

Game Design Document

Time Lab

Concept:

- **Genre:** First person Puzzle
- **Core Pillar:** Time-manipulation mechanics used to solve environmental challenges.

Gameplay Overview: Time Lab is a first-person puzzle game where the player uses three time-based powers, Rewind, Swap, and Freeze to solve challenges and escape an experimental facility. Players take control of a humanoid robot subject undergoing repeated tests by an AI-like robot supervisor named JEFF. Each test iteration grants a new time ability, eventually allowing the player to break the cycle and escape the lab.

Core Mechanics:

A) Time Powers:

1. Rewind (Experiment 834)

Rewinds the timeline of a **single targeted object** up to **8 seconds**.

- Players can stop the rewind early at any point.
- Only the targeted object rewinds—not the environment or player.
- Useful for:
 - Rewinding a door that has just closed.
 - Rewinding a platform while standing on it—e.g., letting it rise, then rewinding it while jumping to reach higher places.

- Undoing the movement of puzzle objects.

2. Swap (Experiment 835)

Instantly swap the player's position with an **object**.

- Functions like a teleport using a physics object as the anchor.
- Useful for:
 - Crossing gaps by throwing a cube and swapping it.
 - Navigating hazards or tight spaces.
 - Bypassing obstacles without requiring moving platforms.

3. Freeze (Experiment 836)

Freezes **everything within a time radius** around the player.

- The player remains unaffected and can freely move.
- Useful for:
 - Freezing falling debris to walk across a ravine.
 - Stopping enemy robots or lasers from detecting you.
 - Pausing rotating hazards or timed obstacles.

4. Grab (ALL)

The player can use a short-range energy beam from their hand to move, pull, and push objects around.

- Works like a gravity gun
- Need for setting up swap teleport or preparing rewind puzzle

B) Failure Conditions

The player resets the room when:

- Falling into pits or ravines.
- Being hit by COPP enemy lasers.
- Touching lethal environment lasers or hazards.

C) Story Progression

Experiment 834 – Rewind

- The player awakens in a white room.
- Introduced to JEFF, their robotic overseer.
- JEFF explains that the player is *Experimentation 834*.
- Player learns the Rewind power and completes puzzles.
- At the end, JEFF coolly tells the player they were "not sufficient to create the perfect being" and shuts them down.

Experiment 835 – Swap

- The player wakes up again, now as *Experimentation 835*.
- JEFF is surprised the player recalls fragments of 834.
- Players learn Swap power.
- Completes another set of puzzles.
- Again deemed "insufficient" and reset by JEFF.

Experiment 836 – Freeze

- Player awakens as *Experimentation 836*.
- JEFF appears more tired, irritated, and unstable.
- Player learns Freeze time.
- Finishes the final test chamber.
- At the end, before JEFF can reset them, the player combines all three-time powers.
- This time they escaped the facility, breaking the experimentation loop.

Characters / Npc:

Player (Experiments 834 → 836)

A humanoid robot designed for testing time-manipulation powers.

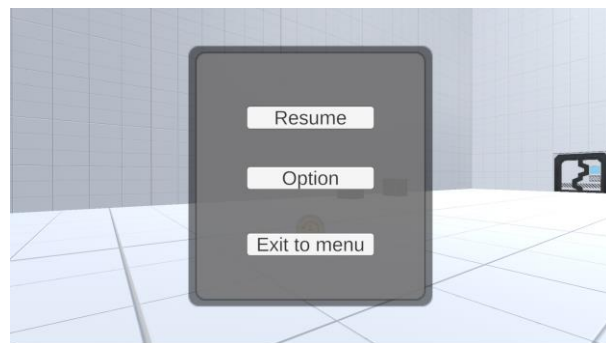
JEFF (AI Supervisor / Antagonist)

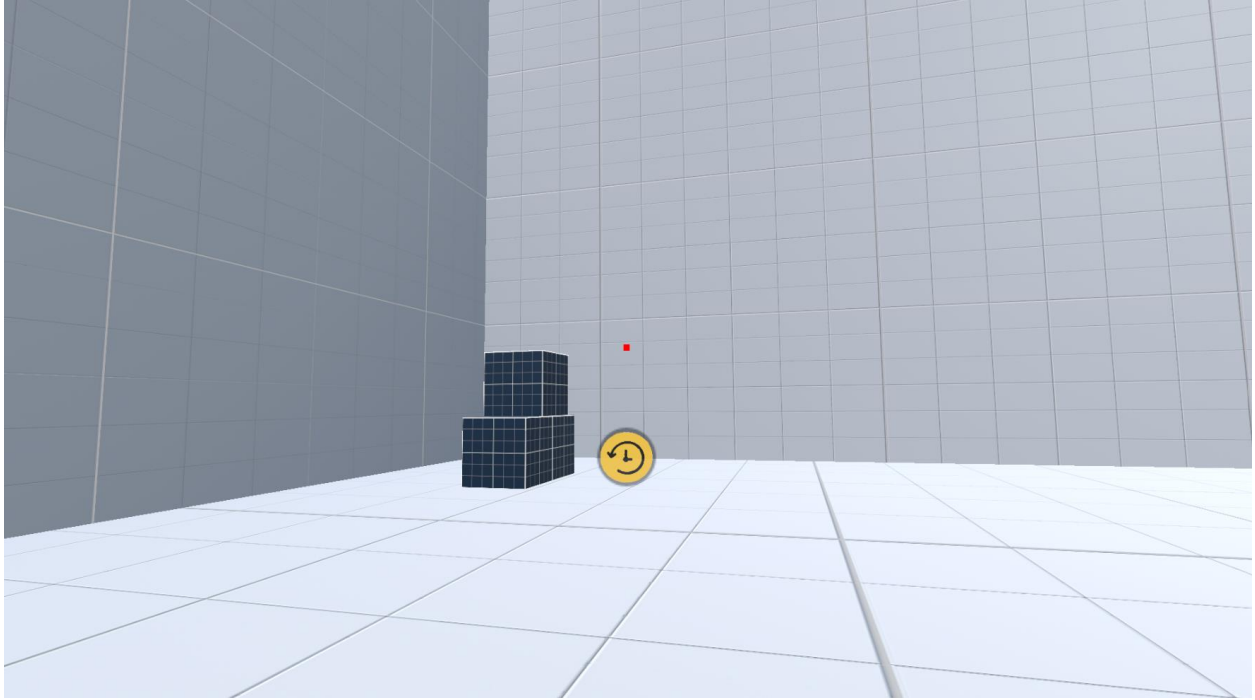
Small floating robot with a propeller on top.

COPP (Security Enemy)

turret unit, moving to patrol set point. Sees the player with its sensor in front of the robot.

UI:





Level Structure:

Each experimentation cycle contains **3 rooms**:

1. Tutorial Room

Teaches new power through simple guided tasks.
JEFF actively explains mechanics.

2. Main Puzzle Room

The core challenge room.
Uses obstacles requiring creative use of the cycle's power.

3. Hallway Escape Room

A linear escape sequence that tests speed and mastery.
Ends with JEFF resetting the player, except Experiment 836.

Art:

