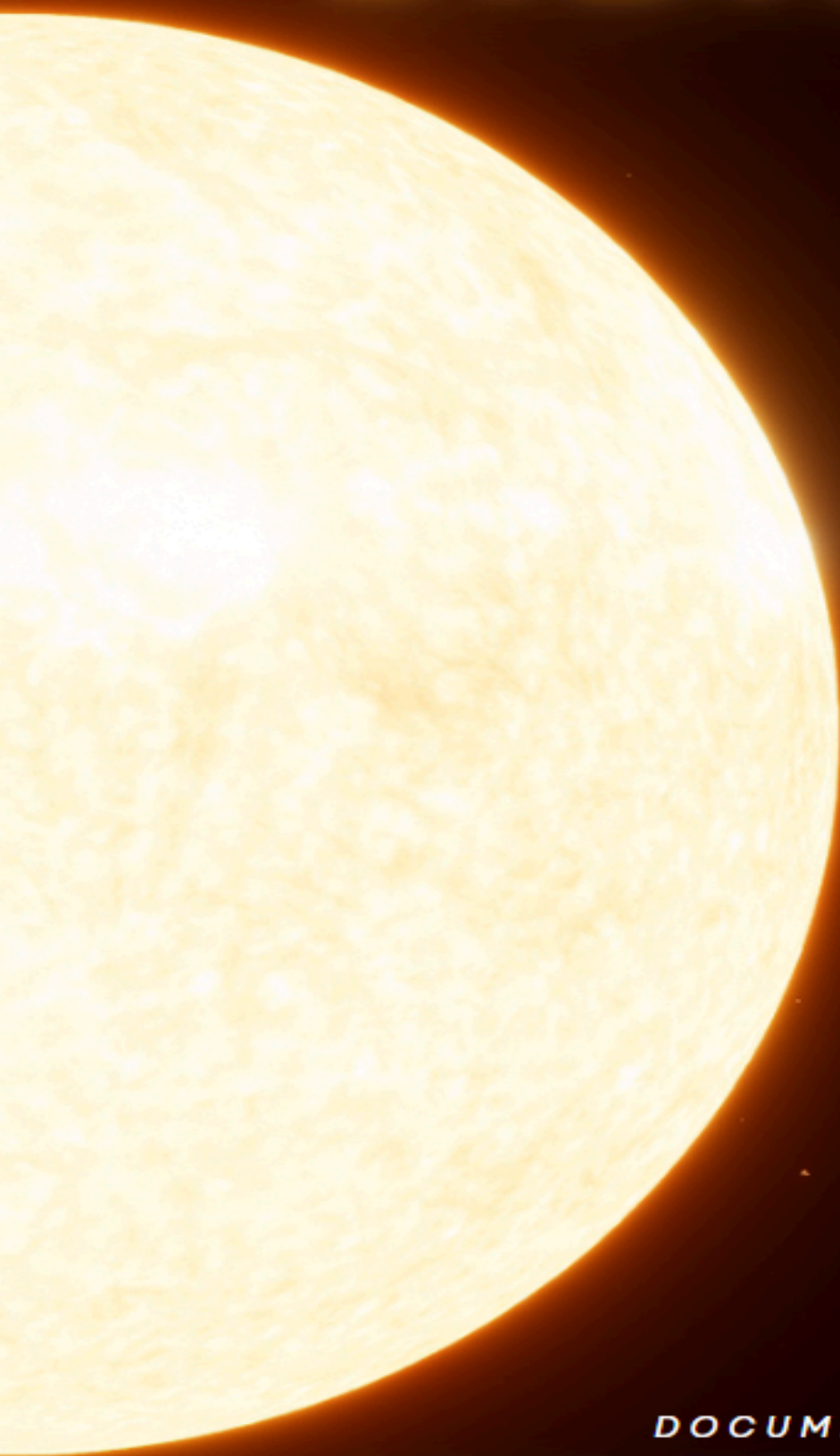


SOLAR SYSTEM



UNITY
DOCUMENTATION

ADAM BIELECKI

Equatori
109 x Ea
Equatori

Surface a
12,000 x
Volume
1,300,00
Mass (1
333,000
Average
0.255 x
Center d
12.4 x Ea
Equatori
28 x Ear
Escape v
km/s
55 x Ear
Tempera
Photosp
Corona:
Luminos
Age 4.

The Sun
is the st
and is b
energy f
life on E
ball of h
with int
generat
via a dy
109 tim
and it h
Earth, a
about 9
System.
of the S
rest is n

Thank you for purchasing the Solar System package. I really hope this will help you to achieve the desired effect for your project.

For contact and business enquiries : adam@visualab.co.uk

New features in version 5.0

1. Added cartoon planets for HDRP, URP and 3D pipelines
2. Added HDRP scene with configured Global Volume settings

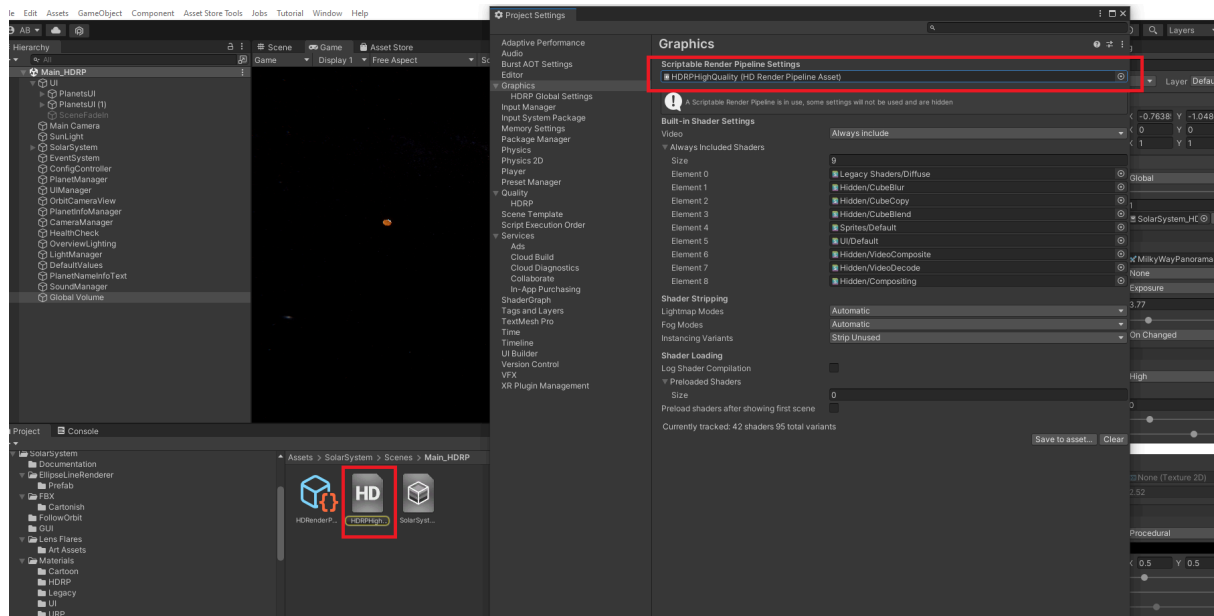
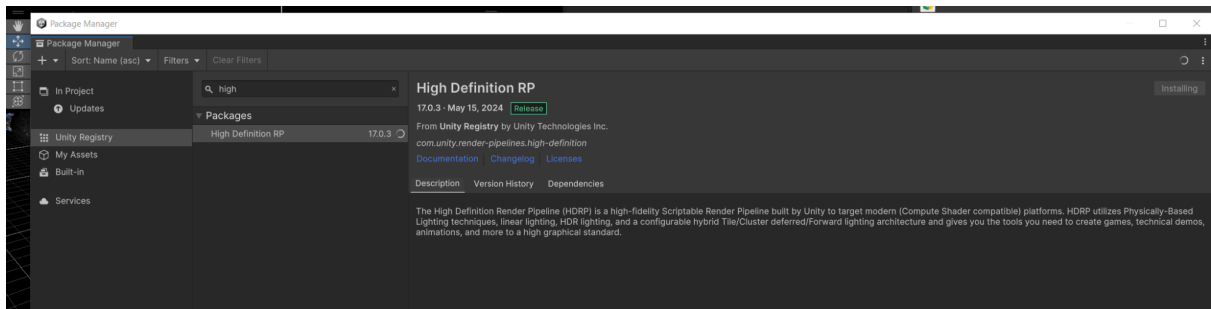
HDRP Setup

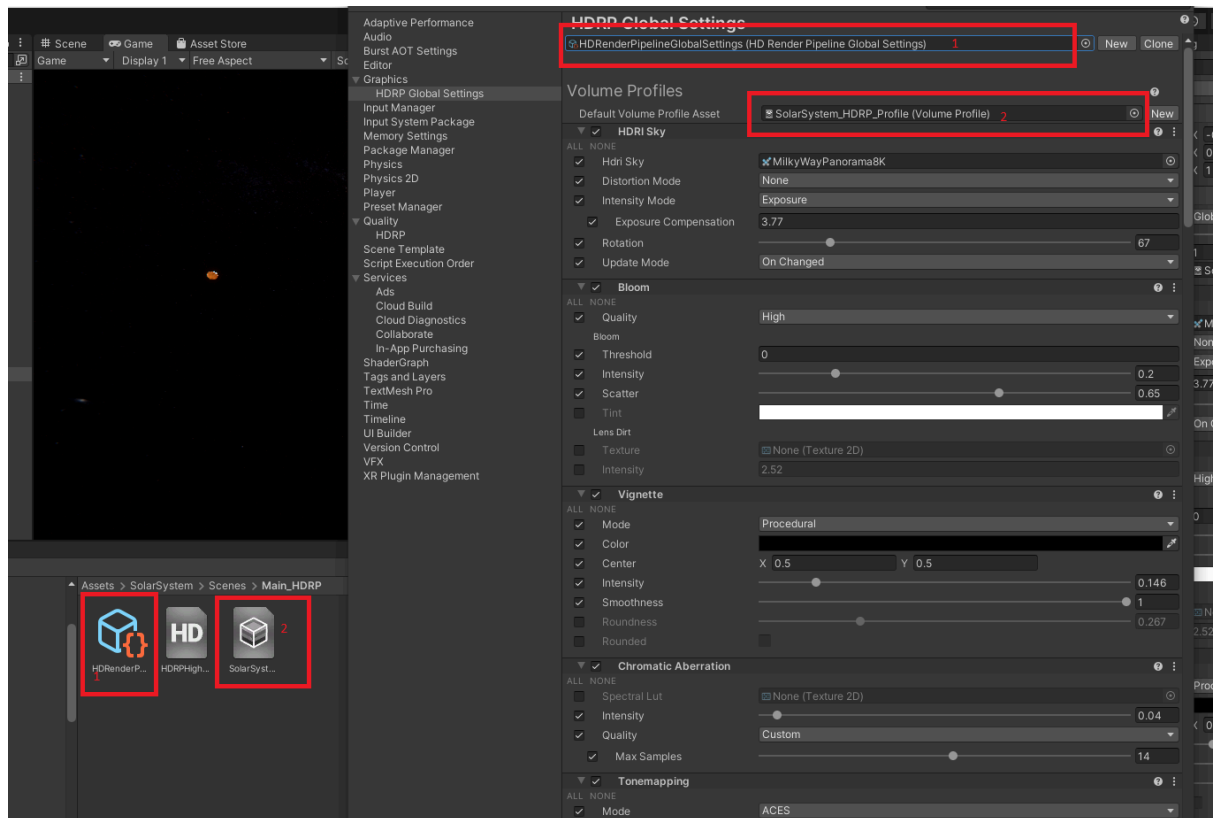
Install HDRP via the Package Manager:

- Open **Window** → **Package Manager**
- In the Package Manager:
 - Set the **Package Source** to **Unity Registry**
 - Search for **High Definition RP**
 - Click **Install** or **Update** (whichever applies)

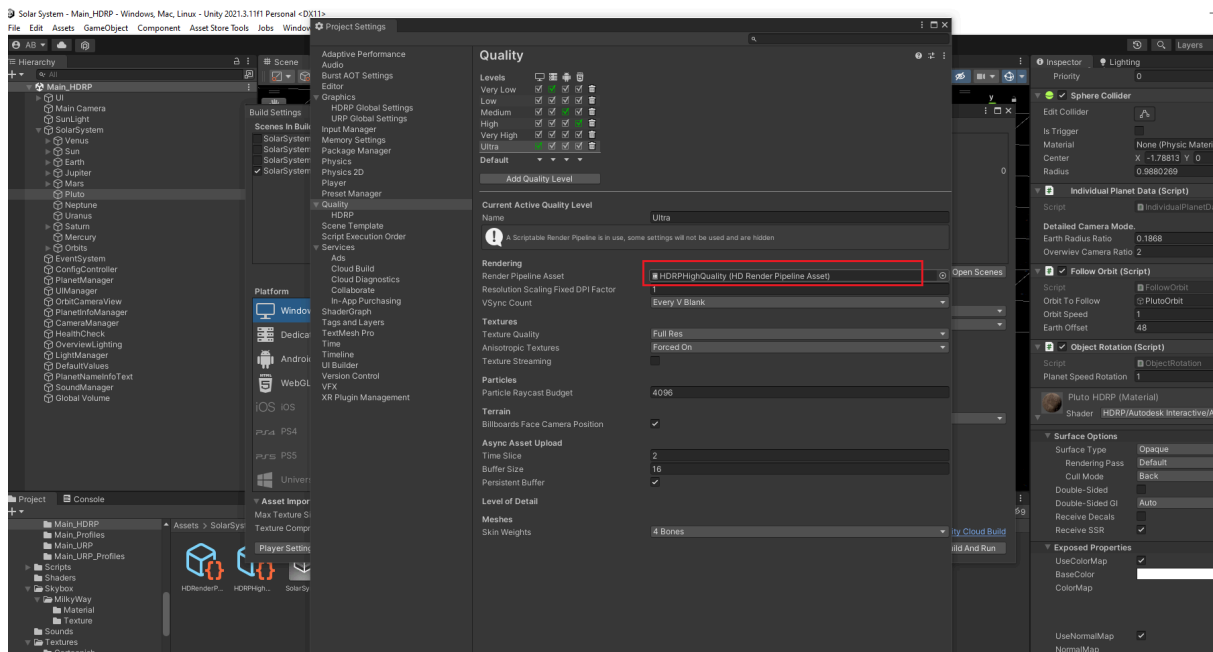
Assign the HDRP Asset:

- Go to **Edit** → **Project Settings** → **Graphics**
- Under **Scriptable Render Pipeline Settings**, assign your HDRP Asset:
 - Navigate to: [Scenes/Main_HDRP/HDRPHighQuality.asset](#)
 - Drag this asset into the **Default Render Pipeline** field

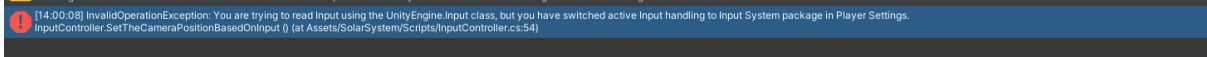




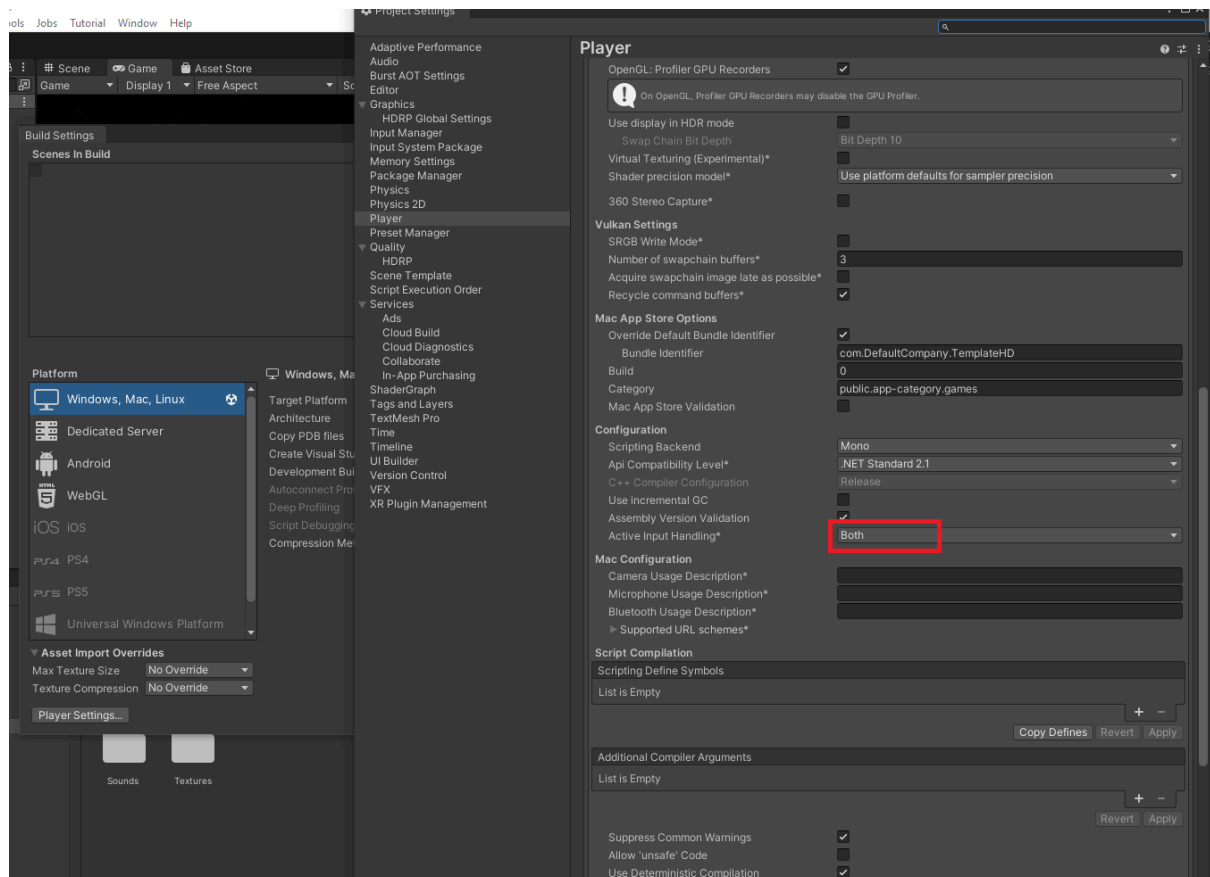
You might also have to change the main Render Pipeline Asset in Quality



Input Exception fix



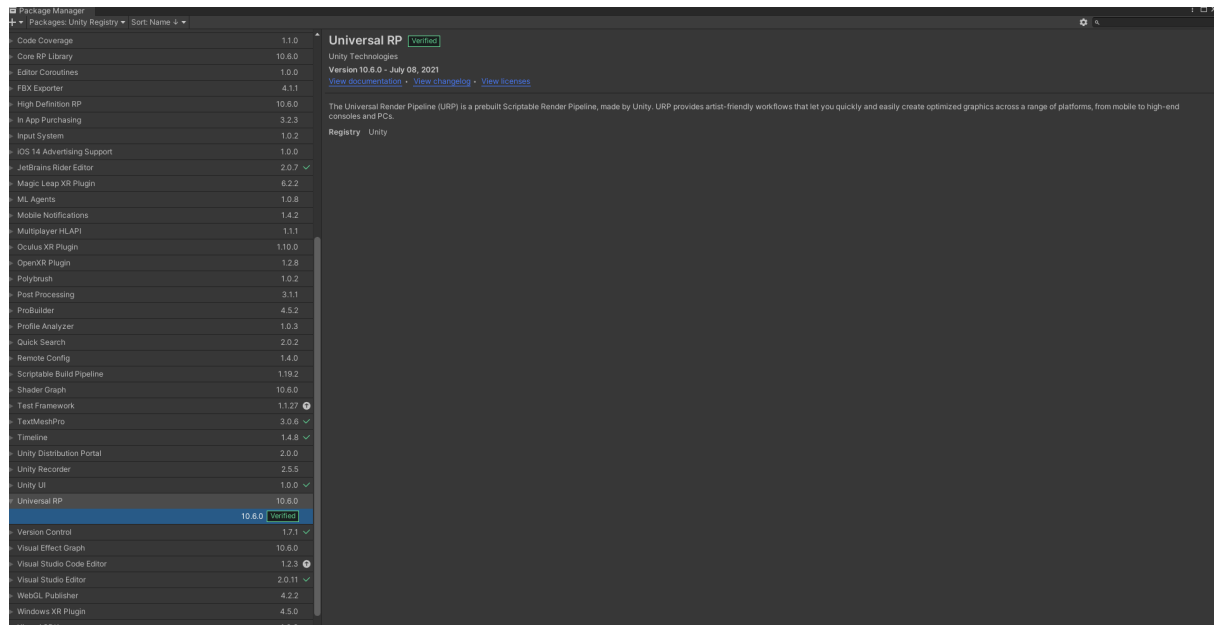
Change Active Input Handling to Both



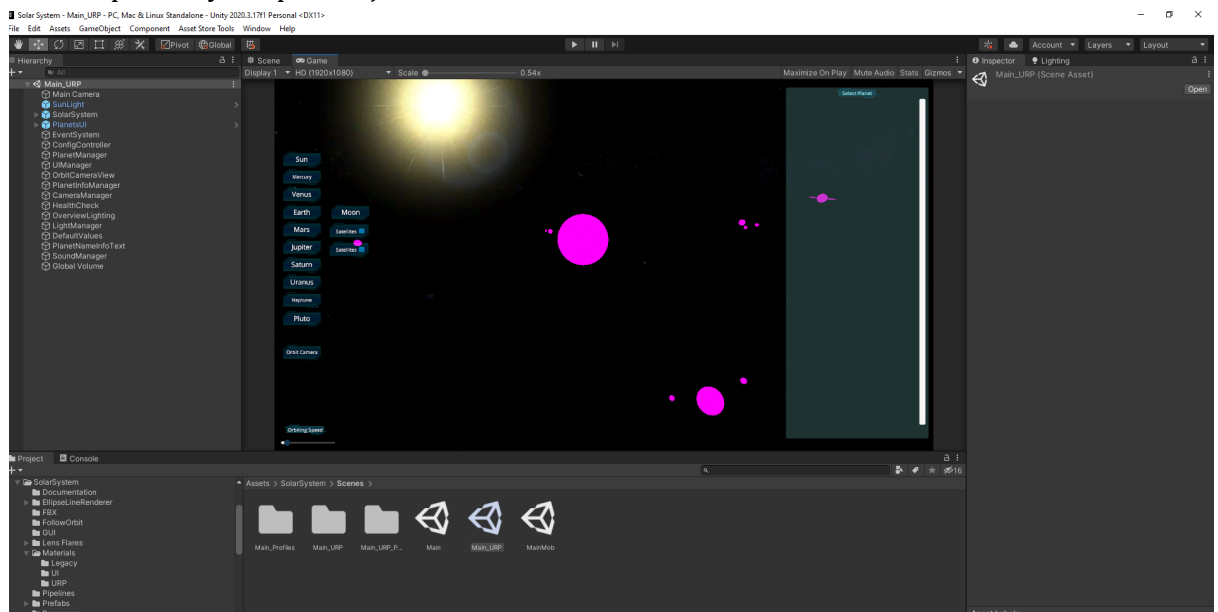
URP Setup

Now you can still use default 3d unity mode but also you can easily switch to URP pipeline.
How to?

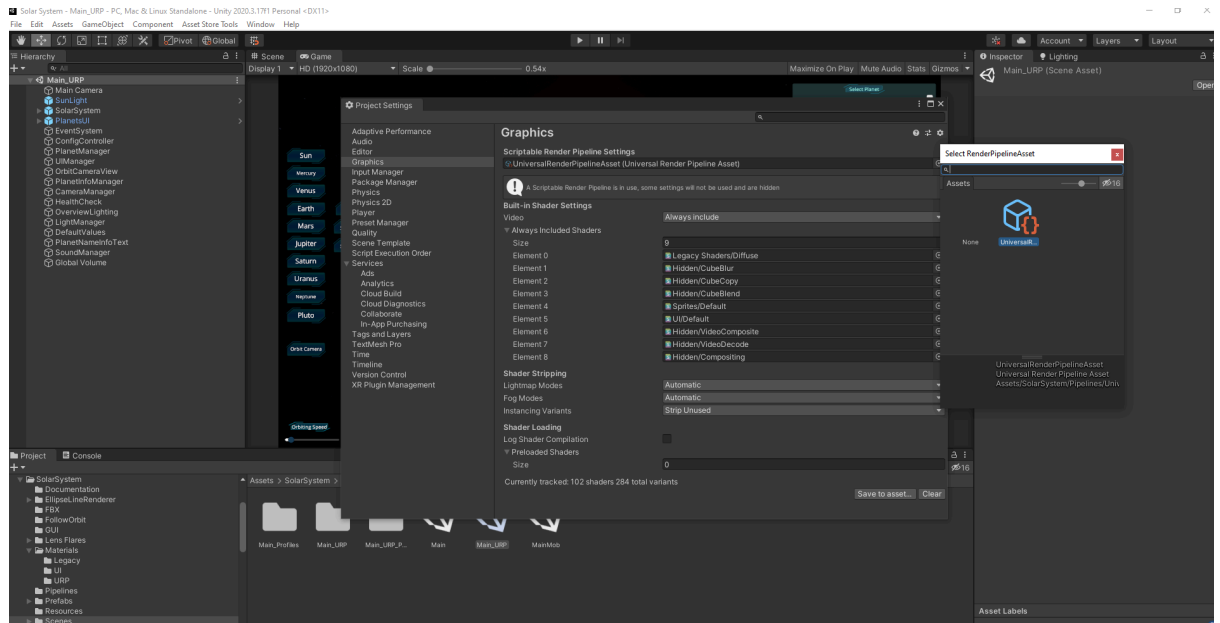
1. Open Main_URP scene in Scenes folder
2. If you have not yet installed Universal Rendering Package add it via package manager



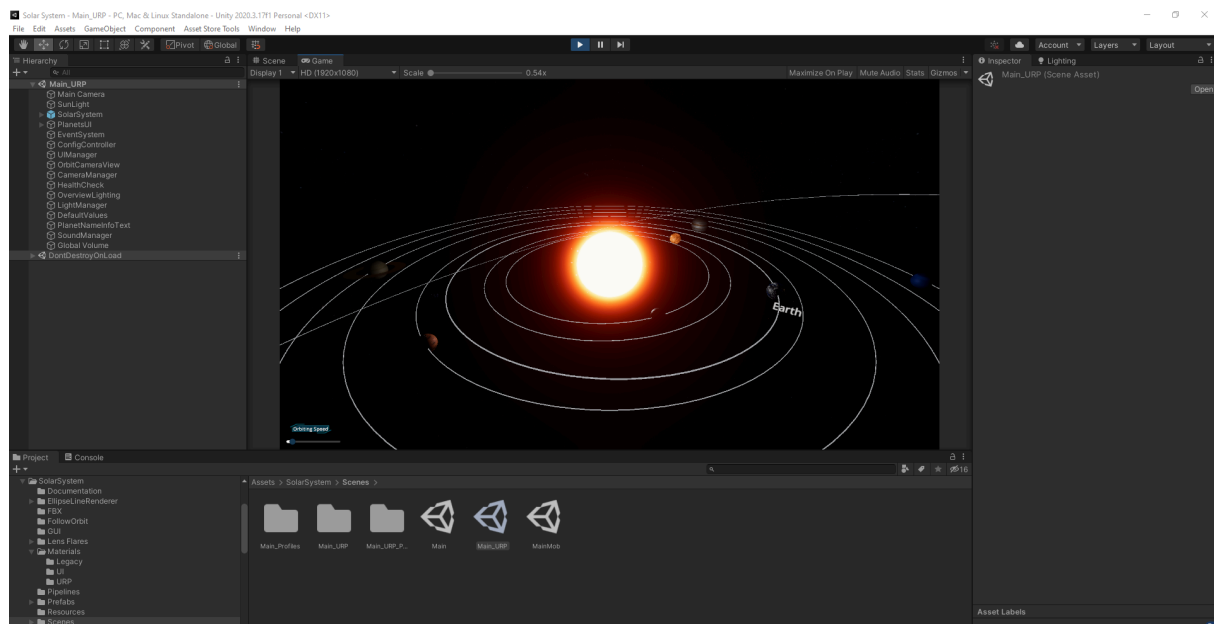
3. Also install Post Processing to get the visual advantage
4. You will probably see pink objects in the scene



5. Go to Edit/Project Settings and choose Universal Rendering Pipeline



6. Play the scene and all should work as expected



7. When you switch back to Main scene (non urp pipeline) you will have to remove URP pipeline from settings (reverse process from step 3)

Orbital view of the whole solar system. Displays the planet name on hover and navigates to it once clicked. Each planet has its own orbit and can be easily set up (radius size, elliptic shape and angle).

Refactored code that is easily manageable and scalable.

Provided better mobile support.

Getting started

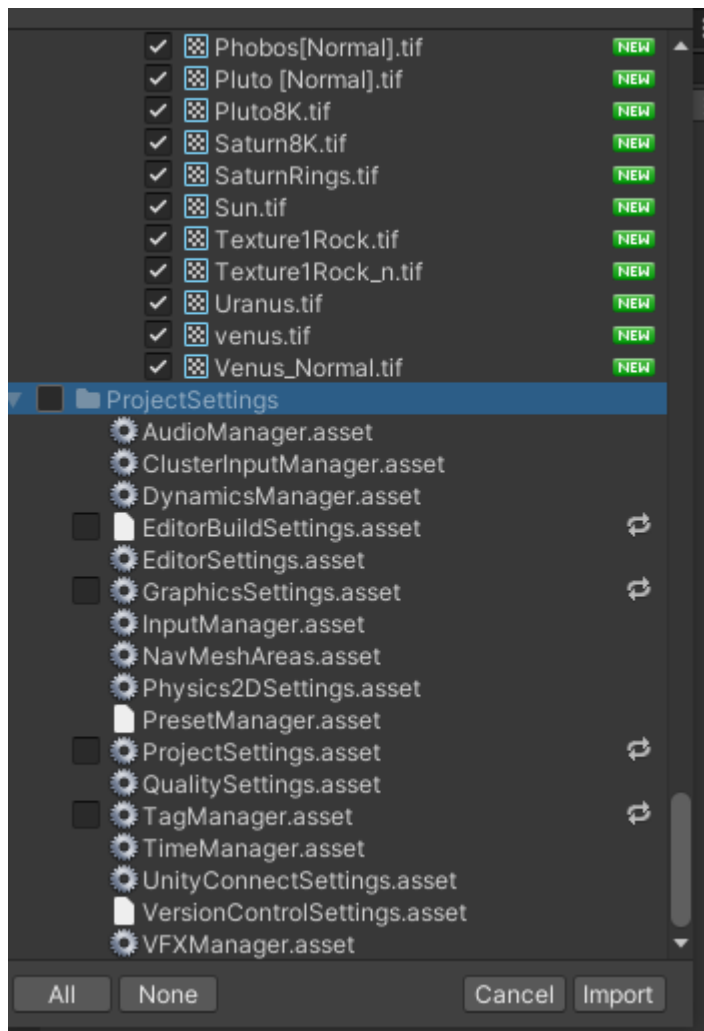
Package features 2 scenes - Main and Mobile Main.

Main scene is optimised for PC and mac, but textures were compressed to 2048px to speed up import time, this can be easily overridden up to 8k resolution.

<https://docs.unity3d.com/ScriptReference/TextureFormat.html> - this doc provided usefull info regarding texture formats.

IMPORTANT


If you are importing this package into your existing project do not import ProjectSettings as that will override yours. Recommended is to import this asset into a separate project and then take any asset you require into your current project.



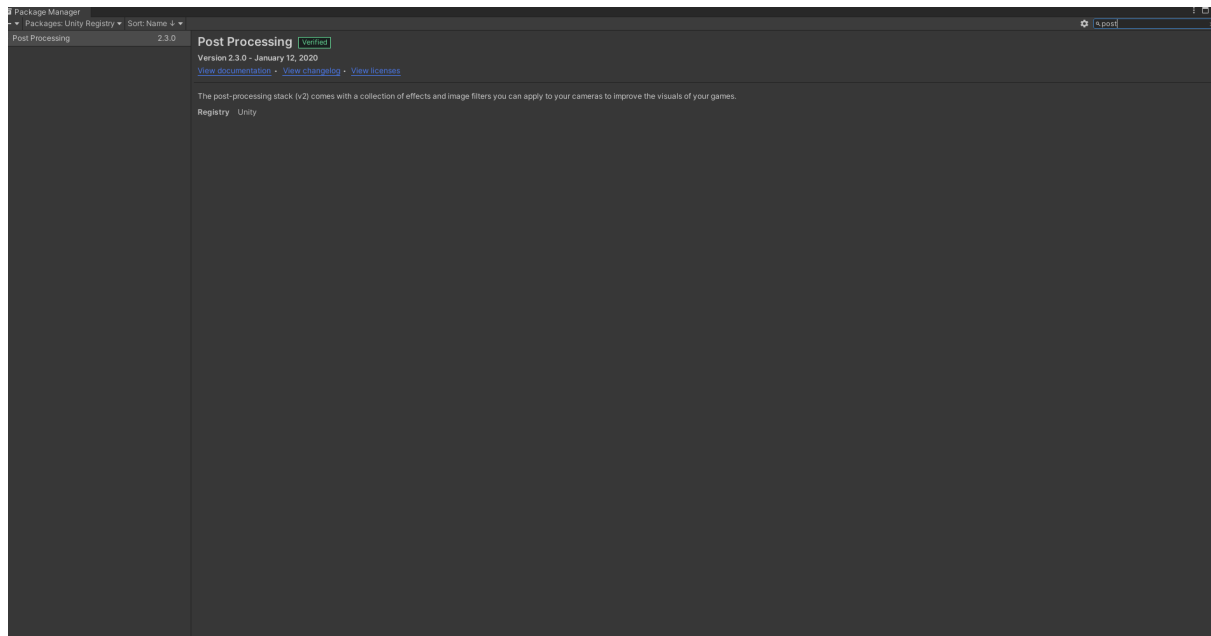
Post Processing for Legacy pipeline

Main scene contains a `PostProcessVolume` object. In order to achieve effect as on promo images on unity asset stores, you will have to add a post processing package into your project if you decide not to install/upgrade during importing Solar System package.

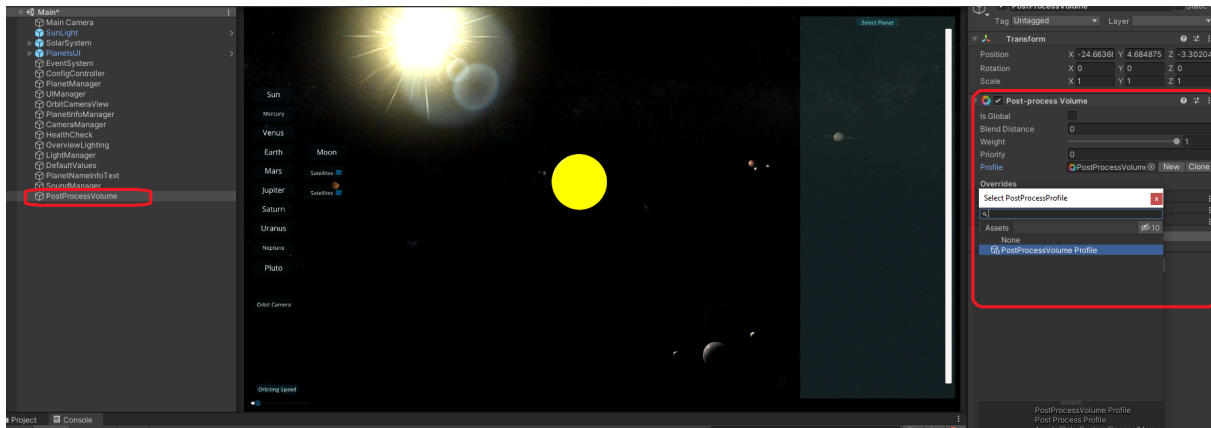
Install Post Processing Package

1. Open Window > Package Manager.
2. In the Packages dropdown, select Unity Registry.
3. Find and install Post Processing (by Unity Technologies). If it doesn't show up:
 - Click the gear  in Package Manager > Advanced Project Settings.
 - Enable Show Preview Packages, then retry. (if not visible)

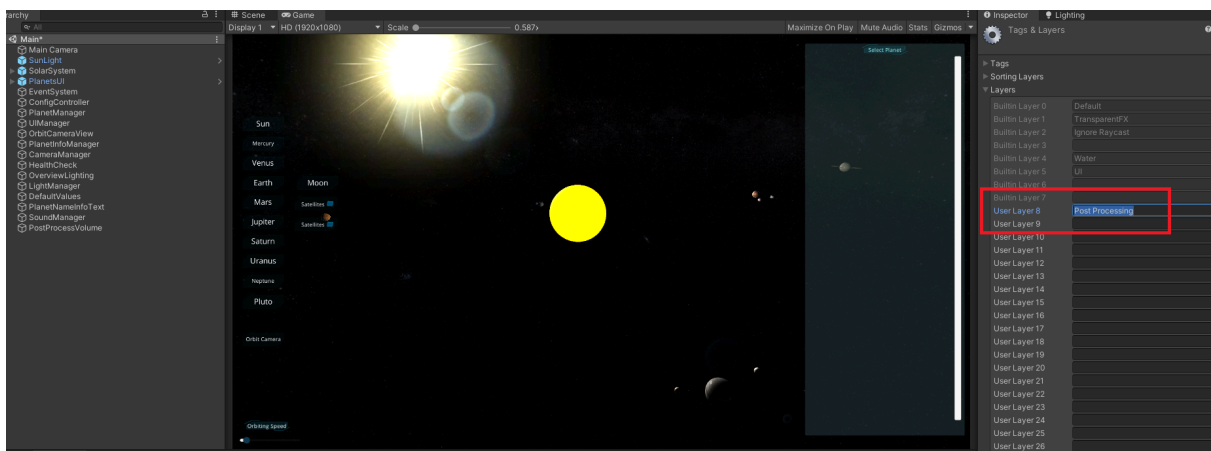
Note: The Post Processing Stack v2 package is compatible with Built-in RP.



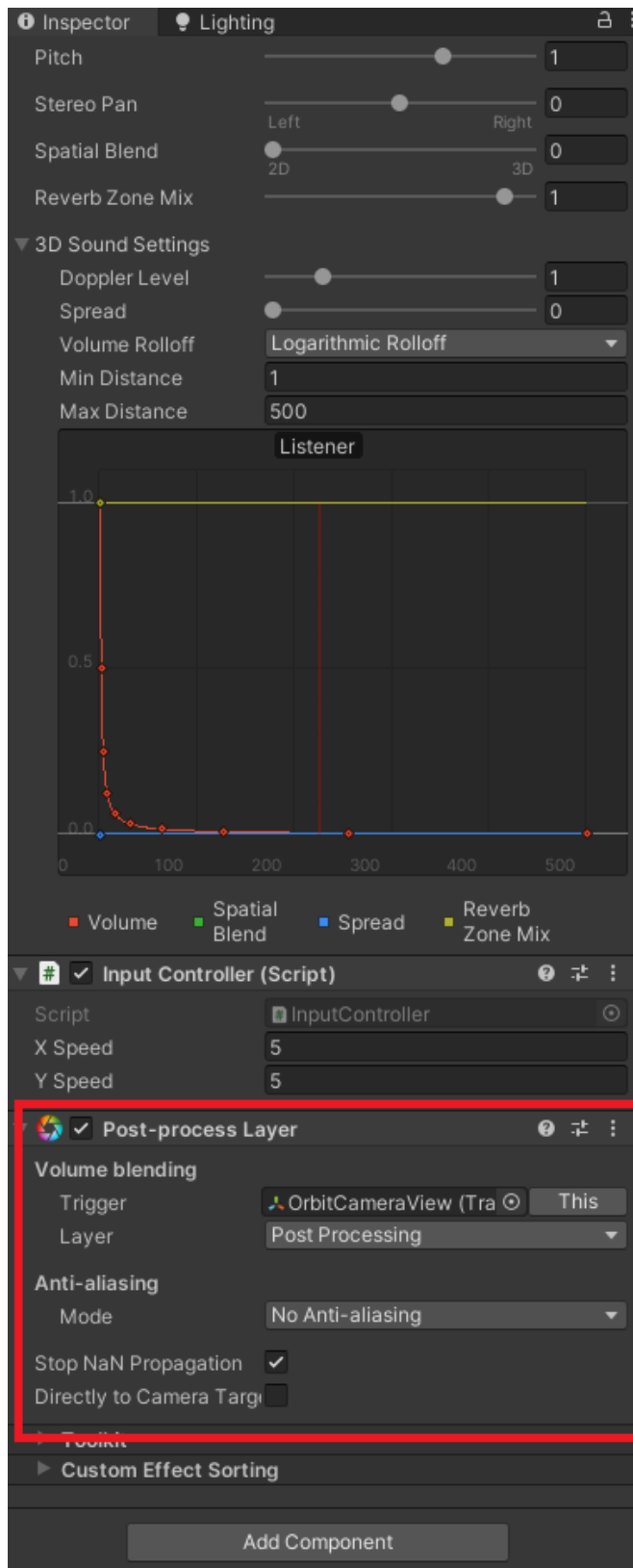
After installation add `PostProcessVolume` that is located under `Scenes/Main_Profiles`



If you are missing Post Processing tag in your project please add it as well



For main camera and orbit camera view objects set layer to Post Processing and under Post-process Layer in Volume blending select correct options



I found out that some unity versions above 2020 are having issues with Post-process Layer on camera. If you get any exceptions, just remove the Post-process Layer from the camera and add a new Post-process Layer and configure Volume blending.

Scripts

ConfigController is responsible for features regarding such as default distance when planet is selected, zoom speed etc.

CameraManager - Holds info about all available cameras

PlanetManager - Functions to manipulate astronomical bodies

UIManager - Responsible for all UI stuff

Orbital view is the new feature that was added to version 4 of Solar System project. Each planet got its own orbit (Scene -> Orbits).

Orbital View Set up

Ellipse Line Renderer

Creates orbit for the planet using the Line Renderer component. To improve performance but reduce quality Segments number can be reduced.

Follow Orbit

This script is attached to each planet and orbit to follow is selected.

Earth offset variable - how far is the planet in regards to Earth

Orbit speed - each planet can have different rotation around sun speed

Setting size, radius and angle for orbit.

Change the scale of X and Y to increase the orbit radius. To achieve elliptic shape X and Y values should be different. In order to create an angle change X rotation (Look at Pluto set up for reference).

Troubleshooting

Tag errors

If you encounter tag errors try few solutions:

Reimport All

Corruption or missing data might trigger this:

- Go to **Assets > Reimport All**.

For any questions, issues please contact me theadambielecki@gmail.com

www.visualab.media

Adam Bielecki