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## 1. Game Story

**Link to project:**

[https://drive.google.com/drive/folders/1SgO3AXZR2w6w8pda1p4dsUfmzGbh6Ndp?usp=drive\\_link](https://drive.google.com/drive/folders/1SgO3AXZR2w6w8pda1p4dsUfmzGbh6Ndp?usp=drive_link)

**Link to videos:**

[https://drive.google.com/drive/folders/174ZIMKxm08Ch2ZjJDfgxxokU1ZISZrW?usp=drive\\_link](https://drive.google.com/drive/folders/174ZIMKxm08Ch2ZjJDfgxxokU1ZISZrW?usp=drive_link)

Story Introduction:

In the not-so-distant future, a catastrophic viral outbreak has turned the world into a nightmarish hellscape. The once vibrant sun now hangs in the sky, a blood-red orb casting an eerie glow over the desolation below. As one of the few survivors, you find yourself overrun by the guttural moans and shuffling footsteps of the undead. Your only beacon of hope is the rifle that lays before you.

Objective:

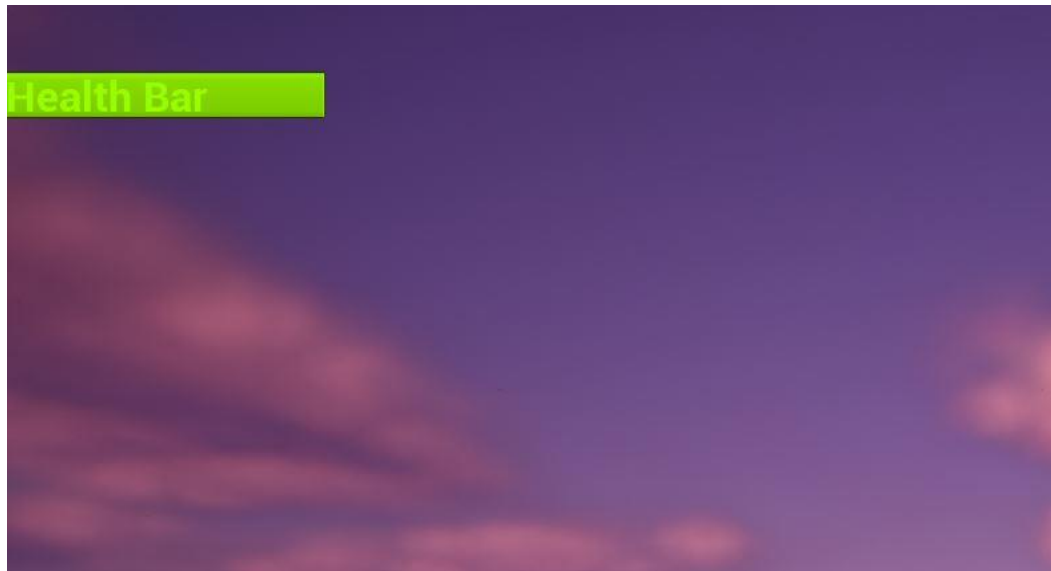
Your mission is simple yet harrowing – shoot all the zombies before they eat you alive!

Plot Twist:

After Killing all the zombies, you uncover a dark secret from sources unknow!

## 1. UX Improvements

- i. **Health Bar Clarity:** Added a clear and prominent health bar text overlay on the health bar.



(ContentDrawer ->HUD-> Hud blueprint)

- ii. **HUD Controls:** Integrated explicit controls on the Heads-Up Display (HUD) to inform players of the key actions and commands.



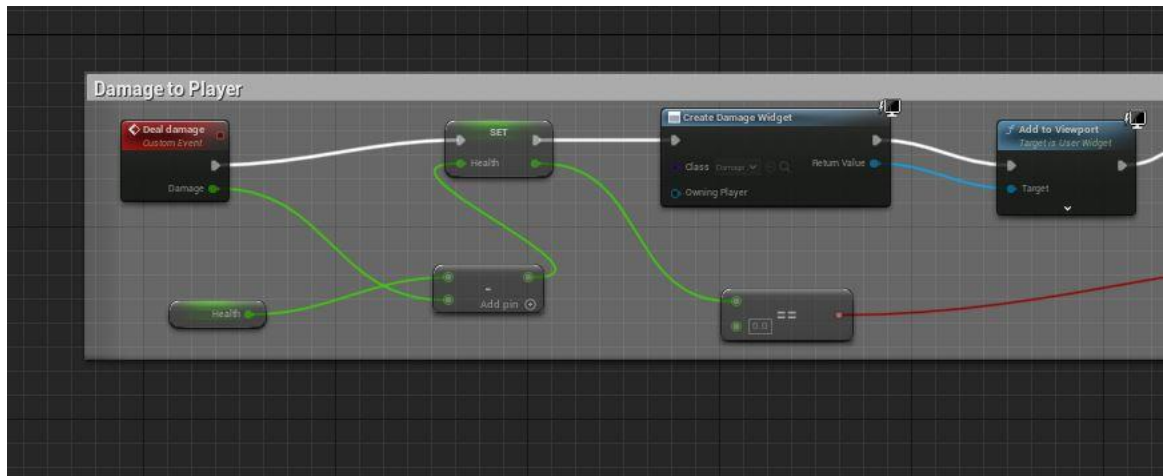
(ContentDrawer ->HUD-> Hud blueprint)

iii. **Damage Indicators:** Introduced red damage indicators as visual cues, providing immediate feedback on the direction of incoming threats.

The Hud and animation of the Hud is under:  
(ContentDrawer -> Hud -> damage blueprint)  
(see video1)



VIDEO\_1.mp4



The implementation of the Hud when the player takes damage is under:  
(ContentDrawer -> FirstPerson -> BluePrints->BP\_FirstPersonCharacter-> Block  
labelled Damage to Player)

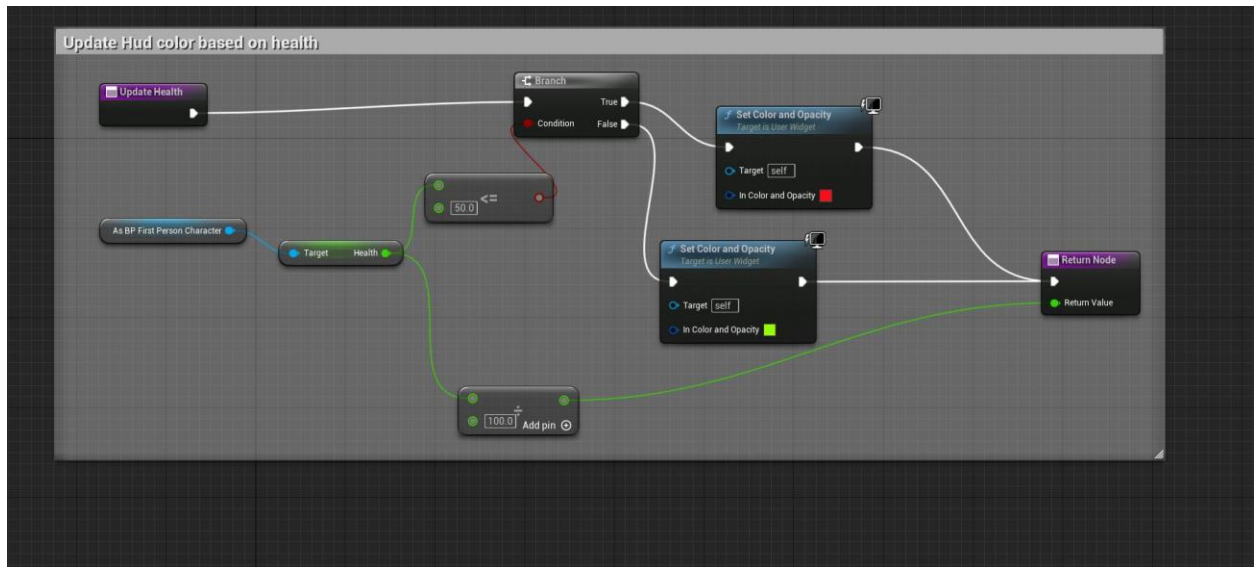
iv. **Low Health Visual Feedback:** Altered the color scheme of the health bar and the rest of the HUD elements to red when the player's health is low.

(see video 2)



Video\_2.mp4

(ContentDrawer -> Hud-> HUD -> Graph-> node with label update Hud Color based on Health)



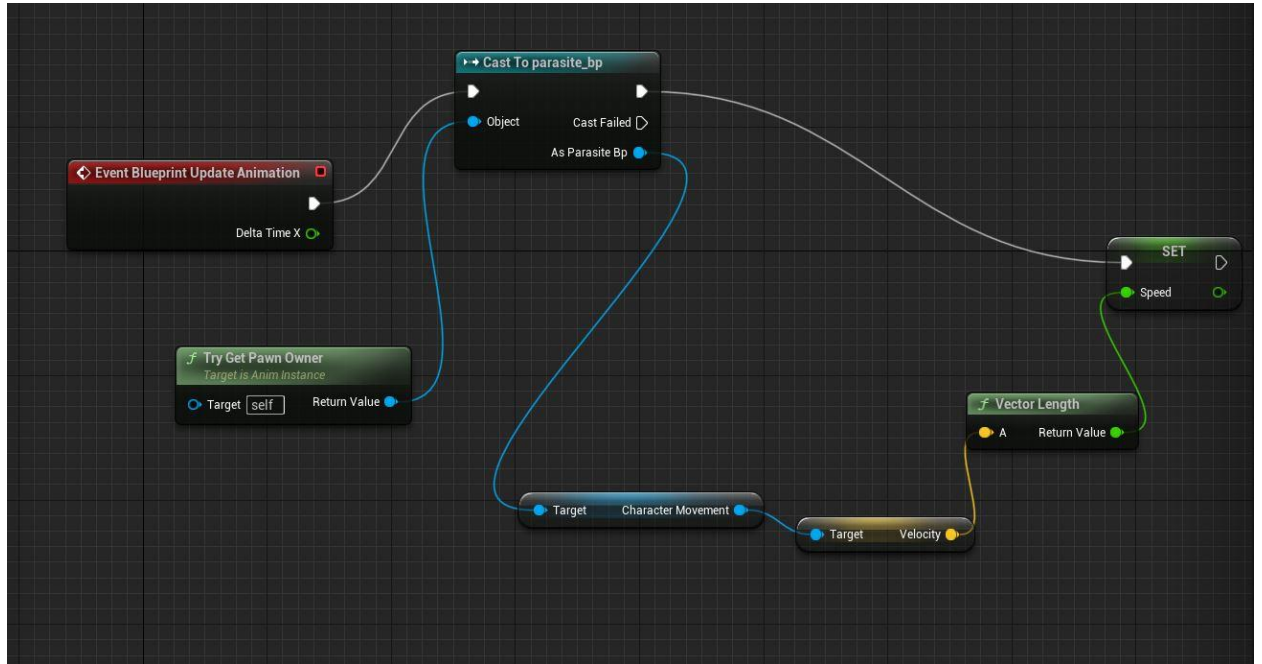
- v. **Monster Design:** Replaced local mesh with zombie-like monsters that visually represent their threatening nature and that form follows function. (see video 2)



(content drawer->fps\_zombiehoarde->parasite\_blueprints->parasite\_bp)

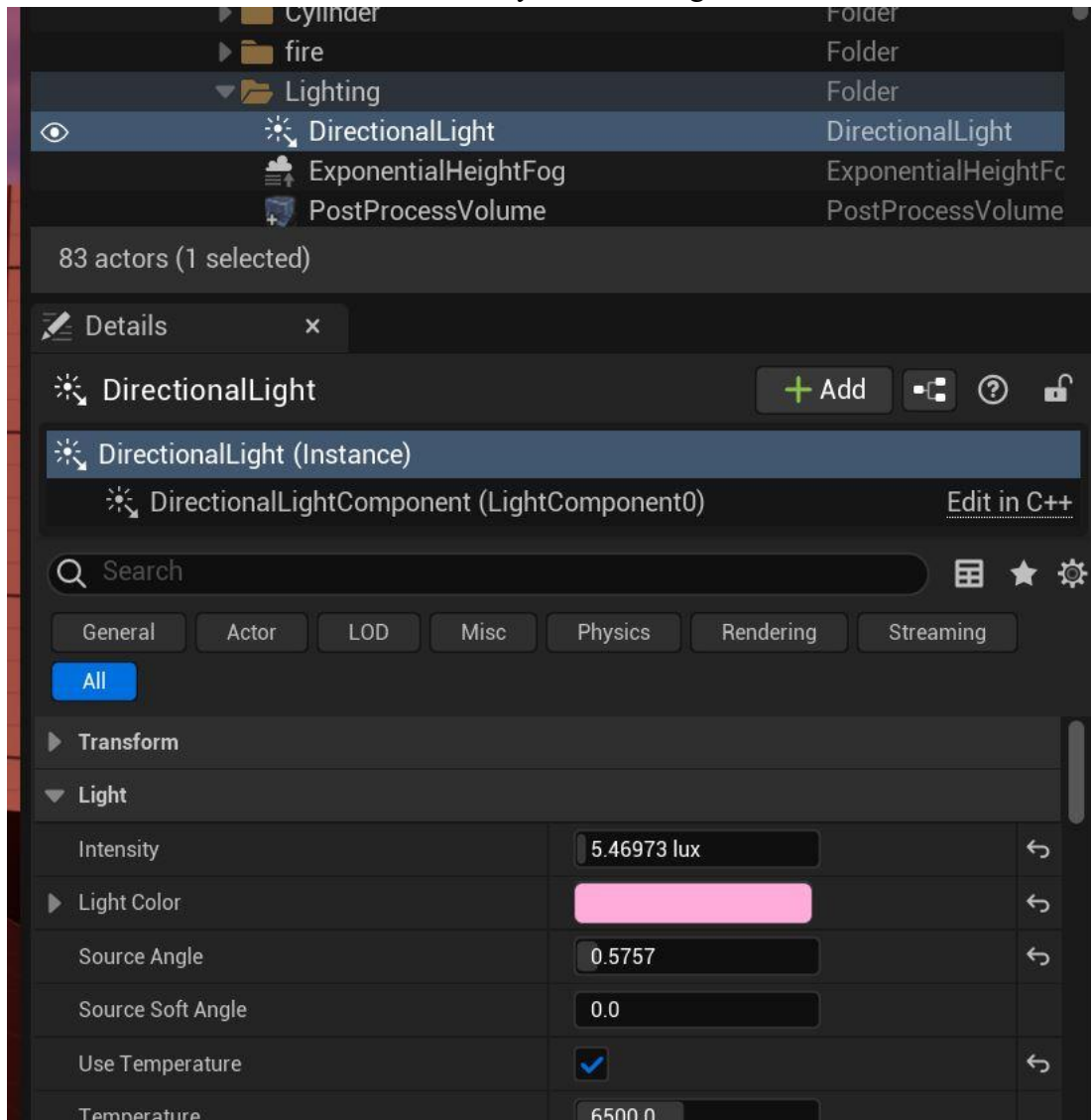
Implementation of the animation is under:

(ContentDrawer->fps\_zombieHoarde->parasite\_blueprints -> bp\_parasite\_animation)

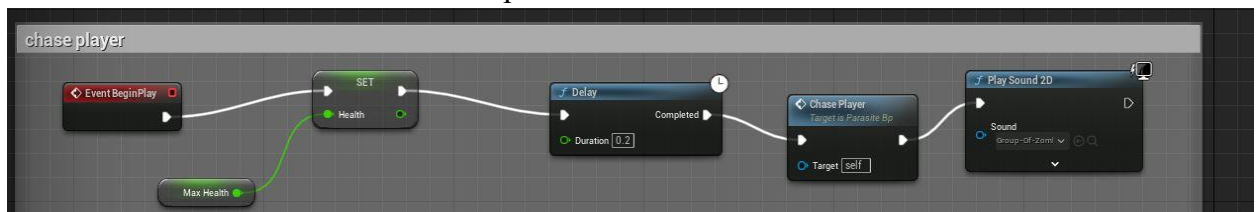


- vi. **Lighting for Emotional Impact:** Adjusted the hue of the in-game lighting to a reddish glow, enhancing the emotional tone of an apocalyptic setting. Could not make

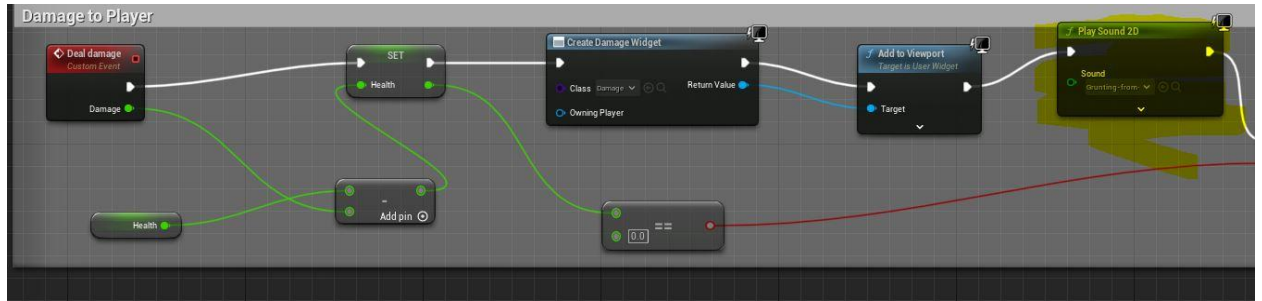
it too red because it affected the visibility of the damage indicator.



vii. **Audio Feedback:** Incorporated zombie sounds distinct player damage sounds and fire element sounds to evoke emotional responses.



(parasite\_bp -> block with label chase player)



(BP\_FirstPersonCharecter -> block with label damage to player )  
(see video 3)

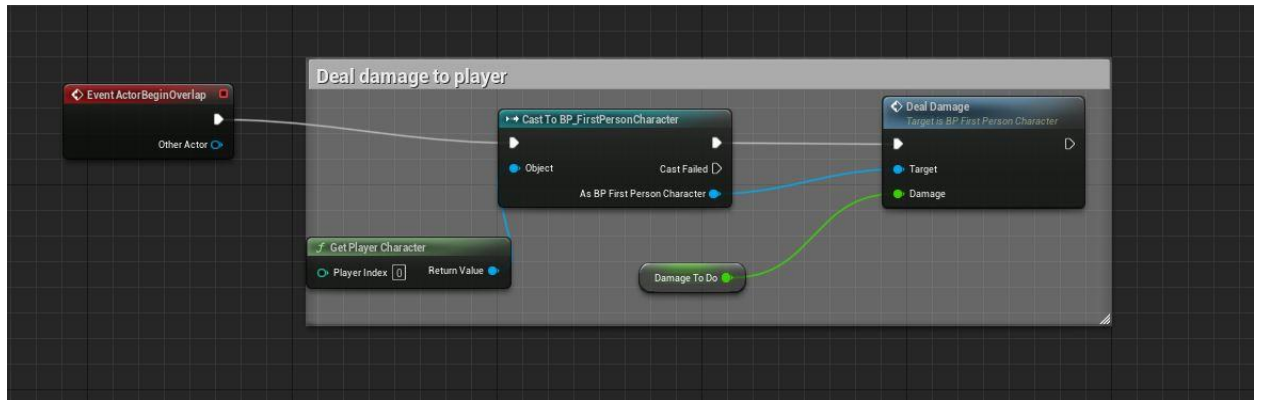


VIDEO 3.mp4

- viii. **Fire for Emotional Impact:** Integrated dynamic fire elements throughout the game environment, creating a visually impactful and chaotic scene. Fire also causes damage to player





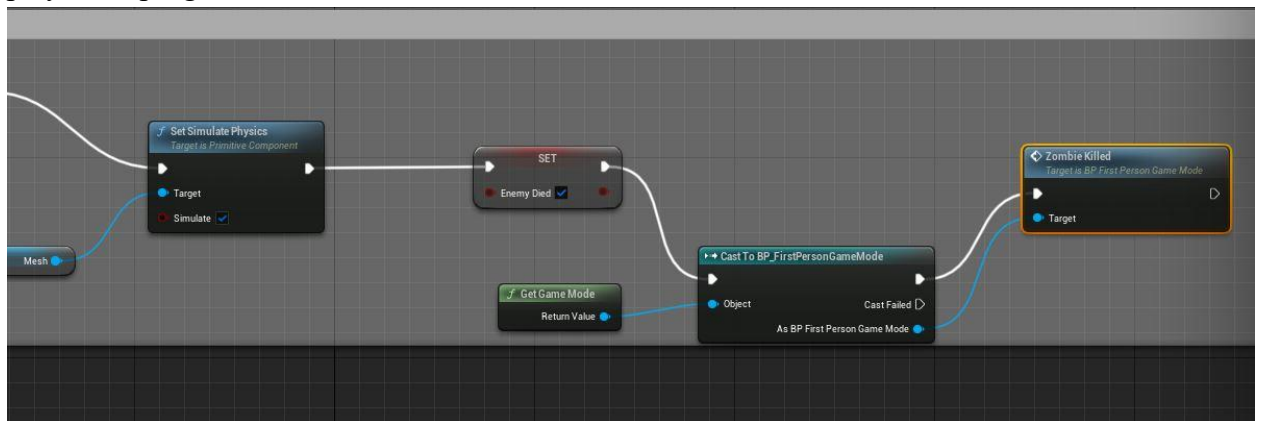


(content drawer->startercontent->blueprints>BlueprintFireEffect)  
 (see video 4)

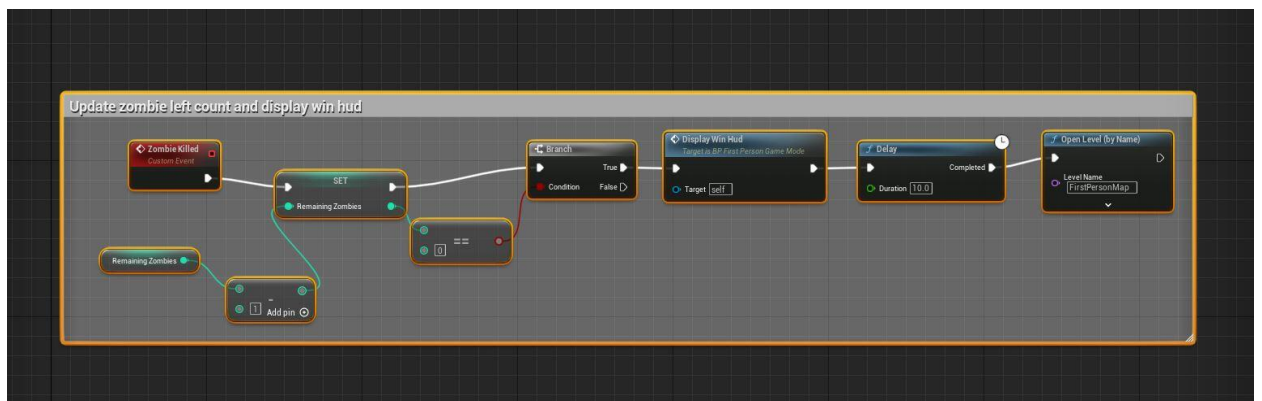


video 4.mp4

ix. **Revelation of the Game Secret:** Uncovering the dark secret serves as motivation for players to progress.



(under parasite\_bp towards the end of the block labeled deal damage to zombie)

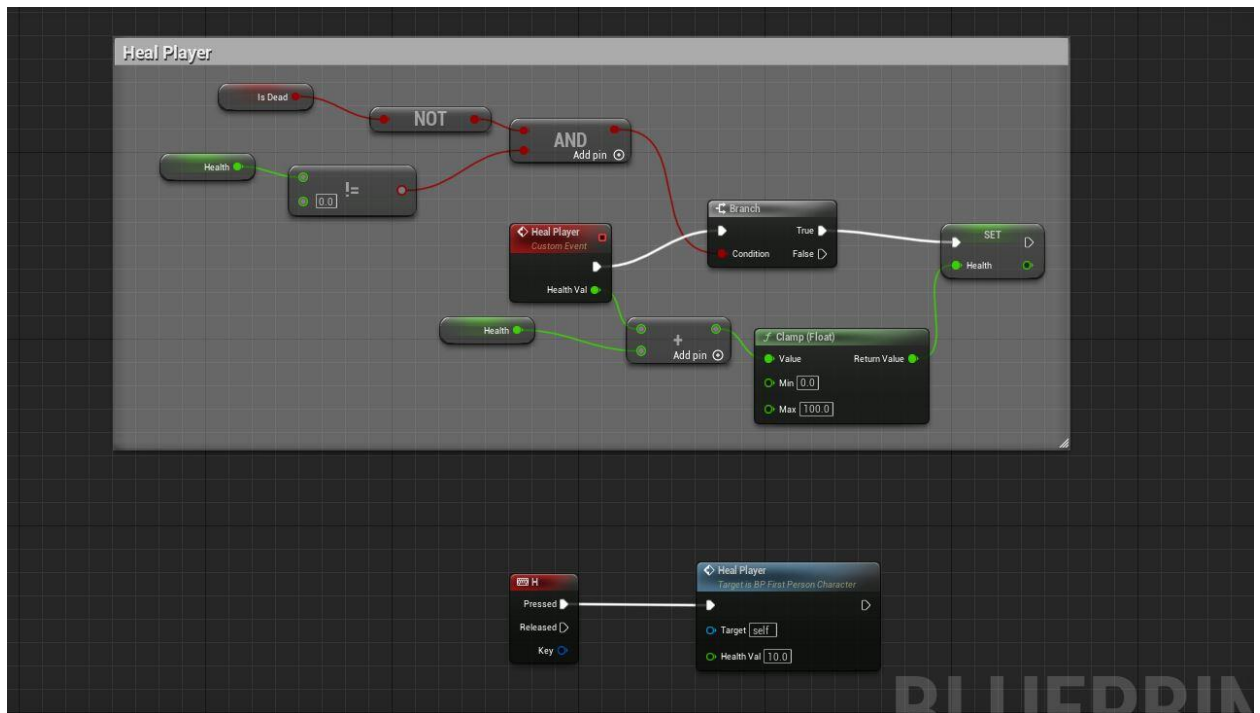


(BP\_FirstpersonGameMode)

- x. **The game secret:** Uncover the secret to the end once you win once to make the game motivating and compelling to players.  
(see video 5)



Video 5.mp4



## 2. UX Justification

- i. **Health Bar Clarity :** Aligns with Hodent's principles of providing clear feedback to the player, ensuring immediate comprehension of the character's vital status.
- ii. **HUD Controls:** Reflects Hodent's emphasis on accessible and transparent information, reducing cognitive load for players by presenting crucial controls in their visual field.
- iii. **Damage Indicators:** Aligns with Hodent's principles of leveraging visual senses to guide player attention, facilitating quick reactions to potential dangers in the game environment.

- iv. **Low Health Visual Feedback:** Follows Hodent's concept of leveraging color as a powerful emotional communicator, heightening the player's sense of peril during critical moments.
- v. **Monster Design:** Hodent's form-follows-function philosophy, where the visual design of game elements inherently communicates their role and significance within the gameplay.
- vi. **Lighting and Emotional Impact:** Draws from Hodent's emphasis on leveraging lighting and color to shape the player's emotional experience, creating a more immersive and evocative game world.
- vii. **Audio Feedback :** Aligns with Hodent's principles of integrating audio elements for emotional engagement, enhancing the player's connection with the game world through immersive and responsive sound design.
- viii. **Fire for Emotional Impact:** Aligns with Hodent's principles of leveraging dynamic and engaging visuals to evoke emotional responses from players. Fire, with its unpredictable and intense nature, contributes to a heightened sense of urgency, chaos, and peril within the game world.
- ix. **Revelation of the Game Secret:** Aligns with Hodent's concept of maintaining a compelling mystery and challenge, rewarding players with a significant revelation that adds depth and motivates them to push forward.

### 3. UX Testing

In UX testing with my roommate as a player, the improvements to the Unreal project were generally successful. The player easily grasped the enhanced health bar clarity and the effectiveness of red damage indicators. He didn't know the controls initially so I added the controls HUD. The low health visual feedback, monster design, and adjusted lighting created a heightened emotional impact, and the inclusion of zombie sounds and player damage sounds contributed to a more immersive experience. The dynamic fire elements and the revelation of the game's secret were well-received, enhancing the overall atmosphere and narrative payoff. While the positive feedback suggests the success of the implemented UX improvements, there were a few bugs that still need attention. For instance, inclusion of more zombies lead to a health decline without taking a hit sometimes. In addition, The player noted that in rare instances he would lose health after the game was over. More so, it was suggested that I should add a variety of zombies and add both blood effects and different attack animations for a better feel. This however, is work for a more substansial project I feel.

## 4. Sources

- i. I used [Blog - Anyone Can Learn To Make Games \(awesometuts.com\)](https://www.awesometuts.com) to learn how to add the zombie design and animation
- ii. [Unreal Engine 5 Damage Effect \(youtube.com\)](https://www.youtube.com/watch?v=...) to make the damage HUD
- iii. [Interfaces in Unreal Engine | Unreal Engine 5.3 Documentation](https://docs.unrealengine.com/5.3/docs/interfaces) on how to use interfaces