

# CSE 165

## Discussion 6

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# Topics

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- Oculus setup
- Project 3

# Oculus Setup

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- Oculus App on PC: <https://www.oculus.com/setup/>
- Import Oculus integration in Unity:  
<https://assetstore.unity.com/packages/tools/integration/oculus-integration-82022>
- Download XR-plugins in Unity
- Tutorial video that might be helpful:  
<https://www.youtube.com/watch?v=YwFXQeBmxZ4>

# Demo

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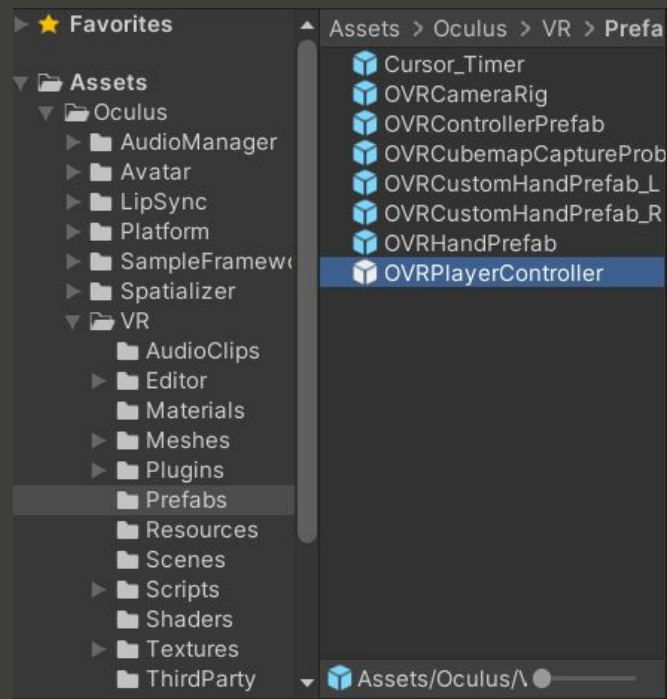
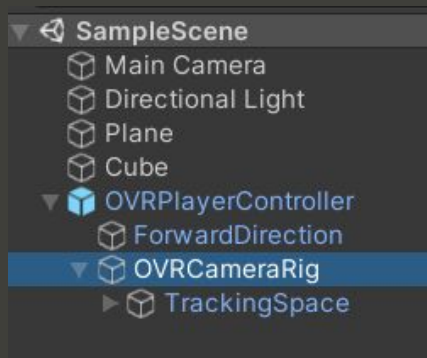
# Oculus Setup

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- Wireless option: Setup wifi connections with Android Debug Bridge (ADB)
- <https://developer.oculus.com/documentation/native/android/mobile-adb/>

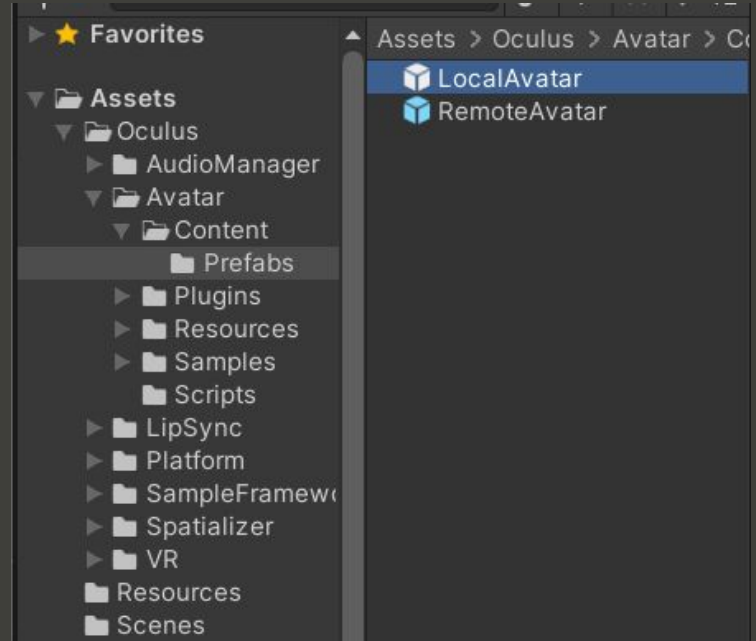
# Oculus Setup

- Use OVPlayerController prefab for camera and player control
- OVRCameraRig is your VR camera



# Oculus Setup

- Use LocalAvatar prefab for hand display and controllers
- Place it under the tracking space of OVRCameraRig



# Input

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- Get inputs from the controllers
- Use OVRInput:  
<https://developer.oculus.com/documentation/unity/unity-ovrinput/>
- Check out the example usage in the link
- Example:  
`OVRIInput.Get(OVRIInput.Button.One);`  
Returns true if you are pressing “A” button



# Ray-casting

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- Similar to the gaze in Project 1
- Draw lines using LineRenderer:
- <https://docs.unity3d.com/Manual/class-LineRenderer.html>
- Example:

```
LineRenderer lr = GetComponent<LineRenderer>();  
lr.SetPosition(0, rightHand.position);  
lr.SetPosition(1, rightHand.position + rightHand.forward * 100);
```

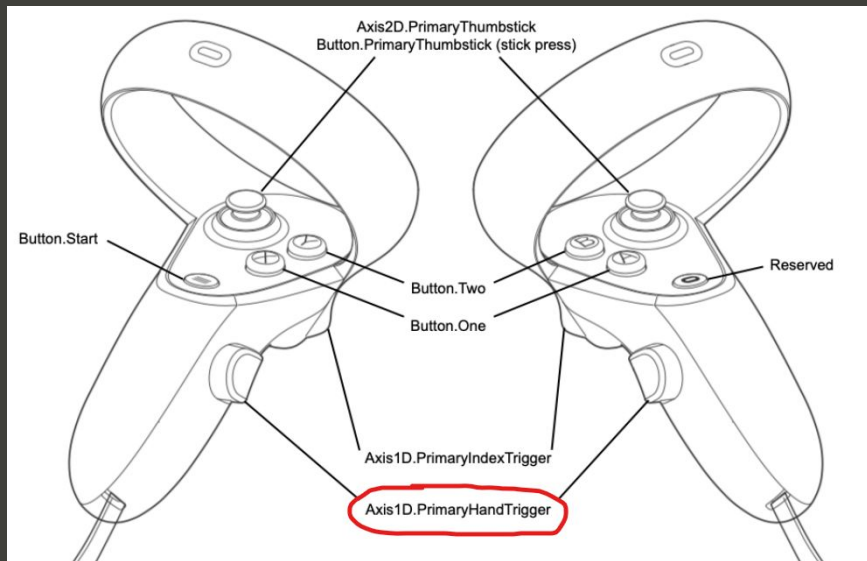
# Virtual hands

- Get the transforms of your hands from LeftHandAnchor and RightHandAnchor



# Grabbing the Air

- Use the hand triggers for grabbing
- Record the position when you press the button
- When holding the button, move the player by the difference in the hand positions



# Questions

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