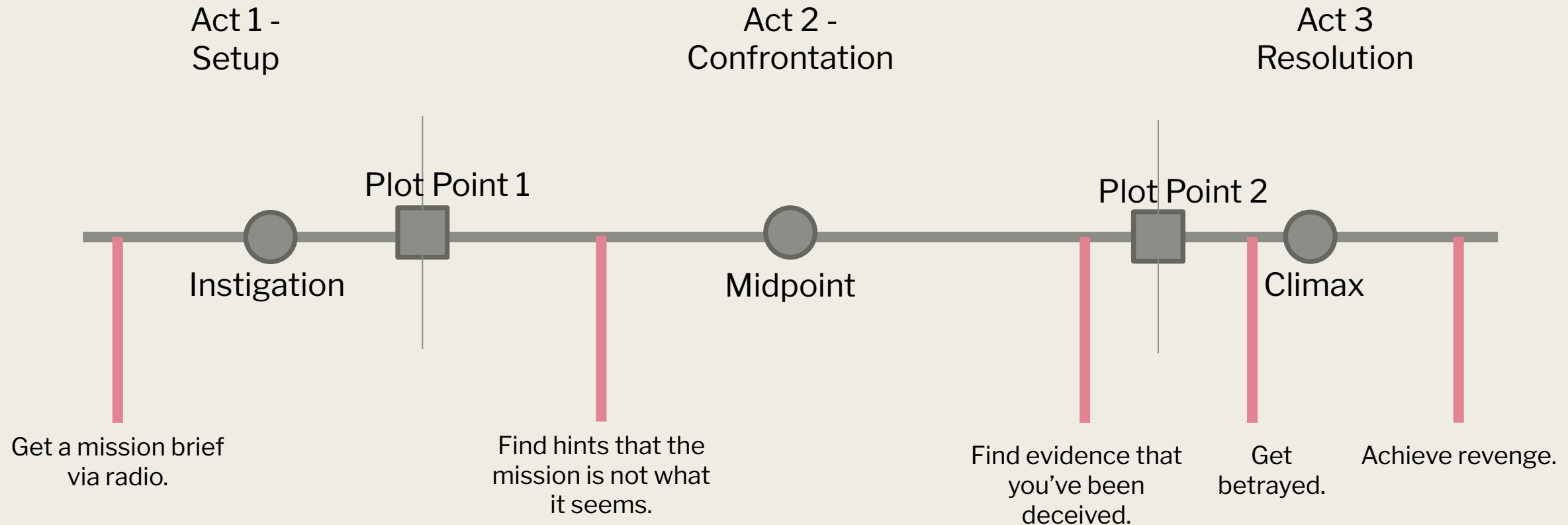Get to the control station.

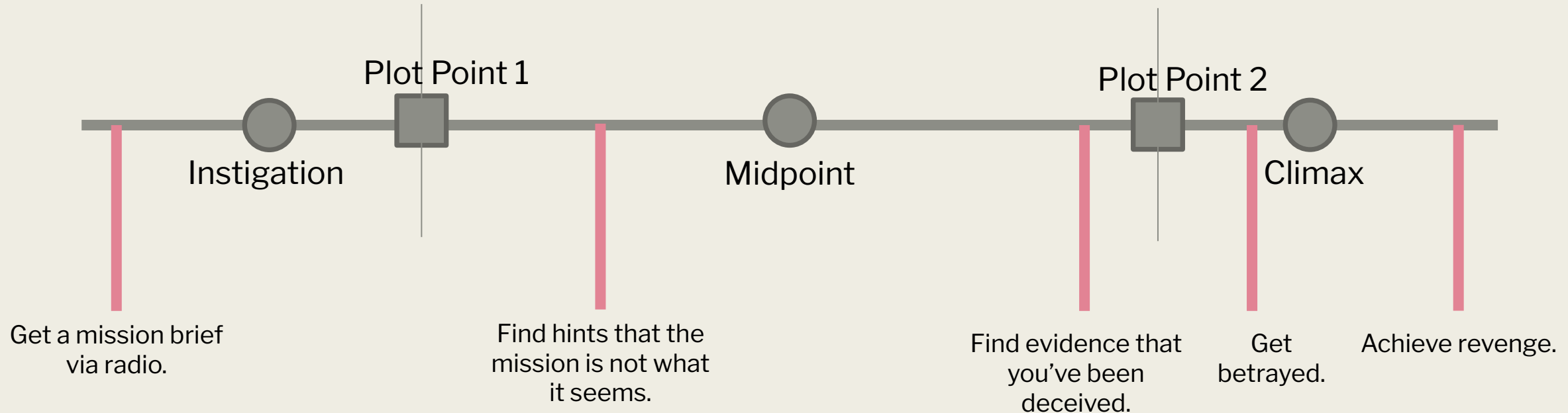Activate the station.

Fight your way through the base.
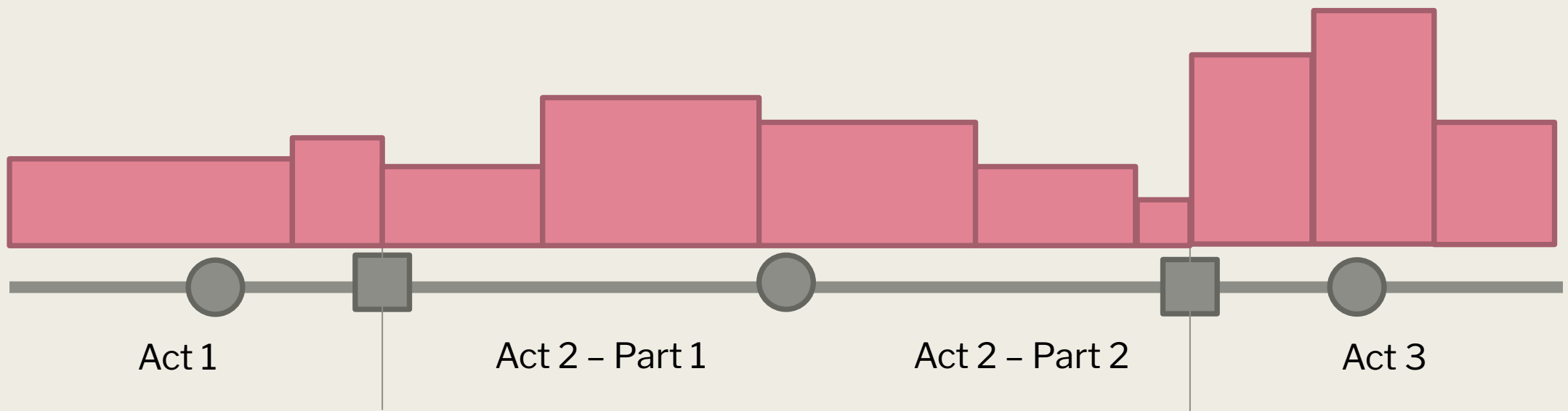
Escape.

Narrative – Three act structure.

Act 1 - Setup

Act 2 - Confrontation

Act 3 - Resolution

Plot Point 1

Plot Point 2

Instigation

Midpoint

Climax

Pacing

Act 1   Act 2 – Part 1   Act 2 – Part 2   Act 3
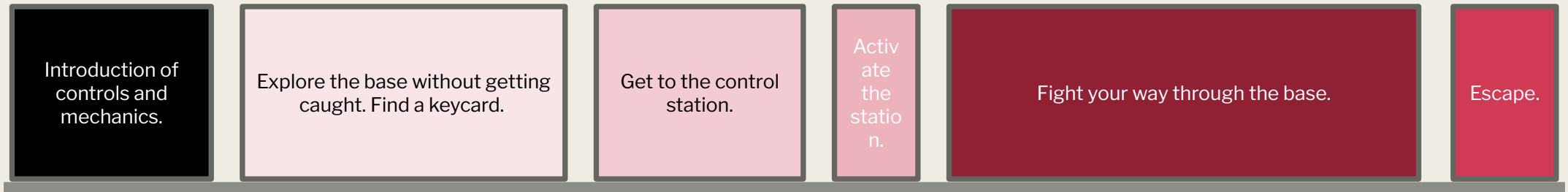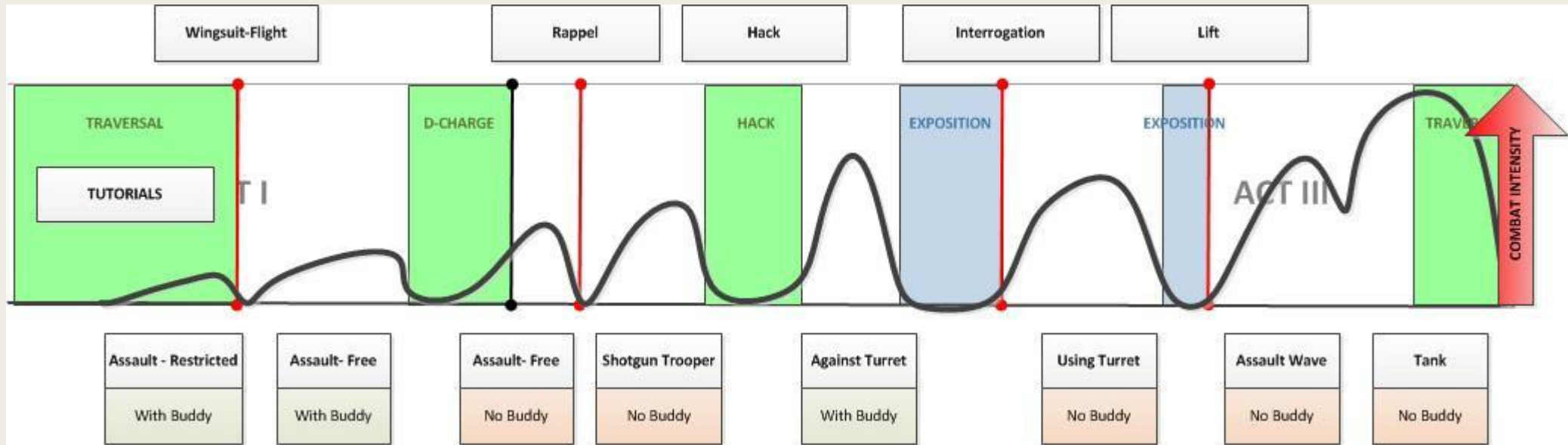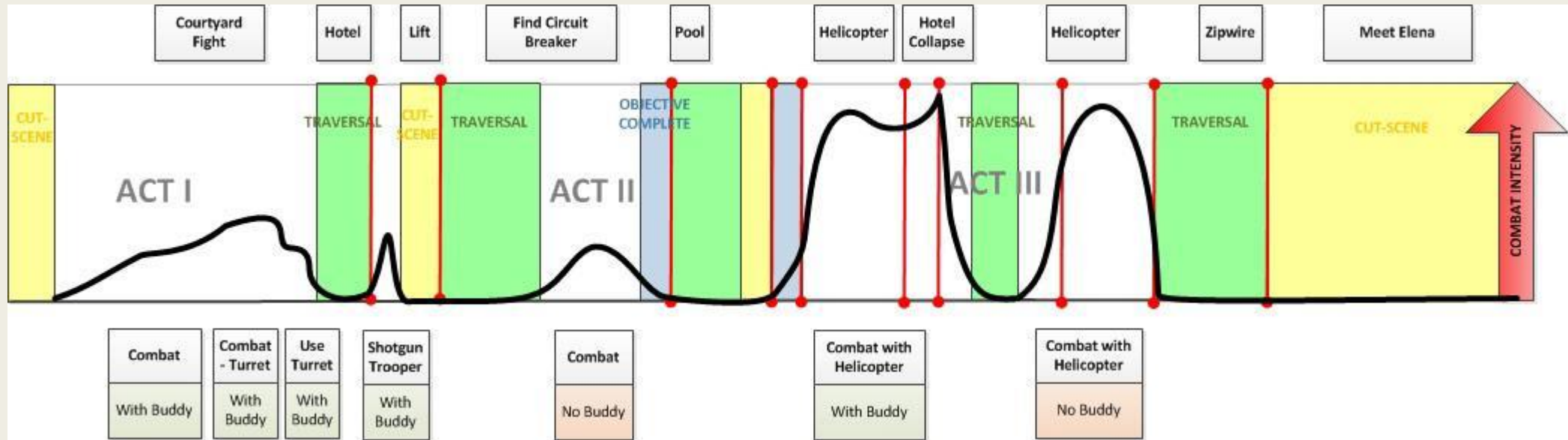
Example

Killzone Mercenary

Example

Uncharted 2 – Chapter 6 ”Desperate Times”

Game Over

Created by Mårten Jonsson

marten@jm-j.com
linkedin.com/in/jmartenj/