

# CPSC 4160 – 6160 / Your Life or Mine Nia Dicks

## **Game Description**

In Your Life or Mine the player - a local detective is on the hunt for a killer - is kidnapped by that towns serial killer and is trapped inside of the home of that killer - the goal is to escape. In this escape based room the player must use the clues inside the room to find the exit and escape alive before the killer returns to that their life.

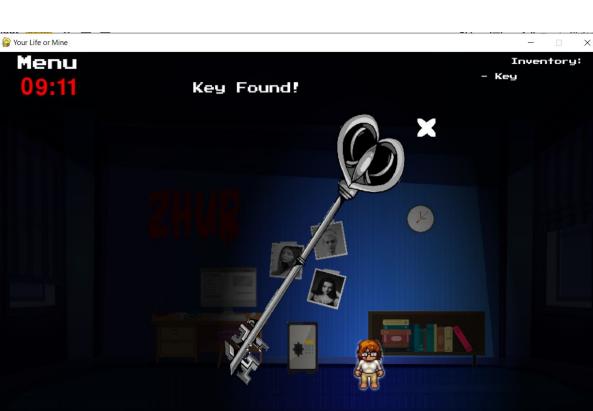
## Game objective

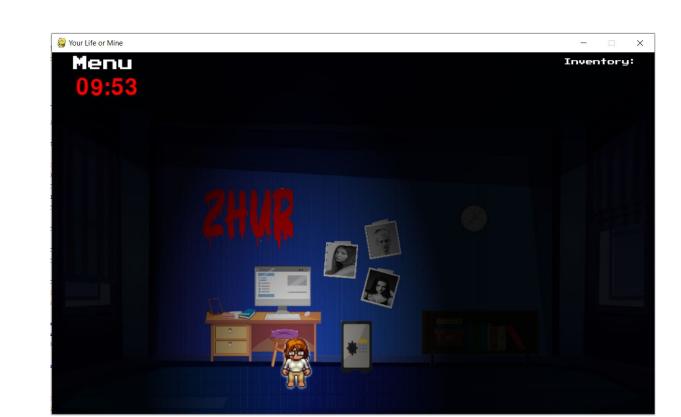
The objective of the Your Life or Mine is to escape from the serial killer and solve the puzzles inside of the room to escape before the killer returns - a timed game. To beign this game you start in a room with a light source surrounding you and you must use the A and D keys on the keyboard to move around the room and find objects/clues that help you escape.

The clues around the room relate to each other to help you solve the final code to exit the room. With the code solved the player should aim to escape before the allotted time is up and the killer return. If the players fails to do so then the player will risk losing their life.

### **Game Screenshots**







#### Game Mechanics

The game employs a blend of 2D sprite animation and lighting mechanics to create an immersive environment, leveraging Pygame's rendering capabilities to simulate depth and atmosphere within the game world.

Despite the limitations of a 2D framework, the combination of dynamic fog effects, a movable light source, and a scrolling camera system creates a sense of spatial awareness and focus, enhancing the player's connection to the environment. This showcases how simple game mechanics can be used effectively to evoke a compelling atmosphere, even within the constraints of a minimalist engine.

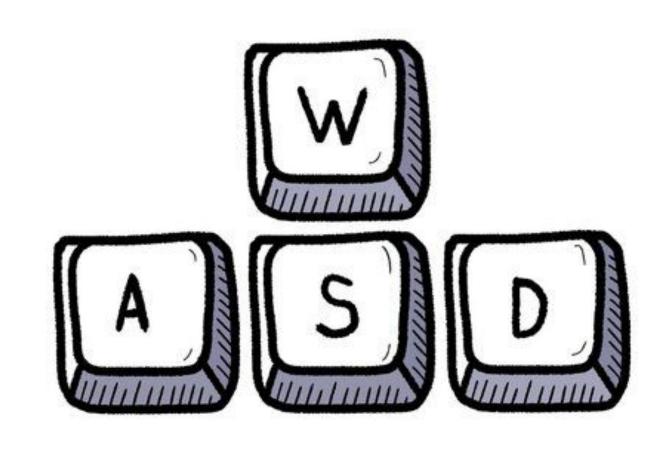
## **Technical Description**

The game utilizes Pygame's modular framework to seamlessly integrate sprite rendering, camera movement, lighting effects, and interactive pop-ups, creating a cohesive and engaging experience. Sprite animations are managed through frame clipping techniques, allowing for fluid transitions between movement states, while the camera system centers the character dynamically within the playable area using a bounding mechanism. Layered lighting effects, such as dynamic fog and a movable light mask, enhance the game's visual depth, despite the constraints of a lightweight 2D development platform.

Interactive pop-ups, keypads for unlocking doors, and visual cues like clocks and inventory updates, appear contextually when the player engages with objects in the environment. These overlays are dynamically rendered and incorporate mouse-driven mechanics, enabling players to click on specific elements within the pop-ups, such as keys or buttons, for puzzle-solving. By blending traditional sprite-based movement with intuitive mouse interactions and visually striking effects, the game delivers a hybrid experience that feels both classic and innovative.

#### Controls

The controls involve using the keyboard for moving left and right, the A or D keys (A for left and D right). This is the only form of movement in the game.



Surrounding the player, is a light source that only show the portion of the round surrounding the player. To move the light source move the player left and right and the light source surrounding the player will move with the player.

#### **Game Limitations**

The limitations on the level of detail and realism that could be achieved inside of this game. Although the player is immersed into the room the artistic aspect of the room could make it feel less eerie and realistic as if the graphics/imagery were a bit better. Outside of the artwork, this game absence of collision detection and interaction with objects or puzzles makes the gameplay less immersive and maybe a bit challenging.

#### **Future Work**

Future iterations of this game could greatly enhance its depth and player experience. Implementing robust collision detection and environmental interactions would make the gameplay more engaging and realistic. Adding diverse puzzles and dynamic events could further enrich the narrative and challenge players in meaningful ways. Expanding the camera system to handle larger maps and smooth transitions would improve visual appeal and exploration. Introducing customizable lighting effects and adaptive fog could create a more immersive atmosphere tailored to each scene. Finally, multiplayer modes or additional levels could expand replayability and make the game a more comprehensive and memorable experience