

# Tasks

I am planning to do these tasks myself because I wasn't able to find a teammate. Considering the size of these tasks and magnitude of the project I made milestones for myself.

## 1. Functionality

Basic functionality of the game

- camera behavior: third person tracking camera.
- player controller
- dynamic entities: entities that the player can interact with.

## 2. HUD/UI

HUD elements like the player's inventory because the player can interact with objects and carry them to solve puzzles. The player should be notified about their vision status, there can be an icon to show ultraviolet vision on/off status. And an icon for when the player is on sneak mode in an environment with enemies to notify the player when an enemy is on detecting state to give the player time to hide.

## 3. Enemies

Enemies have 3 states in the game,

- Patrolling, when enemies are walking in a scene before detecting the player.
- Detecting, this will have a time span for the player to be notified that the enemy is detecting them. Enemy state can go back to patrolling if the player goes back to hiding or it can switch to the chasing state.
- Chasing, when the enemy fully acknowledges the player's location and starts to chase them.

State pattern will be used for this feature.

## 4. Ultraviolet Vision

The game will have an ultraviolet vision feature to use in puzzle solving. Things that look opaque in normal vision can be transparent in ultraviolet vision and objects that look like one color in normal vision can have multiple colors in ultraviolet vision. I decided to add this mechanic in the game to complicate gameplay and puzzles. Shaders can be used to create this vision type.

## 5. Level Design

This game will have stealth puzzle elements. The player needs to go from point A to B solving puzzles on the level. Level should be clear and compelling. I decided to include this as a task because in puzzle games level design is one of the most important aspects.