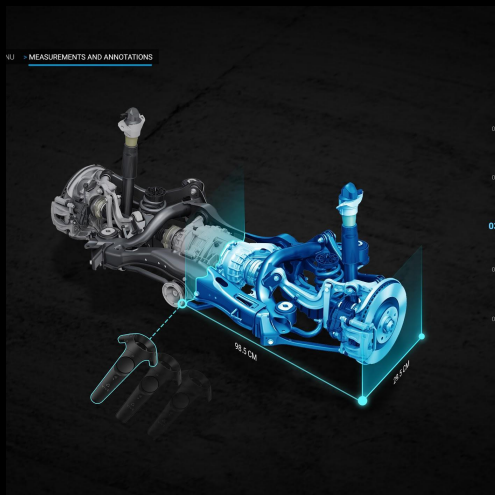


Session 7

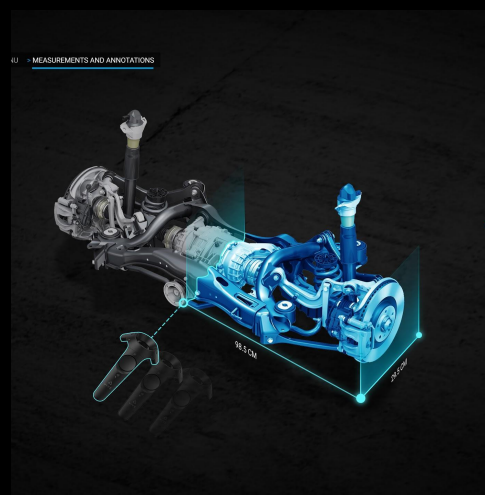
Lighting and Post-Processing in VR

What are some finishing touches that you want to add to your Capstone project? Are there any places where you find it lacking?

Instructor(s)



Instructor Name
Instructor Title
Instructor Company



TA Name
TA Title
TA Company

Session Goals



In this session, you'll:

- Apply Post-Processing effects to improve visual and stylistic fidelity of the scene
- Identify which post processing effects are effective in VR
- Configure Lights and Universal Render Pipeline settings to create a visually appealing scene

Session outline

1. Customizing the Universal Render Pipeline in Unity
 - Add lights and configure URP Asset Settings
1. What is Post Processing?
 - Adding Post Processing to your project
1. Best Practices for Post Processing in VR
 - Configure Post Processing Values
1. Using Profiling tools to measure performance
 - Profile your project

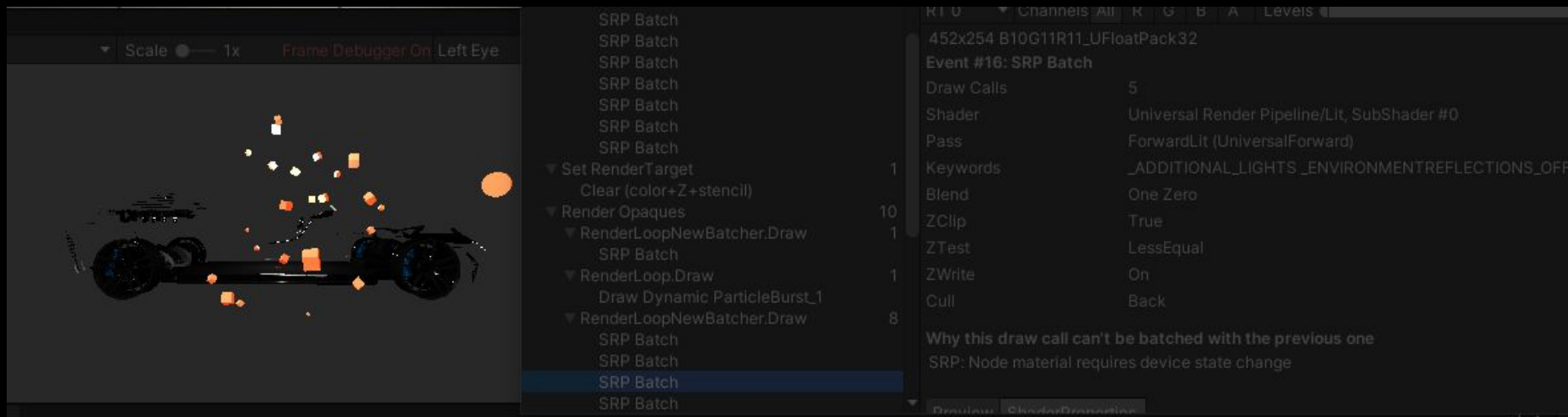
Activity 7: Fine-tune project visuals

Universal Render Pipeline in Unity



The Universal Render Pipeline (URP) is a prebuilt Scriptable Render Pipeline, made by Unity. URP provides artist-friendly workflows that let you quickly and easily create optimized graphics across a range of platforms, from mobile to high-end consoles and PCs.

Using the Frame Debugger

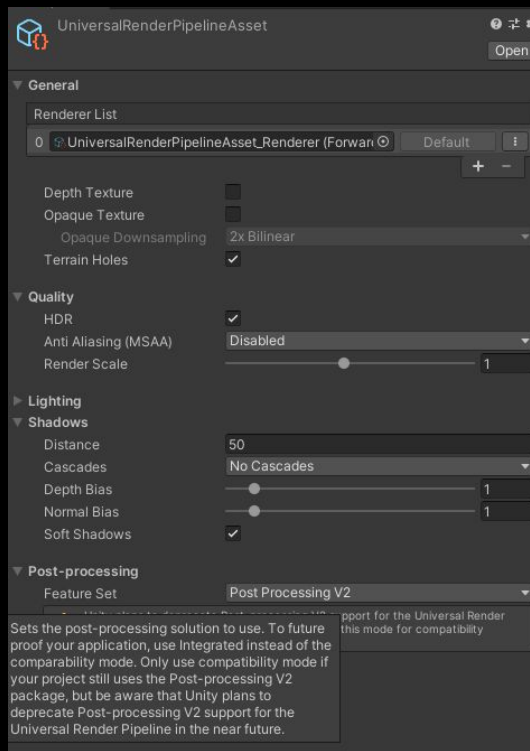


Configuring Lighting and URP



1. Add a few lights of various types to your scene

1. Configure URP Asset Settings

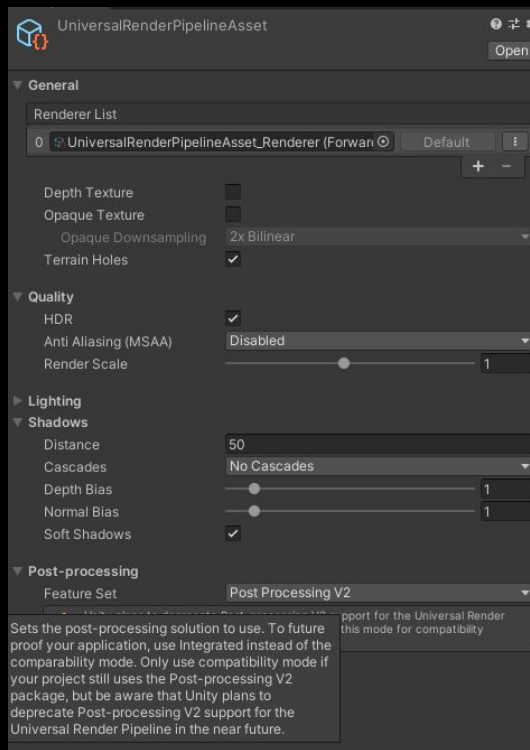


Configuring Lighting and URP



1. Add a few lights of various types to your scene

1. Configure URP Asset Settings



What is Post Processing?

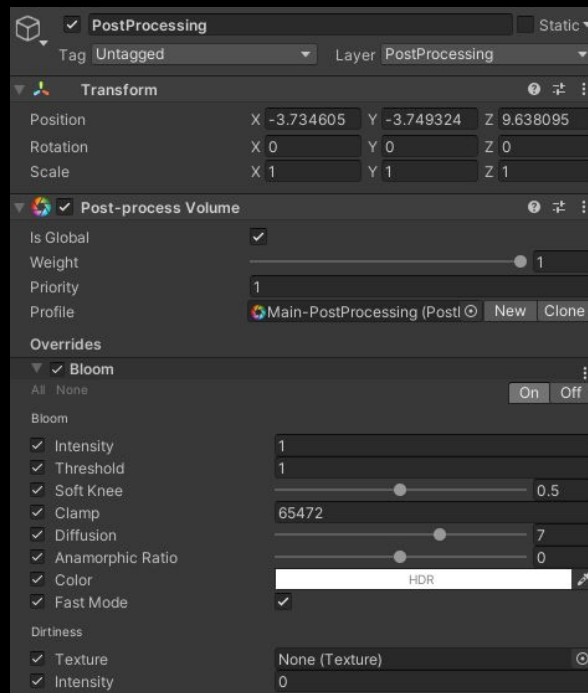


Setting up Post Processing in Unity



1. Create a Post-Processing Profile and Global Volume for your Scene

1. Add a Post Processing Layer to the Camera

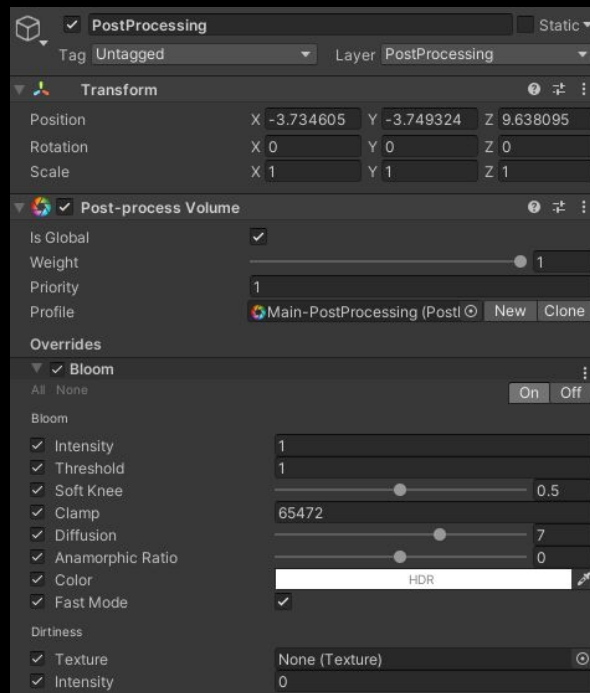


Setting up Post Processing in Unity

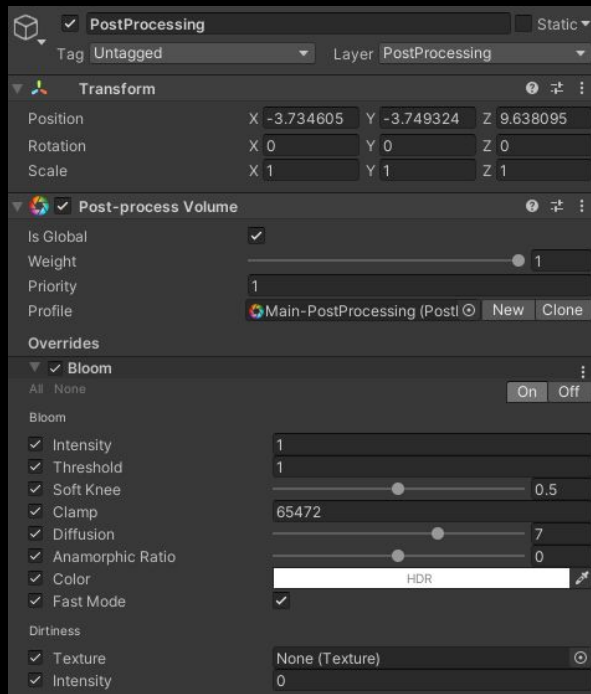


1. Create a Post-Processing Profile and Global Volume for your Scene

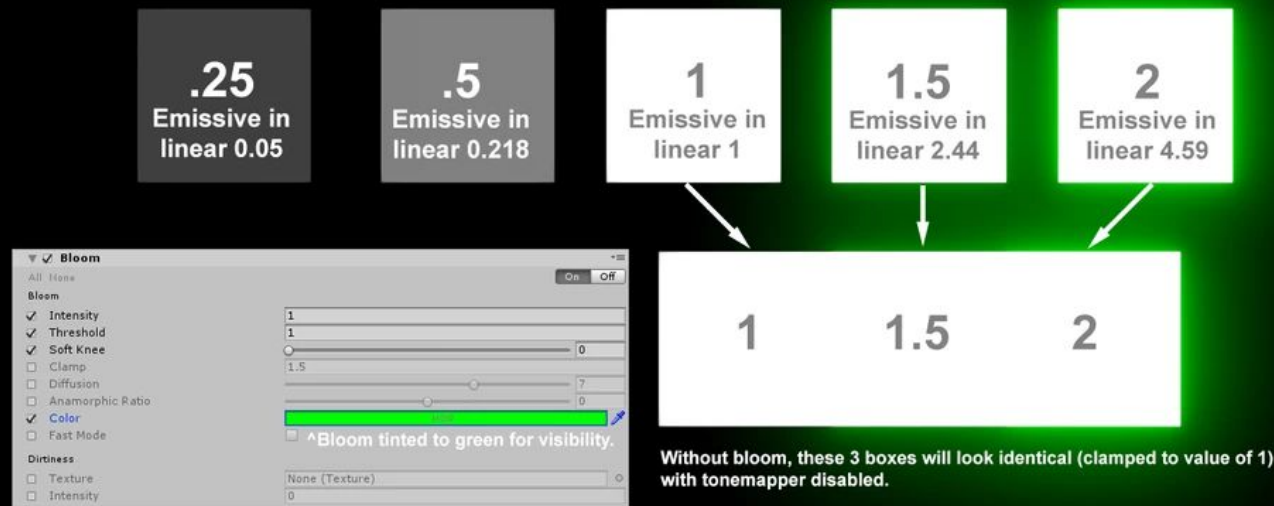
1. Add a Post Processing Layer to the Camera



Customizing Post Processing



Example Post Processing Effect: Bloom



Exploring Post-processing in VR



1. Configure a variety of post-processing effects and examine their impact on user experience in VR
 2. Write down a few notes and observations to share with the group
-



Exploring Post-processing in VR



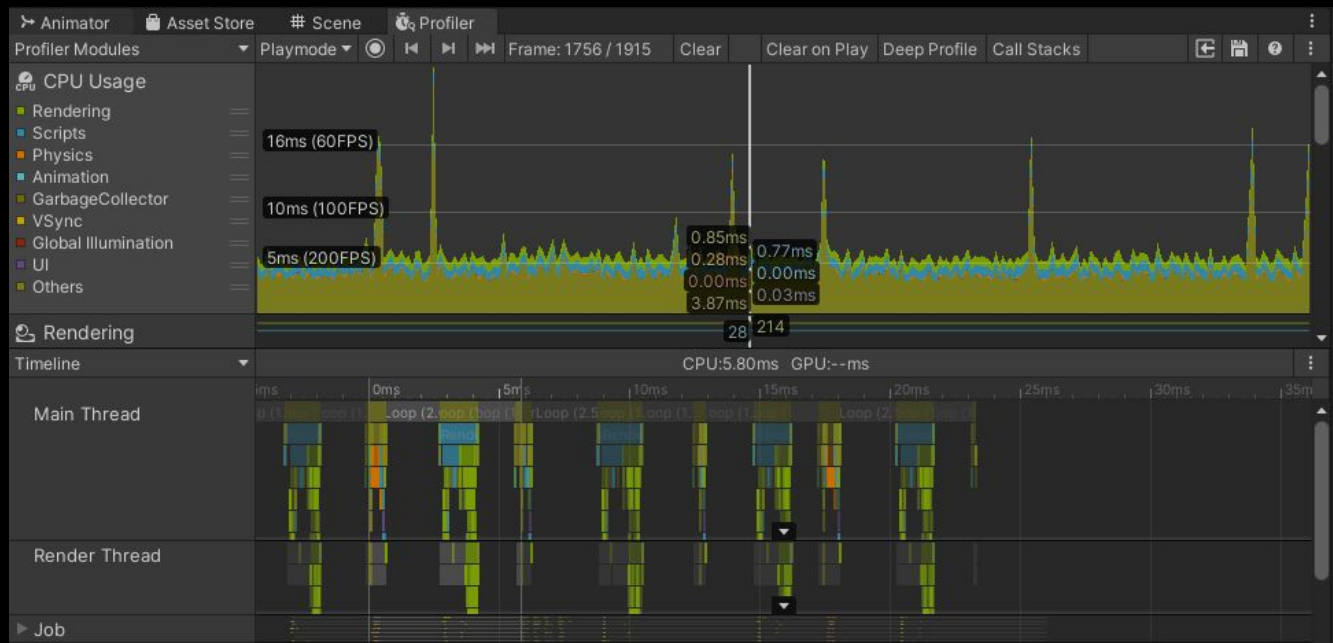
1. Configure a variety of post-processing effects and examine their impact on user experience in VR
 2. Write down a few notes and observations to share with the group
-



Discussion - Which Post Processing Effects work well in VR?



Using Profiling Tools to measure Performance in VR

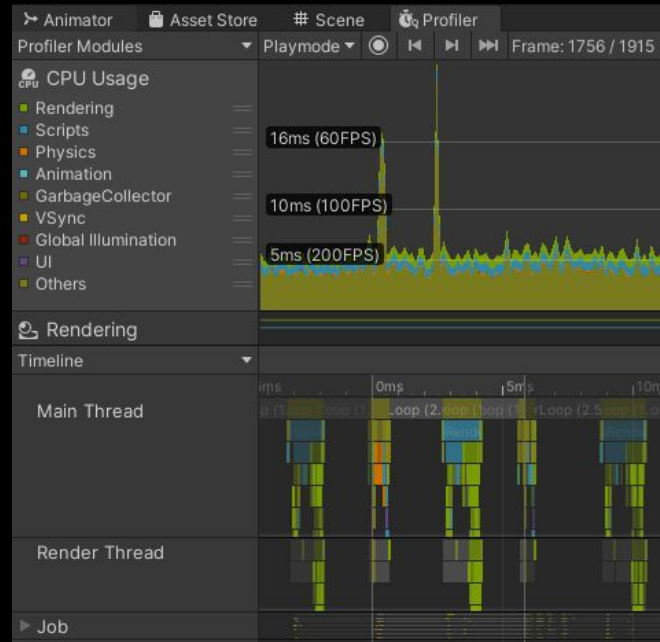


Profiling and Optimizing your Project



1. Run the profiler to examine the impact of post-processing on your project and identify any performance bottlenecks

1. Finalize the values of your Post-processing effects
-

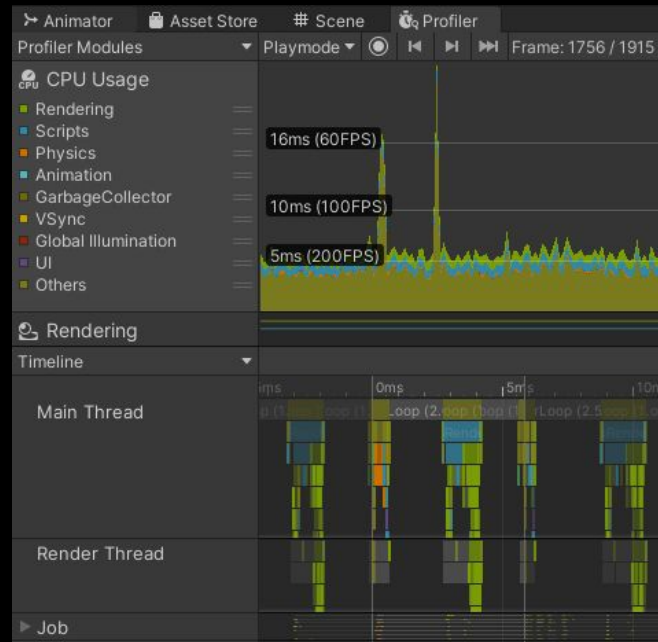


Profiling and Optimizing your Project



1. Run the profiler to examine the impact of post-processing on your project and identify any performance bottlenecks

1. Finalize the values of your Post-processing effects
-



Activity Session 7

Fine-tune Project Visuals

Activity 7 Goals

1. Attend Session 7 Office Hours

- a. Have your project ready to demo

1. Finalize the lighting in your scene

- b. Add lights to your scene, being careful to pay attention to performance
- c. Add Light Probes and/or Reflection probes
- d. Bake the lighting once you are happy with the look and feel



Feel free to ask questions!

Thank you.