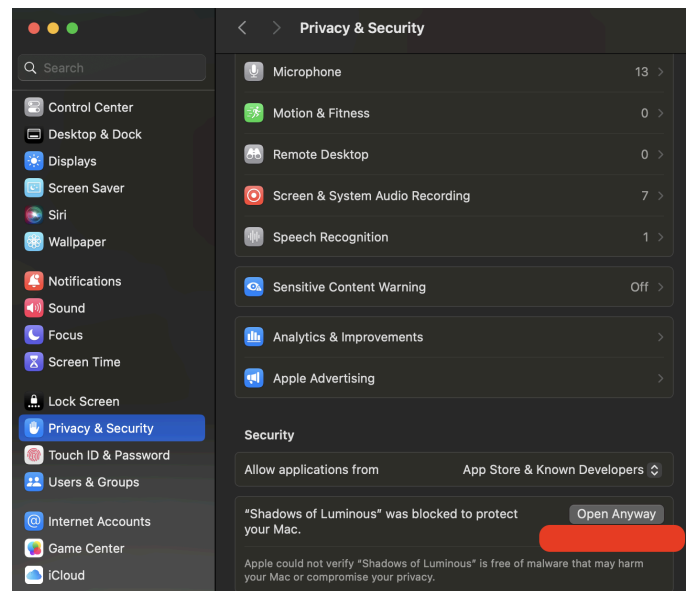


Final Deliverables

- **Game Play - *Shadows of Luminous* Download for Mac**
 - https://drive.google.com/file/d/1p25lZ-oZlpm1P_aVw9TCcARktUpH_CLO/view?usp=sharing
 - I uploaded the downloadable app version rather than submitting to the platforms for better gameplay experience.
 - Tips when opening the app:
 - After you download the app, click to unzip it, for Mac, it would show as:
“Apple could not verify ‘Shadows of Luminous’ is free of malware that may harm your Mac or compromise your privacy.”
 - Do not click “Move to Trash”
 - Instead, go to the System Settings→Privacy&Security→Find “Shadows of Luminous’ was blocked to protect your Mac”→Open Anyway

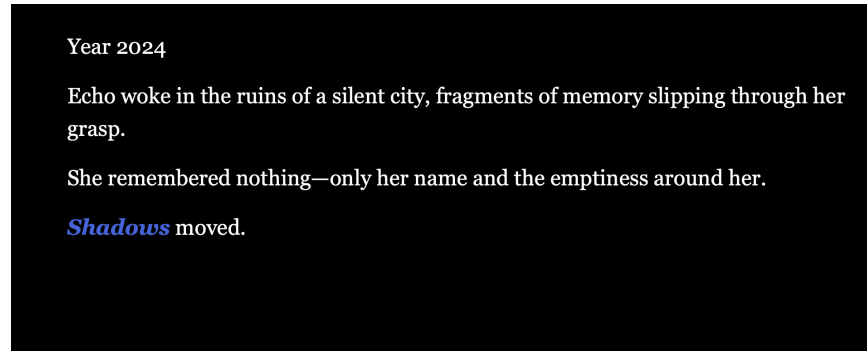


- **Overview:**

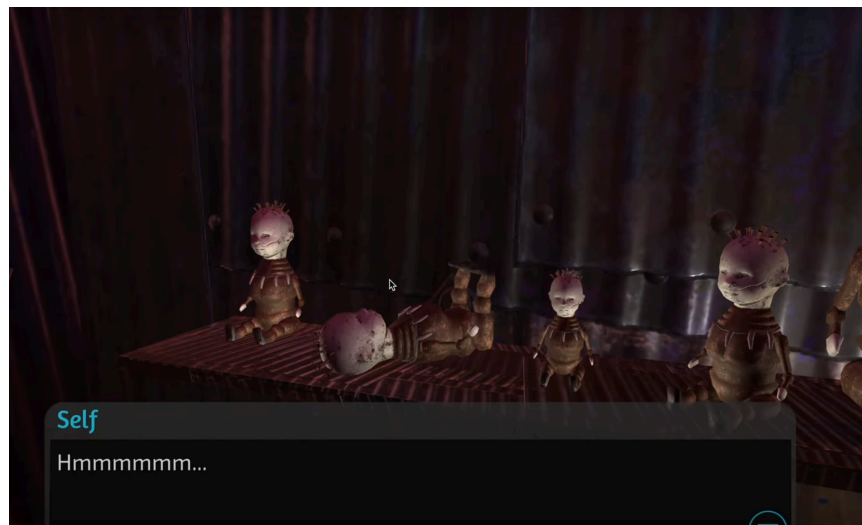
- The game centers on Echo, a young woman who awakens in a post-apocalyptic wasteland strewn with the haunting remnants of a powerful institution's failed experiment, known as *Project Luminous*. Conceived to regulate population growth and manage reproductive outcomes through advanced genetic modification, *Project Luminous* was envisioned as humanity's salvation in the face of growing societal pressures. Yet, as Echo begins to piece together fragments of her shattered memories, she discovers a harrowing truth: these attempts to control the future of humanity led, paradoxically, to its near annihilation.
- Echo's journey is one of unraveling the consequences of sacrificing individual autonomy for the promise of collective stability. She confronts the ethics of a world where life itself became a state-mandated experiment—one that failed disastrously. The echoes of *Project Luminous* reveal a chilling legacy of manipulation, hubris, and unintended consequences that destroyed society's fabric.
- Inspired by real-world events, the game's narrative draws parallels to China's population policies, such as the One-Child Policy implemented in the 1980s. These measures, aimed at achieving economic and social goals, prioritized collective objectives over individual freedoms. Over the decades, these policies resulted in severe gender imbalances, an aging population, and a crisis of declining birth rates. Although revised to allow two and three children in more recent years, such state-driven controls have continually raised questions about autonomy, human rights, and the far-reaching implications of centralized decision-making.
- In the dystopian world of *Shadows of Luminous*, *Project Luminous* takes these ideas to an extreme, envisioning a society that attempted to engineer an ideal future by tampering with human biology. Instead of progress, this manipulation led to societal collapse. Players, as Echo, explore desolate research facilities, abandoned cities, and haunting relics of the past, piecing together the truth of a project that sacrificed humanity for control. Along the way, Echo encounters grotesque, altered beings—tragic remnants of the experiment—each a living testament to the devastation wrought by the institution's hubris.

- **History Versions of Game:**

- **Version 1: Twine Interactive Fiction** I began this project as a Twine interactive fiction, focusing on a narrative-driven escape-room concept. However, I decided to transform it into a 3D escape-room game using Unity Hub to provide a more immersive and visually engaging experience.



- **Version 2: Unity Hub 3D Escape Room Game with a Single Space** My initial attempt was a single sealed room with a horror atmosphere. During a playtest with two of my CS377 classmates (a female in her 20s and a male in his 20s), both remarked that the environment was immersive and effectively conveyed a sense of horror. However, when I explained that the original idea was set in an abandoned hospital, one of the players mentioned that the current environment lacked the depth and thematic alignment of a hospital setting.



- **Version 3: 3D Escape Room Game with Multiple Spaces** Based on this feedback, I redesigned the environment to resemble a dilapidated hospital. I expanded the gameplay from a single sealed room to multiple interconnected locked rooms, encouraging exploration and allowing players to uncover a dark secret piece by piece. In

a playtest with my partner, an Asian male in his 20s, he noted that while the updated design improved the spatial experience, the game lacked sound and lighting effects to fully immerse him in the horror atmosphere.

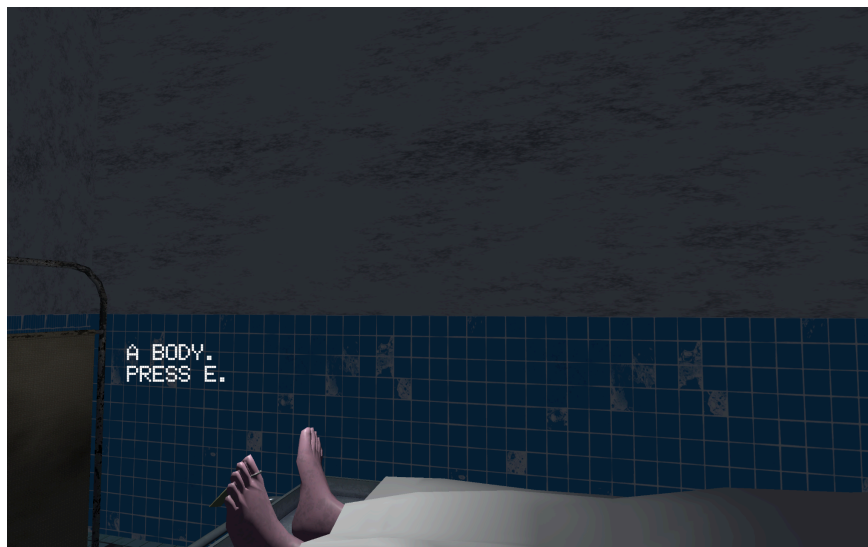
- **Version 4: 3D Escape Room Game with Horror Audio Design and Improved Lighting** To address the feedback, I added horror audio and adjusted the lighting design. Now, when players enter the game, they are greeted with eerie, haunting incantations that set the tone. In the first room, players encounter a creepy doll that sings a scary nursery rhyme, hinting at a sinister presence tied to the dolls. At the end of a corridor, when players interact with a twisted statue of a woman, the statue emits a piercing scream. The visuals of the female statue—a distorted and suffering figure—combined with the haunting sound effects, emphasize the horrors that women and children have endured in this space. My partner playtested this version again and praised the audio-visual design but pointed out that the game still lacked sufficient interaction to feel like a true game.



- **Version 5: 3D Escape Room Game with Basic UIs** To make the game more interactive, I added a basic UI system. When players start the game, a system UI introduces them to the setting: “Your name is Echo, and you are in a wasteland. Find clues to uncover what happened here.” Interactive elements also received UI indicators, such as when players encounter a dead body in the first room—pressing “E” allows them to investigate and reveal clues.



- **Version 6: 3D Escape Room Game with Organized UIs** In a subsequent playtest with a friend, an Asian woman in her 30s, she found the audio, visual, and lighting design immersive and engaging. However, she pointed out that the UI system felt chaotic—if players didn’t fully interact with the introductory UI elements, they would overlap with interaction prompts from other objects, such as the dead body. To resolve this, I reorganized the UI system: players are now unable to move their avatar until they complete the initial system prompts about the world’s setting, ensuring a more seamless and intuitive experience.



- **Version 7: 3D Escape Room Game with a Cutscene** In a final playtest with another friend, a male in his 30s, he expressed confusion about the avatar's backstory and the game's context. To address this, I added a cutscene at the start of the game. The cutscene provides a brief yet impactful introduction, showing the horrific events that occurred before the gameplay begins, setting the tone and providing the necessary context for Echo's journey.



