PlayerJoinManager Script Documentation

The PlayerJoinManager is a script that changes the PlayerPrefab variant of the Player Input Manager every time a new player joins in so that every players has a different character/abilities. It also handles the “press to join” function so that the game only starts when enough players are joined in.

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1. Variables  
[SerializeField] private PlayerInputManager PlayerInputManager: A reference to the PlayerInputManager.  
[SerializeField] private Timer TimerScript: A reference to the Timer script  
[SerializeField] private GameObject[] PlayerPrefabs: An array of player prefabs to choose from.

[SerializeField] private Transform[] SpawnPoints: An array of spawnpoints for the players to spawn in.  
[SerializeField] private GameObject[] HudJoinElements: An array of hud elements that are turned off depending on the player count.  
private int CurrentPrefabIndex = 0: Index of current prefab to use.

2. Methods

void Start(): When the game is started, the method sets the first player prefab when the scene is loaded in and sets the spawn position of the player prefab.

void OnPlayerJoined(): This method sets new player prefabs and spawnpoints, and handles the player join in function.Bovenkant formulier

3. Code Explanation

In the start, the Start() function sets the PlayerPrefab of the PlayerInputManager to the first one in the PlayerPrefabs list, and also sets the position that the PlayerPrefab will spawn at. It also skips the first PlayerPrefab in the array so that it doesn’t spawn 2 players with the same prefab.

Afbeelding met tekst, schermopname, Lettertype

Automatisch gegenereerde beschrijving

In the OnPlayerJoined() function, a new PlayerPrefab of the PlayerInputManager is set, the player’s spawn position is also set to the next available SpawnPoint in the array. It also sets the PlayerPrefabs array index to the next one in the array. For the join in function, it is checked if the first player has joined and it disables one of the HudJoinElements. If the playerCount is equal to 2, the second HudJoinElement is turned off and the TimerOn boolean of the TimerScript is set to true, so that the game can start.

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4. Conclusion

The PlayerJoinManager helps with making the co-op game asymmetrical, since it allows different players to have a different character with different abilities.