

HTC Vive Development Tutorial

04.10.18

Reminder 1: Space Invaders

- Please upload a zip file which contains:
 - Your code (EnemyController.cs)
 - A 10 seconds video shot of your design effect.
 - Other files (ex: image, audio, material...etc) that should be added in the project.
 - A “ReadMe” file to describe how to add the effect.
 - Name the zip file with your **student ID + "_AS2"**. For example, 0799999_AS2.zip
- Deadline: 10/15 23:59
- Link: <https://www.dropbox.com/request/9WNS8cLJjeSJ71IKQQSL>

Reminder 2: Group Foto

- Please upload your Group Photo to our Facebook group.

Outline

- Vive Controller Connection
 - Vive Tracker Connection
 - Vive in Unity
 - Vive Tracker in Unity
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- Simple Demo: Controller + Space Invaders

Vive Controller Connection

Vive Controller Connection

1. Open the SteamVR Window.
2. Right click the controller icon and connect it.



3. Press the controller's two button together.
The led will turn blue and flash when it is in the pairing mode.



Vive Controller Connection

The controller's led will turn green after it is connected.

Right click the icon on SteamVR for turning it off.



Vive Tracker Connection

Vive Tracker Connection

1. Open the SteamVR Window.
2. Right click the controller icon and connect it.



3. Press the tracker button.
The led will turn blue and flash when it is in the pairing mode.

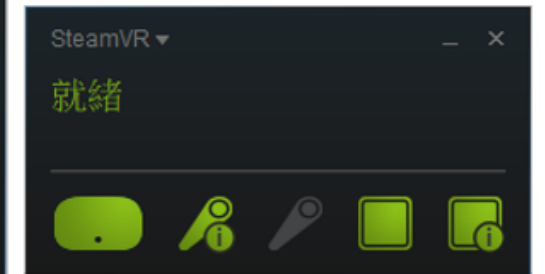


Vive Tracker Connection

The tracker's led will turn green after it is connected.



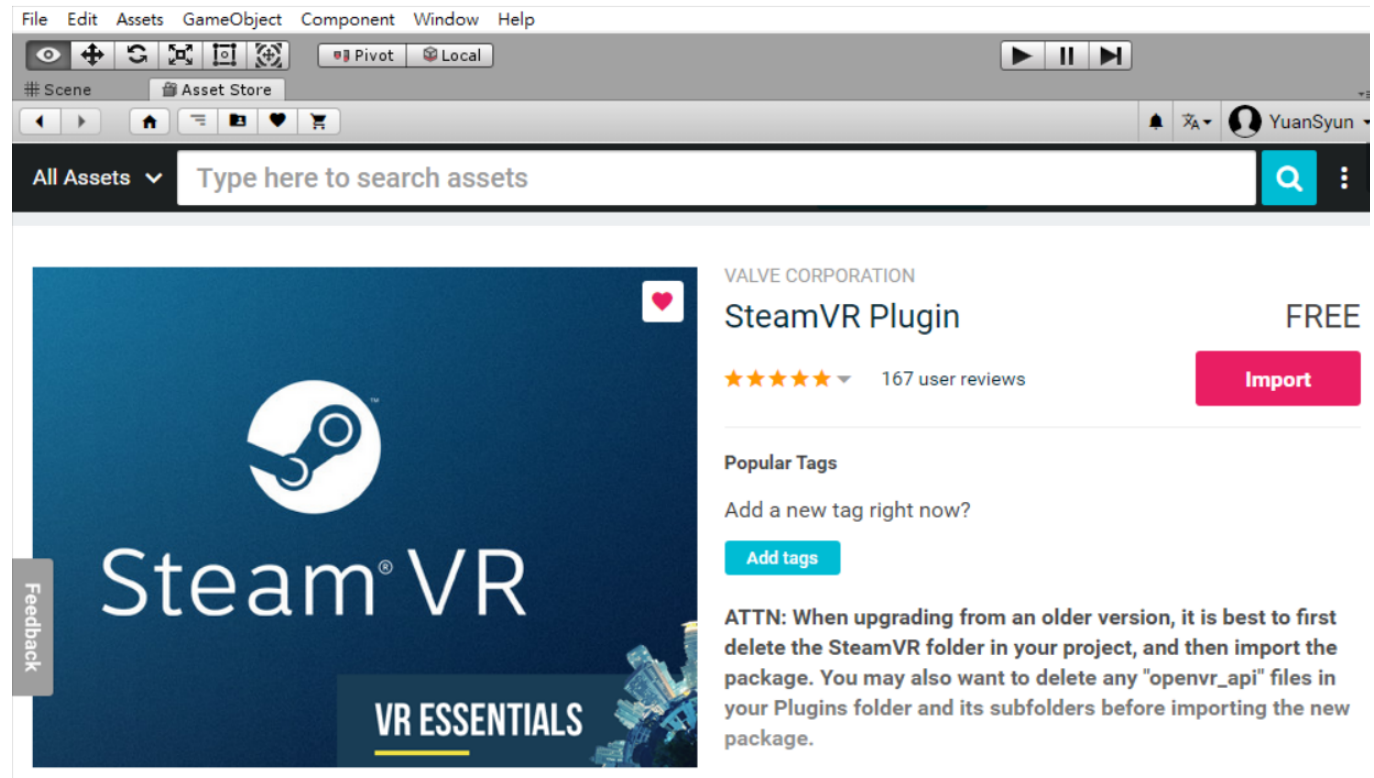
The icon in the SteamVR will be either a tracker or a controller.



Vive in Unity

Vive in Unity

- After creating a Unity project, import SteamVR Plugin from Unity Asset Store.
 - Asset Store: Window -> Asset Store
 - Type "SteamVR" in the search bar, find the SteamVR Plugin and download it to import.

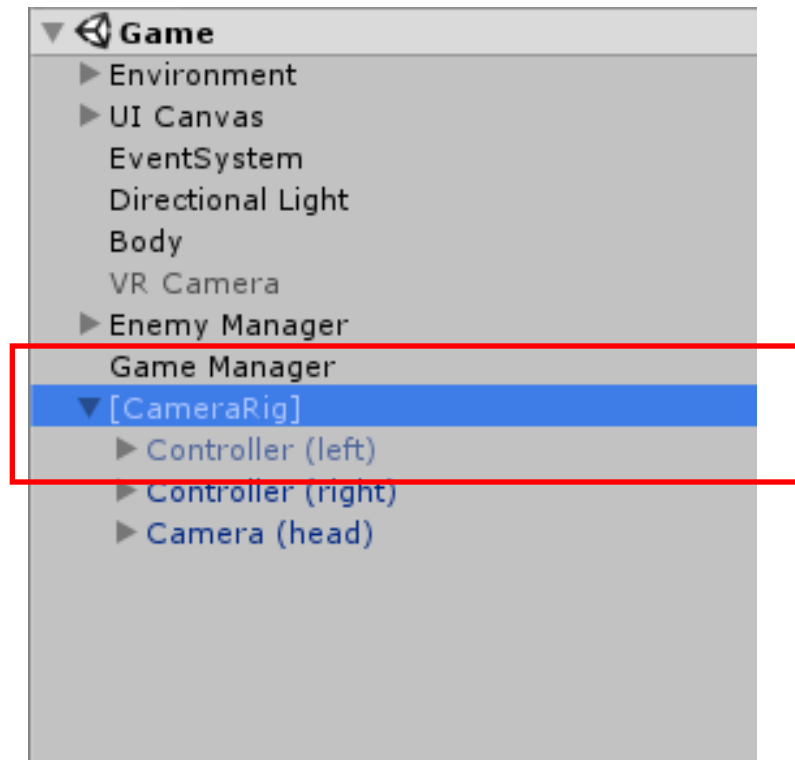
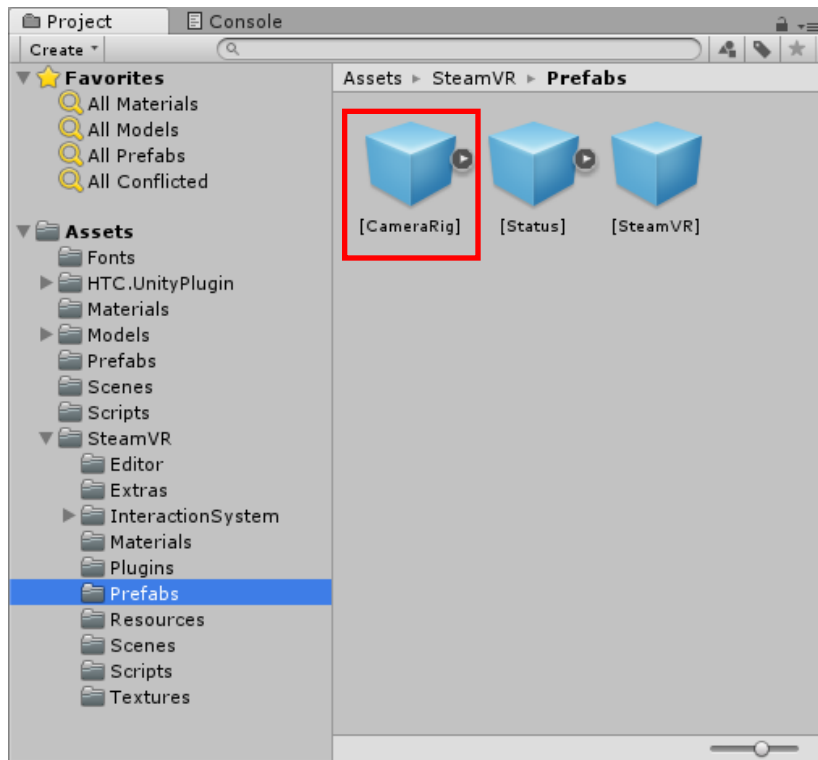


Vive in Unity

- We provide SteamVR plugin for Unity v1.2.2 package in the following link.
- <https://drive.google.com/a/nctu.edu.tw/file/d/14lqPFKGIzt4Hw92kw10LdRAocoVR8fqP/view?usp=sharing>

Vive in Unity

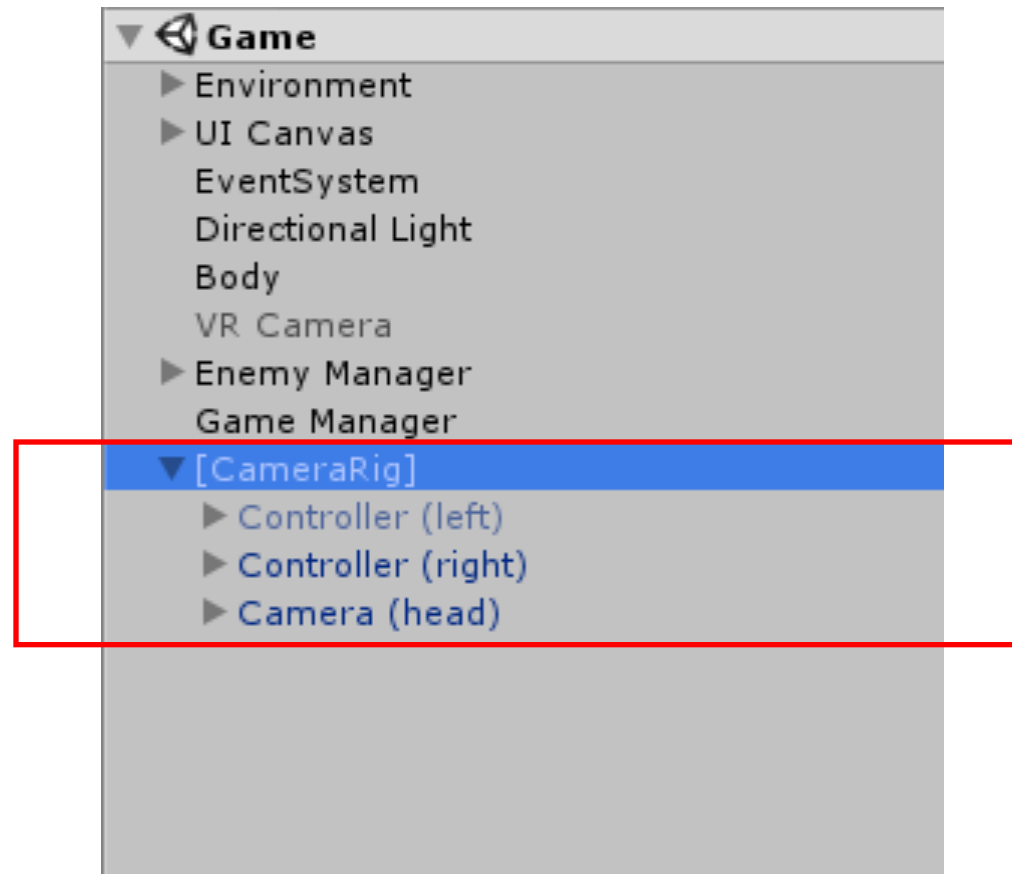
- Drag the [CameraRig] GameObject to the scene.
 - Find the Folder SteamVR/Prefabs in your project Assets.
 - Drag the prefab “[CameraRig]” to your scene
 - The HTC Vive will be linked to the [CameraRig] as long as the SteamVR is running successfully.



Vive Tracker in Unity

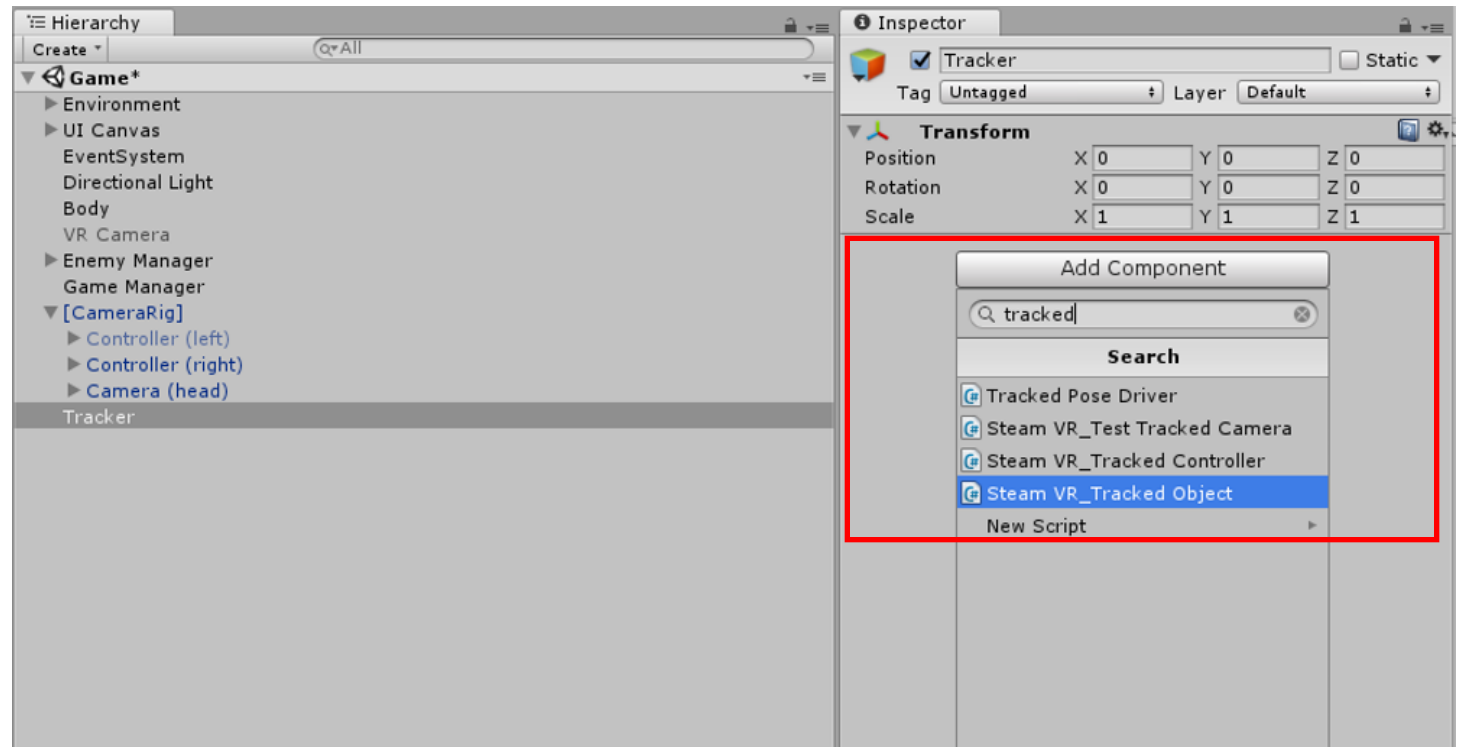
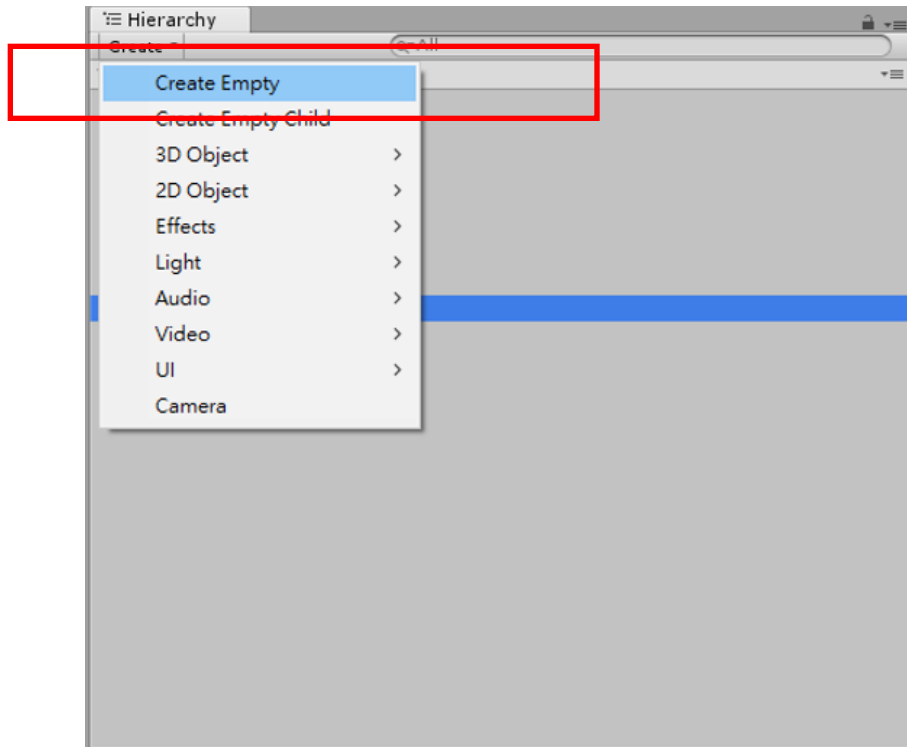
Vive Tracker in Unity

- Prepare the scene with [CameraRig].



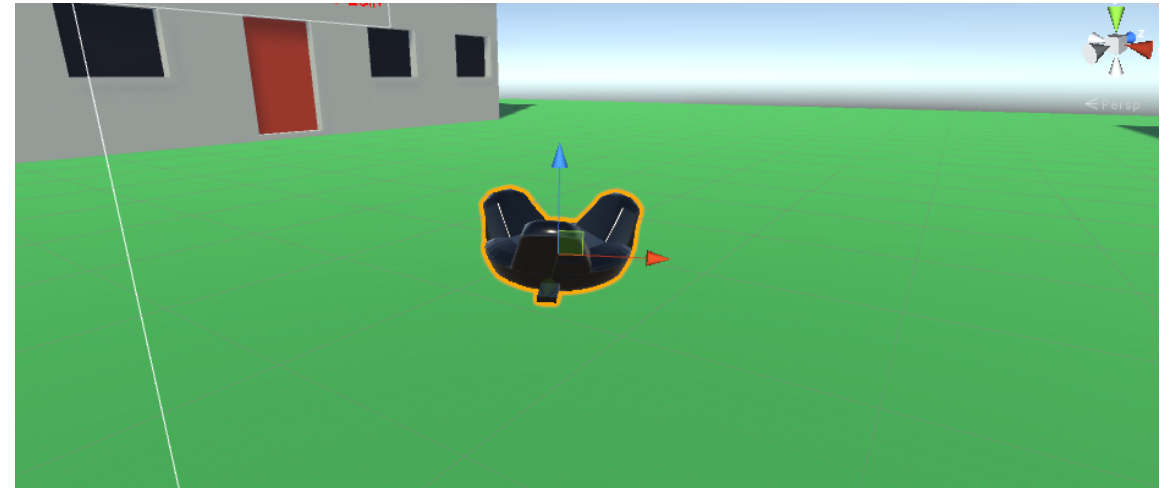
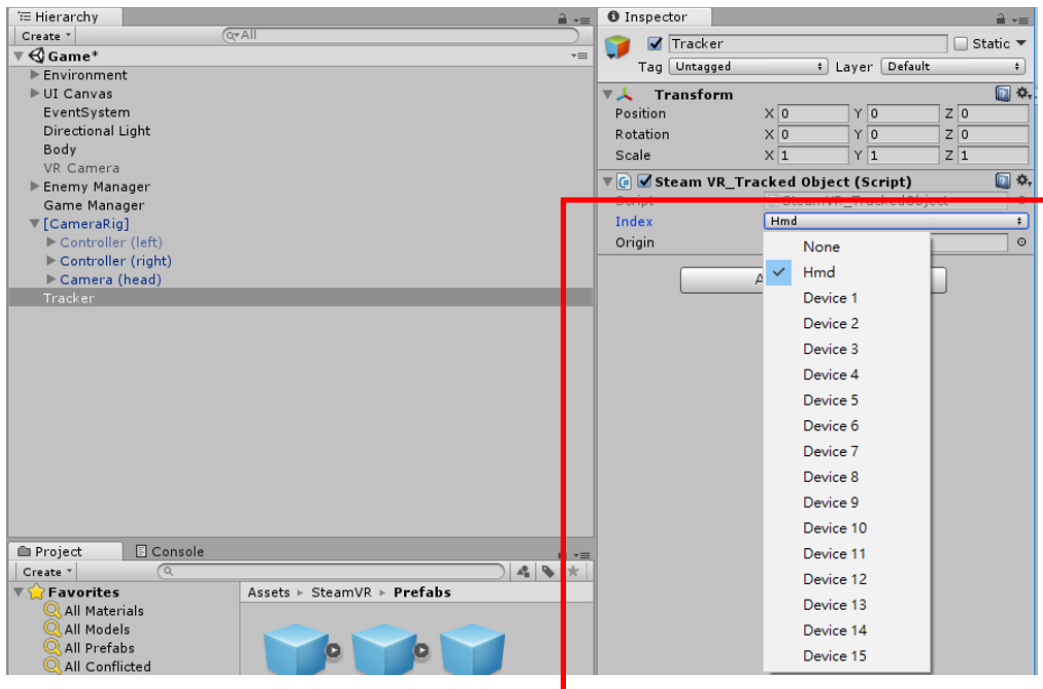
Vive Tracker in Unity

- Create an Empty GameObject which would be used to represent the Tracker.
- Add Component -> Scripts -> Steam VR_Tracked Object



Vive Tracker in Unity

- Public variable "Index":
 - The device number of the controller/tracker, which is determined by the SteamVR.
 - 1. Trial and error.
 - 2. Run the program, the device number will be show in the GameObject "Controller(Left)" or "Controller(Right)".



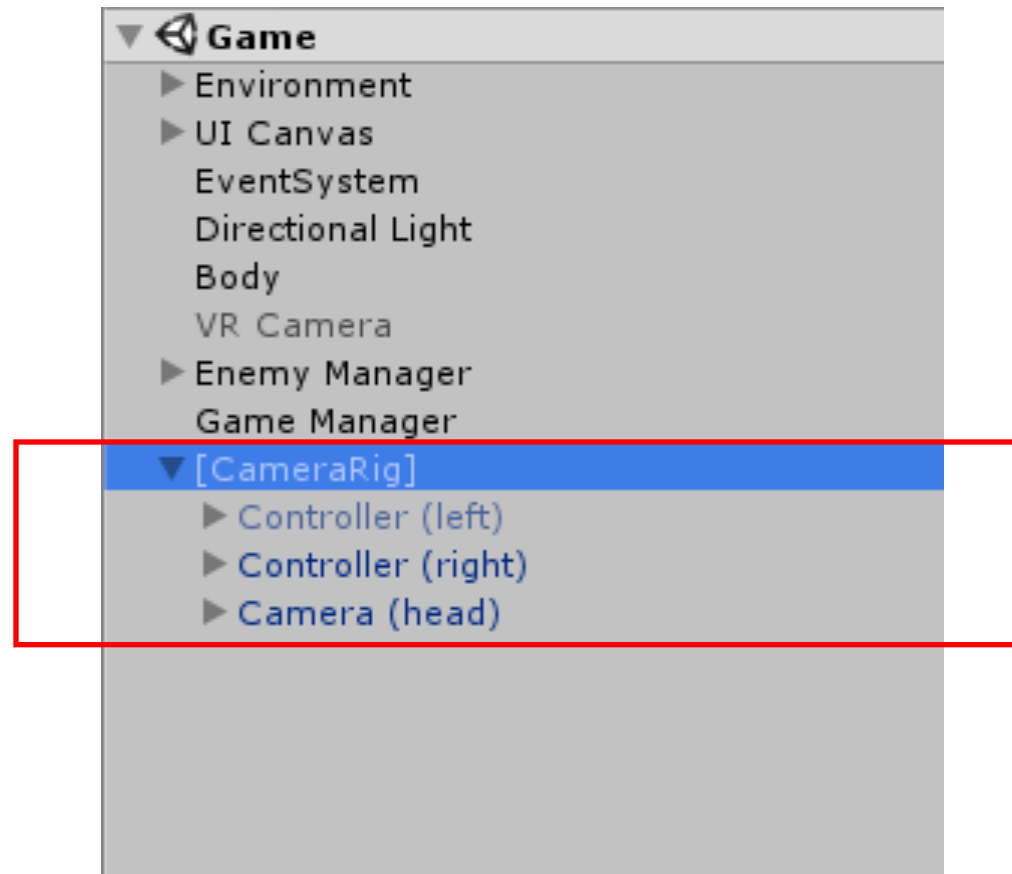
Vive Tracker in Unity

- Drag your model to be the Empty GameObject's child
 - There will be some offset of position and rotation between the model and controller/tracker.
 - Modify it manually.

Simple Demo
Controller + Space Invaders

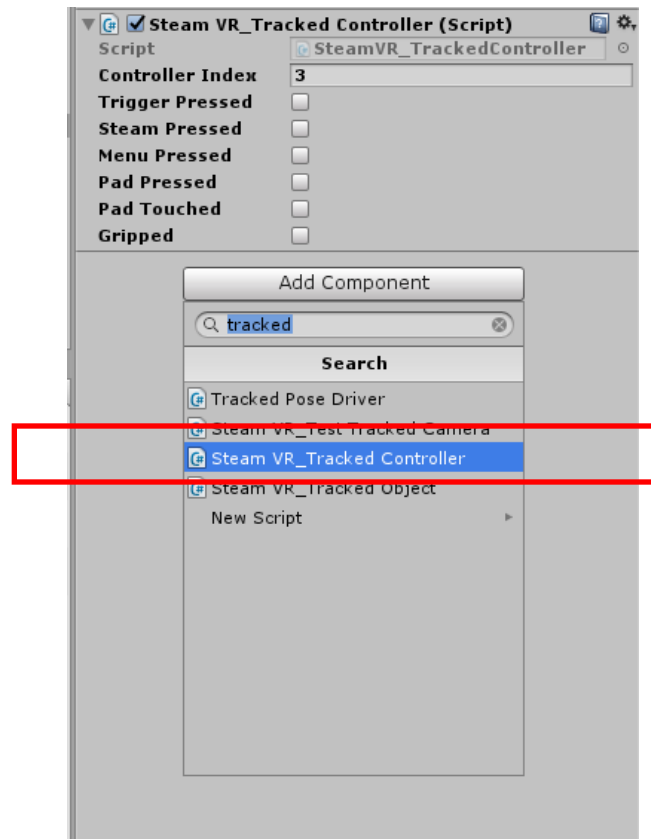
Controller + Space Invaders

- Prepare the scene with [CameraRig].



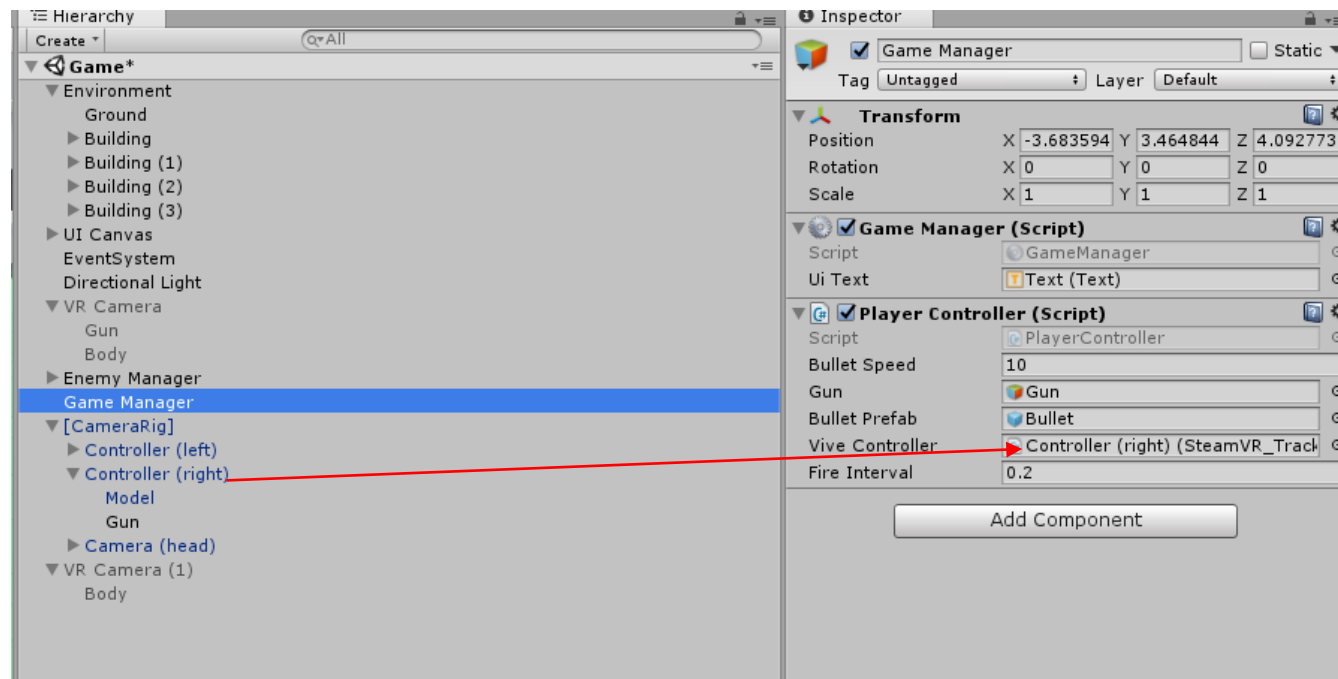
Controller + Space Invaders

- Disable "VR Camera" in Hierarchy.
- Add "Steam VR_Tracked Controller" Script as a component of the Controller (right).



Controller + Space Invaders

- Add "Player Controller" Script as a component of the GameManager GameObject.
- Drag Controller (right) to the public variable Vive Controller in "Player Controller" Script.



Controller + Space Invaders

- Drag gun GameObject as a child of "Controller (right)" GameObject and adjust the offset.

