CS4555 Introduction to 3D Game Programming
Fall 2018
HW3 – Shooter Game (28%)

➢ Submission deadline: 12/09 Sunday
➢ What to submit:
    o Submit only script files via CSNS. File names should be self-explanatory. Each script must have a short description.
    o Submit your game document via CSNS. Use the same game document template given for HW2.
    o Submit a game trailer video.

Every team will be peer-evaluated on Thursday, 12/13/2018. Each team must schedule to visit the instructor for the instructor's evaluation.

Like previous two assignments, your reference or inspirational game is Goleneye 007 FPS. Watch a gameplay clip at https://www.youtube.com/watch?v=dW_ElQJ6eRA. Update your game document with all the changes you have made. Don't forget to add many screen shots.

Your final game implementation should provide seamless player controls and enemy actions. Also, you do need to pay great attention to visual parts.

✓ Game World – Implement all the game world features required for HW2. In addition, implement the followings:
    o Obstacles that react (moves/rotates) to the player's external forces

✓ Player – Implement all the player's controls required for HW2

✓ NPCs – Implement all the NPCs' controls required for HW2. In addition, implement the followings:
    o Make each NPC type react more intelligently based on the feedback that I gave to each team during HW2 presentations. For example, random moving a bystander character won't give you any points.
    o When an enemy 2 alerts other enemies, make the communication through the alert more visible.
    o (Optional) Introduce a unique behavior for the enemy type 1.
    o (Optional) Introduce a BOSS enemy. Make this boss character hard to defeat.

✓ Game Control and others - Implement all the scene controls required for HW2. In addition, implement the followings:
    o Your game should have an intro and an ending scenes. You are allowed to use Unity's scene control functions (such as LoadScene) for this homework.
        ▪ Initial Screen – Start with an intro animation showing your game mission and make a transition to the initial screen. The initial screen should have a menu consisting of at least "Start", "Resume", and "Quit".
            • Start –Start the game with default initial settings.
            • Resume – Start the game from the last saved point.
            • Quit – Quit the game. Prompt "Save" Option.
        ▪ Ending – Provide different endings for the player's "Win" and "Lose". "Win" should play the ending animation. "Lose" should ask the player for "Resume" or "Quit". "Resume" starts always from the last saved point.

- Add an HUD – Implement your HUD using Game-Object Based UI and two utility classes that were given during the lecture. See "2D GUI in a 3D Game" lecture notes. Your HUD should display
  - Player's status (health, inventory, and etc.)
  - Game status (NPCs' stat, mission completion, and etc.)
  - Audio on/off toggle button
  - Help and Quit buttons (these can be replaced with key events)
- Add background music (e.g. **intro, ending, game quest**, boss fight, menu screen, and etc.), sound effects (e.g**. gun firing, pickup, transport**, button selection, footsteps, and etc.) and other visual effects (e.g. gun trail, explosion, and etc.) Bold-faced ones are required audios.