

## **A) User Interface**

### ***UI elements (and priority)***

In order of priority:

1. Time remaining (timer)
2. Parachute timer (timer)
3. Enemies remaining (goal)
4. Character health remaining (track)
5. Chests (track)
6. Fast forward / Pause / Time options (option)
7. Menu / Quit / (option)

### ***UI Mockups***



#### **1. Layout A**

- a. This version includes all the elements of the original UI.
  - i. The main menu/ quit can be consolidated to one button.
  - ii. Time can have an icon and have the pause buttons integrated.
  - iii. The Parachute warning can be given its own icon.
  - iv. The kills can be given more priority and replaced by the “guest remaining” phrase.
  - v. Chest can be given its own icon and reduce the information down to a number.

- vi. The character's health can be displayed at all times and the hitpoints numbers were replaced by a health bar.
- vii. Cursor can have a "glow" variant.



## 2. Layout B

- a. This version includes all the elements except the return to main menu / quit options.
  - i. The main menu/ quit were removed, because these can be assigned to an average pause / options pop-up menu. [keybind]
  - ii. Time can have an icon and have the pause buttons integrated.
  - iii. The Parachute warning can be given its own icon.
  - iv. The kills can be given more priority and replaced by the "guest remaining" phrase.
  - v. Chest can be given its own icon and reduce the information down to a number.
  - vi. The character's health can be displayed at all times and the hitpoints numbers were replaced by a health bar.
  - vii. Cursor can have a "glow" variant.

## **B) User Experience**

### ***Mouse movement***

*Left click (hold) + Drag* works fine looking up and down, but its inverted when moving left and right. It does not take too much time to get used to, but is not completely natural. On the other hand, the camera is slow and hinders the speed that player can address the intruders.

The following are a couple of solutions that could solve this issue:

- **Option 1:** Click and drag is replaced by just hovering the cursor to an edge of the screen for moving in said direction.
  - **Pros:** The camera moves faster, and feels more lightweight. Allows for quicker response times.
  - **Cons:** Without the proper sensitivity settings, it could lead to moving the camera flying farther than the user might want.




- The camera starts moving to the left once the cursor approaches the (left) edge of the screen.
- **Option 2:** Use the existing mouse camera movement, but change the adjust the movement so it acts in similar way how *click (hold) + drag* works in *Unreal's* blueprint editor.
  - **Pros:** The movement is consistent, and *click + drag* movement will behave the same way like many other programs. (no need for player learning how to navigate, because it feels “natural”)
  - **Cons:** The camera allows for precise movement at the cost of being much slower. Also, the camera feels more heavy having to constantly drag the camera to move.
- **Option 3:** Integrate both of the previous options. The result would be that moving the cursor to the edges functions as the main movement of the camera; while the the other one would be used for adjusting position.
- **Option 4:** Adjust the speed of the camera to be much faster. The controls remain the same and might still feel strange. However, at least the camera allows the player to move the area much faster.

## ***Cursor / Mouse***

Cursor icon changes when it's over traps. However, the change is too subtle, when it should be more noticeable.

The following are a couple of solutions that could solve this issue:

- **Option 1:** Add a glow effect around the cursor when hovering over the traps.
- **Option 2:** Use different sprite icons or animation to indicate what can be done when

hovering over the screen items. For example, the cursor changing to a  when it's over the electric gate trap.

- **Option 3:** Change scale of the cursor when over the traps.