#### Spring 2021

## **CSE 190** VR Technologies

### **Discussion** 6





#### ANNOUNCEMENTS

- Homework 3
  - Due Sunday (5/16)
  - Record videos from both screens
- Keep up with the great work!





### AGENDA

#### • More Homework 3 Tips





## Homework 3 Tips

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#### Homework 3 Tips: Stereo Mode Cameras

• Create two cameras in the scene, each parented to an empty GameObject (lparent & rparent), and make them parented to another empty GameObject (CameraRig)

CameraRig
Iparent
lefteye
rparent
rparent
righteye

- Attach P2Utils script from the course website to the CameraRig
- Assign correct cameras and parents

🔻 # 🖌 P2 Utils (Script)	Ø	÷	
Script	₽2Utils		
Left Eye	■lefteye (Camera)		$\odot$
Right Eye	■ righteye (Camera)		$\odot$
Left Parent	⇔lparent		$\odot$
Right Parent	⇔rparent		$\odot$

#### Homework 3 Tips: Stereo Mode Cameras

• Alternatively, you can still use OVRPlayerController's camera rig, but make sure to disable Eye Anchor Camera

🔻 # 🖌 OVR Camera Rig (Script)		0	- <u>+</u> -	•
Script	# OVRCameraRig		0	Ð
Use Per Eye Cameras				
Use Fixed Update For Tracking				
Disable Eye Anchor Cameras	~			

#### Homework 3 Tips: Shrinking FOV

- Create 2 3D Canvas (GameObject -> UI -> Canvas)\
- Select corresponding eye cameras
- Create black images (GameObject -> UI -> Image)
- Use the black images as tiles to form this shape
- Put each in front of corresponding cameras

🔻 🧮 🖌 Canvas		07‡ :
Render Mode	Screen Space - Camera	
Pixel Perfect	✓	
Render Camera	■ righteye (Camera)	
Plane Distance	0.1	
Sorting Layer	Default	
Order in Layer	0	
Additional Shader Channels	Nothing	



#### Homework 3 Tips: Stereo Recording

- Default, on-device screen recording is single eye ONLY cannot record screen from the other eye
- Luckily, Android provides a good solution.
- Install ADB (Android Debug Bridge) first (see discussion 5), then install scrcpy
  - macOS: brew install scrcpy
  - Linux: apt install scrcpy
  - Windows: download



#### Homework 3 Tips: Stereo Recording

- Simply run the command scrcpy when device is connected
- GitHub Page: <u>https://github.com/Genymobile/scrcpy</u>



# **OFFICE HOUR**

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