VR Teleport package

An easy-to-implement teleport package for your Unity + Oculus VR project.

VERSION

v1.2

Release notes

v1.2

- Added Button Mappings. Assign any of the TP-functions as your desired button.
- Added some more psuedocode here and there.

v1.1

- Fixed an issue regarding the "TELEPORT_RIG"-prefab being made up of Missing-Prefabs
- Left controller' MeshRenderer is now disabled by default. The GameObject itself hasn't changed.

v1.0

Initial version

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Requirements

- This Package (path to the .unitypackage)
- Oculus' VR package for Unity, downloadable for free in Unity's Asset Store.

Implementation

From empty to testable

-Import the required packages into Unity

Use Ctrl+Shift+B to open the Build-Settings

- -Register your scene or the ExampleScene in the build-settings.
- -Switch platform to Android.\

Open the Player-Settings

-Enter your company name and product name.

Open the Other settings

- -Remove Vulkan Graphics API
- -Set the Minimum API Level to at least 19.

Open XR Settings

- -Add the Oculus SDK
- -Tick the V2 Signing (Quest) box.

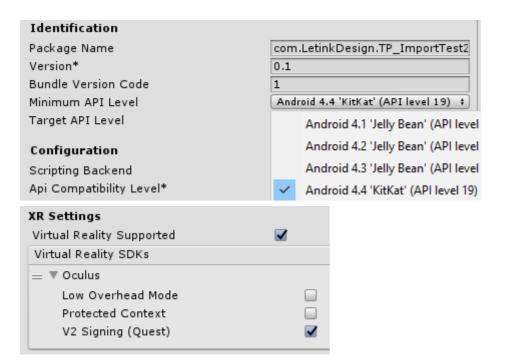
Put on the Oculus Quest

- -Make sure that the Oculus Quest unit is connected to your PC and is active.
- -Make sure that the Oculus Quest unit has Developer-Mode enabled.

Go back to the Build-Menu and select Build and Run.

Images





Usage

How to Teleport

By *pressing and holding* the trigger on the *back of the controller*, using your index-finger, a line will appear from your controller -- thickening as it goes on.

If this line hits a surface, it should place an object with an arrow pointing forward. This object is called the TPTarget. TPTarget shows you where you're about to teleport to. By letting go of the trigger you'll instantly be placed there.

The TPTarget, along with the line should be *blue*, but if it's *red*, it simply means that you're not allowed to teleport to that location because the floor is *too steep*. The maximum allowed amount of steepness can be adjusted in the *TP_Core component* (~0.98f is recommended).

Cancelling the Teleport-Laser

If you started pressing and holding the Teleport-Trigger, but regret it, you can cancel it by pressing the Laser-Cancel Button (assigned to both A and B by default).

Custom rotation

The arrow in TPTarget is controllable. By holding the right-controller's stick in any direction the arrow will mimic the exact direction and hold it when you let go of the stick. The arrow shows you what your next central rotation will be after teleporting. For example: If you hold the stick downwards, you'll be facing the other way after teleporting.

Undo

Once you've teleported, you might want to go back to a specific point. This is why all teleport-positions (and rotations) are saved and by pressing B you can go back 1 step at a time. It works almost exactly like Ctrl+Z in that sense. </div>

Controller visibility

Don't like the seeing the controller the VR-app? Press the Visibility-Toggle Button stick to toggle visibility of both controllers. By default, this is assigned to the right controller's stick.

Issues

The TPTarget-Disallowed -object isn't properly oriented on walls or slanted terrain.

This is a known issue and I'm having some trouble fixing it, as I don't understand why it does what it does. It's not a big problem, though, as it doesn't break the application. It is pretty annoying, though. (Recreate: Try teleporting to different walls)

The TP-Laser doesn't turn blue when moving from steep-terrain to flat terrain. (Doesn't happen when they're different objects)

This is a known issue. This happens because the line-color updates every time a new object is hit or when the line starts missing. If you keep pointing at the same object, the line will never update – which means that it won't update even if that one object has both steep and non-steep angles. It doesn't have any impact on gameplay, luckily.

(Recreate: Try teleporting on top of a sphere and move from the outside to the top).