**Open Dungeon**:

* 1. **Player movement:** if w,s,a,d keystrokes are pressed, the rigid body moved by the distance = to speed \* the direction \* time.deltatime.
  2. **Player skill:** mouse cursor replacing by the new cursor icons in the prefab. These prefabs in update, transform always equal to main camera’s mouse position.
  3. **Inventory**: if rocks clicked, instantiate rock prefab onto equipment slot, and while rocks sprite appear in equipment slot, the barrels can be clicked and destroyed.
  4. **Barrels**: if on mouseover the game object, cursor icon changed, and searching if mouse clicked every frame. If mouse clicked, instantiate resource prefab and siler loader.
  5. **Resource**: include mask, wash, and wall. Every item increases 10 pieces in the inventory, which can be brought into encounter.
  6. **Infected allies**: constantly moving between two designated point in patrol pattern. The destination can be added for it to travel other places. After reaching any location, it will wait number of seconds before departure to another one.
  7. **Uninfected allies**: disable to move, waiting for resecure, having a dialog appear when player clicked their game object icon.
  8. **Packet universe**: which store all the infected and uninfected allies. Any sides’ count is not equal to zero will start a timer. Every time this timer runs out, one uninfected ally will turn into infected one. Player is started with carrying 2 uninfected allies at the beginning.
  9. **Encounter skill shots**: the ability to go into encounter without having to wait for the timer to run off then get out of the encounter. With using the skill, have a cooldown period, player can use exit button right after they masked all the infected ones to reset the timer on the very top.

**Encounter**:

* 1. **Player**: similar movement to open dungeon, using the mouse to aim around 365 degrees and shoot depends on which inventory options is chosen towards the mouse clicked position.
  2. **Infected allies**: appearing in the sprite color of red and a parameter in its behavior of Isinfected state is true. It will emit the red droplets randomly scatter around the environment, and those droplets will disappear in a period. They can be shield by mask but cannot be washed. Whenever they touch walls, the walls will lose percentage of concentration. Uninfected allies touch the lesser concentrated wall will have increase chances to get infected.
  3. **Uninfected allies**: appearing in the sprite color of white and a parameter of isinfected set to false. It will not emit droplets until it’s infected. After they turn, it will appear the same behavior as the infected ones. Before turning, they can also be masked to prevent from getting infected by virus or peers. If they touch lesser concentrated wall, they will be more likely to get infected.
  4. **Timer**: When player enter being caught by the uninfected ones, the timer will start instead of a button to exit directly. The player can only exit after the timer runs out.
  5. **Exit Button**: with prior entering with using spell to capture infected allies. The player can quickly exit out of the encounter after masking the infected ones.