connect a robot Documentation

1. Clone the repository:

Clone the repository from GitHub using this link: https://github.com/Virtual-FTC/Unity-Hydrogen-Horizons

2. Open the project in Unity:

Once the repository is cloned, open the Unity Hub and load the project by selecting the folder you just cloned.

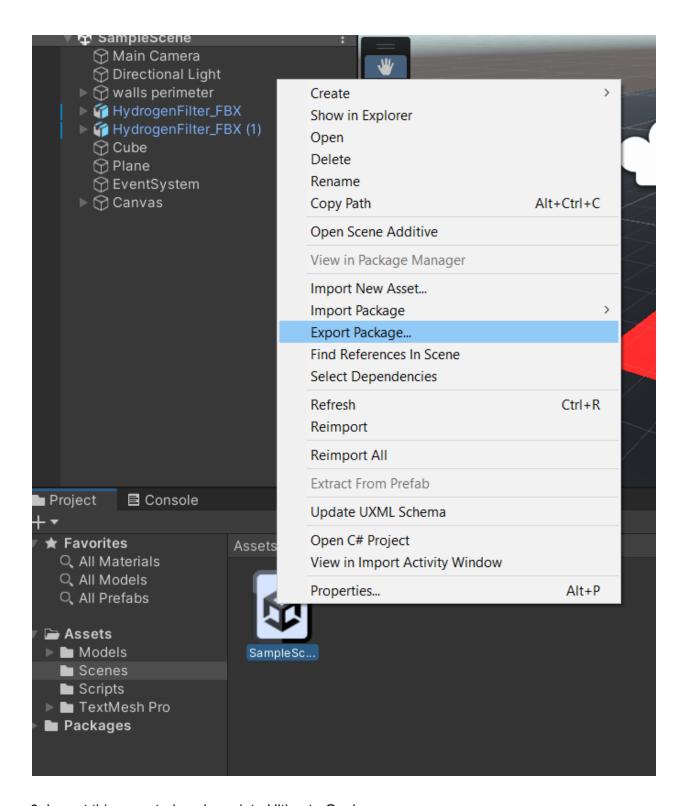
3. Clone an additional repository:

Clone another repository from GitHub: https://github.com/Virtual-FTC/VRS-UnityWebGL-UltimateGoal

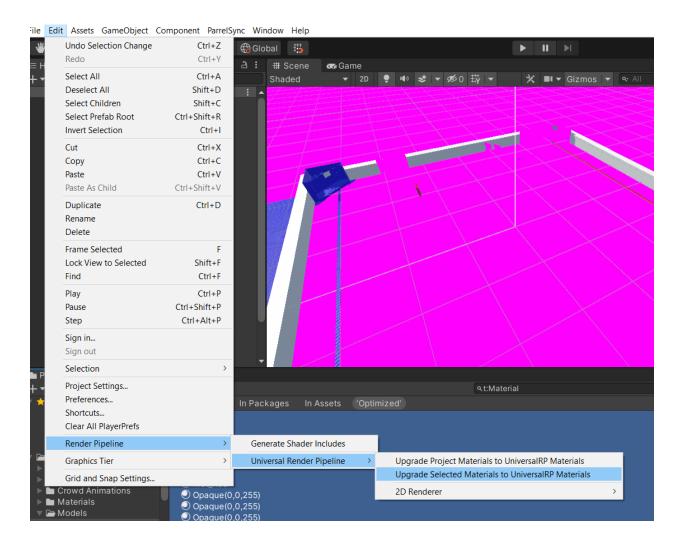
4. Open the project in Unity:

Once the repository is cloned, open the Unity Hub and load the project by selecting the folder you just cloned. Make sure to use version 2020.3.8f1.

5. Open the Unity-Hydrogen-Horizons project and export SampleScene.

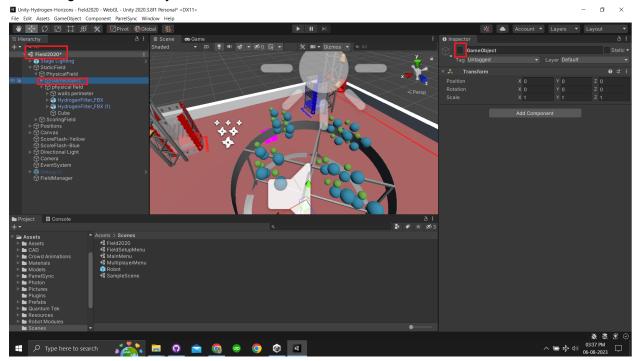


- 6. Import this exported package into Ultimate Goal.
- 7. After importing, if you open the sample scene and encounter a pink material issue:
- 8. Select all the Material files used in the Unity-Hydrogen-Horizons project's SampleScene.



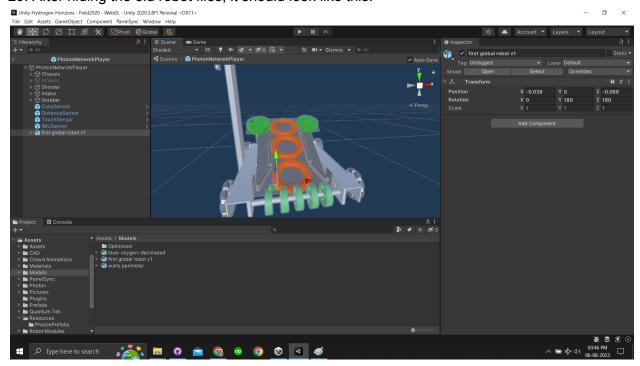
- 9. Upgrade the selected materials to UniversalRP Materials to fix the issue.
- 10. Once you confirm that the sample scene looks good, open the Unity-Hydrogen-Horizons project's repository location, except for the .git folder, and delete everything else.
- 11. Now, go to the VRS-UnityWebGL-UltimateGoal repository folder, copy everything except the .git folder, and paste it into the Unity-Hydrogen-Horizons project's repository location.
- 12. Reopen Unity Hub and add the Unity-Hydrogen-Horizons project where you copied the data.
- 13. Confirm if everything is working as expected, such as the sample scene is good and functions correctly when played.
- 14. Commit the project to GitHub.
- 15. Group files and put them under a parent called "physical field."

16. Arrange the hierarchy like this: Scene -> Field2020.

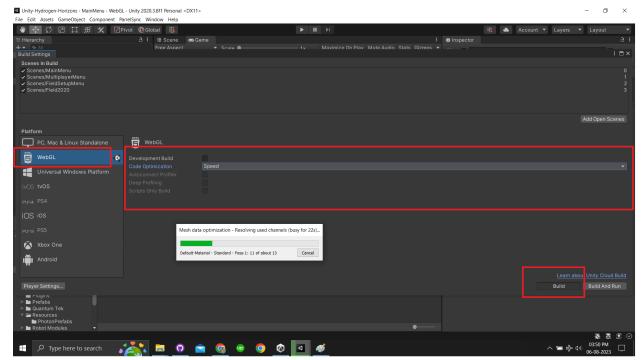


- 17. Import the first global robot v1.fbx into Assets/Models/first global robot v1.fbx.
- 18. Open Assets/Resources/PhotonPrefabs/PhotonNetworkPlayer.prefab.
- 19. Drag and drop Assets/Models/first global robot v1.fbx into Assets/Resources/PhotonPrefabs/PhotonNetworkPlayer.prefab.

20. After hiding the old robot files, it should look like this:



- 21. Turn off ScoringField as it is related to the older Ultimate Goal.
- 22. Connect a Logitech joystick and test if the robot moves and shoots when playing.
- 23. Build for WebGL.



- 24. Clone https://github.com/Virtual-FTC/VRS-Local-ElectronApp-base
- 25. Switch to the "Hydrogen-Horizons" branch: https://github.com/Virtual-FTC/VRS-Local-ElectronApp-base/tree/hydrogen-horizon
- 26. Hold Shift in the above repository folder and open Windows PowerShell here.
- 27. Type "npm i" and press Enter. Make sure you have everything installed as mentioned in https://github.com/Virtual-FTC/VRS-Local-ElectronApp-base/tree/hvdrogen-horizon#readme
- 28. When the WebGL build is complete, copy the files from the build folder into the Electron app at path VRS-Local-ElectronApp-base\webgl.
- 29. Open index.html and compare it with https://raw.githubusercontent.com/Virtual-FTC/VRS-Local-ElectronApp-base/main-ug/webgl/index.html
- 30. Find this line: }).then((unityInstance) => {.
 In the "ug" branch, it has some extra code compared to our build, and we need that code in our build too. So, copy from there till </script>, and paste it into our build code. Then, save index.html.
- 31. When "npm i" is done, run another command "npm start." It will open the Electron app.
- 32. Open the programming section.
- 33. You will see "Import robot" in the project.

