Manual

A template for making bike racing games with 2D physics but 3D models.

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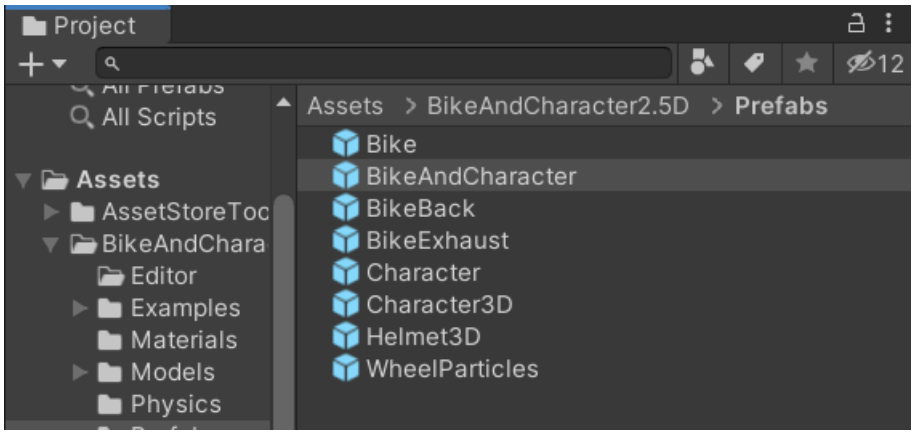
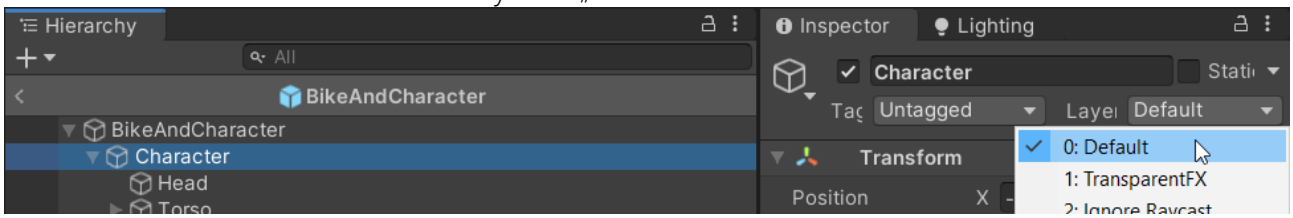
1. Preparations after import

These are some (optional) preparations to be done after import. You can skip these but then the experience (behaviour of the bike) will not be as good as it can be.

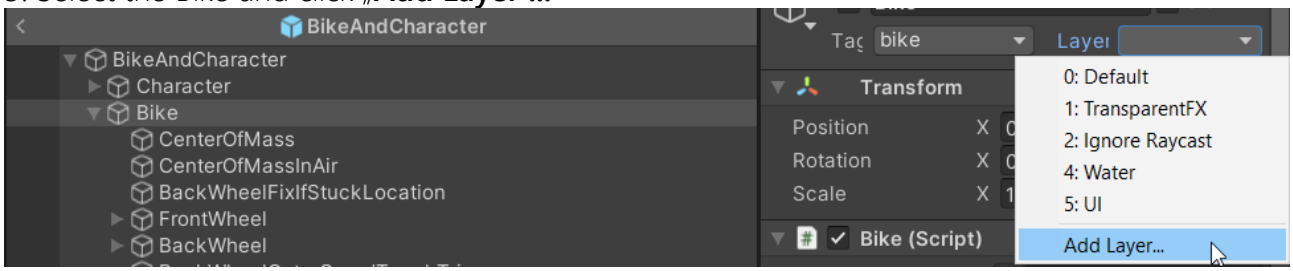
1. Open the „**BikeAndCharacter**“ prefab under **Assets/BikeAndCharacter25D/Prefabs**.



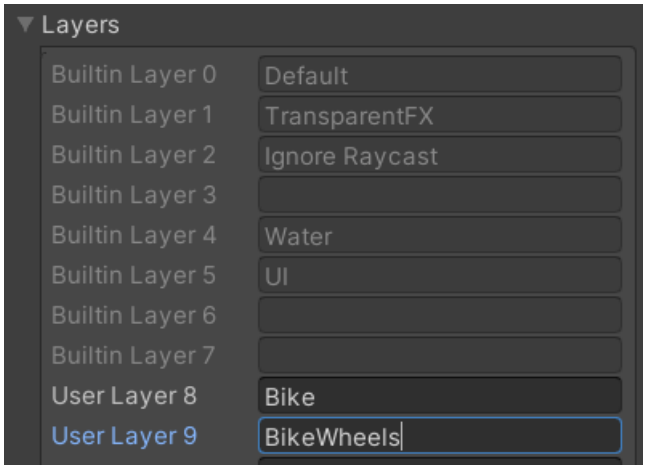
2. Select the Character and set the layer to „**default**“



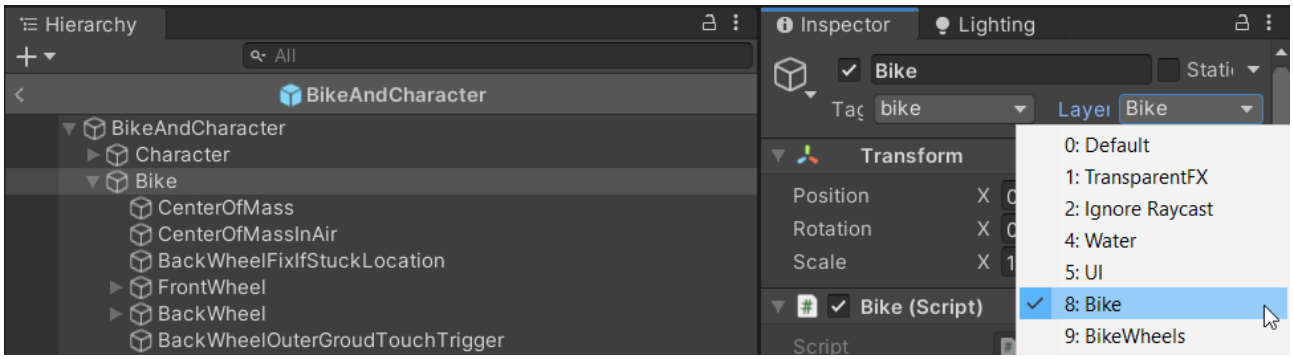
3. Select the Bike and click „**Add Layer ...**“



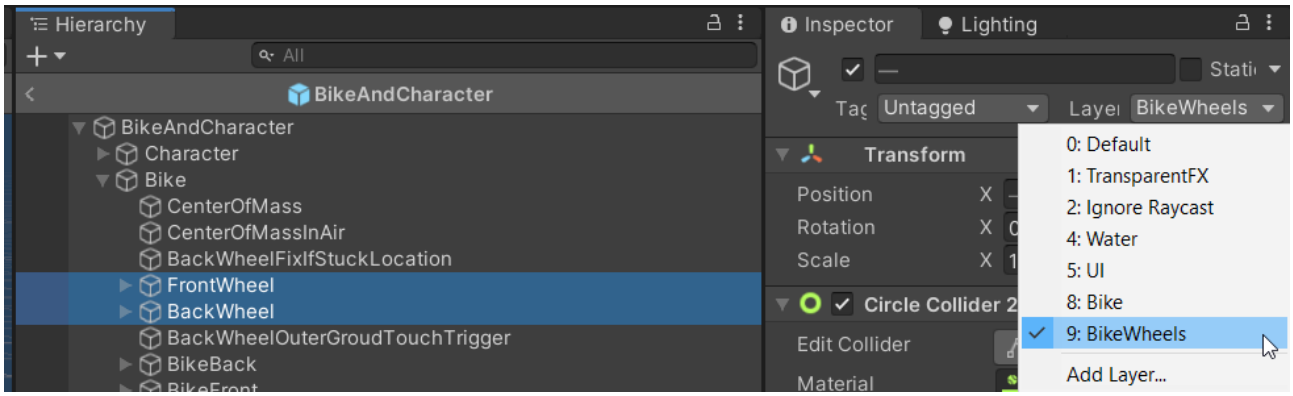
4. Add two new layers „**Bike**“ and „**BikeWheels**“.



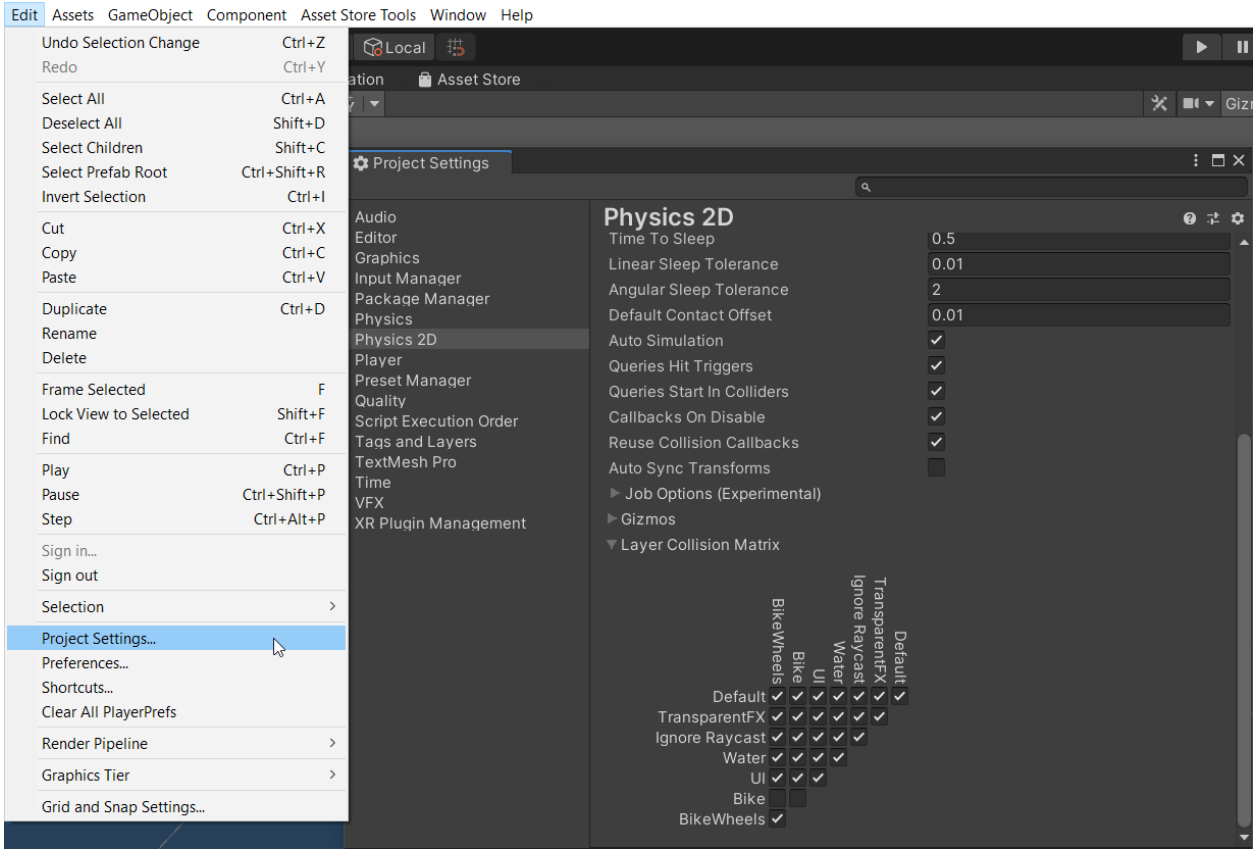
5. Assign the „**Bike**“ layer to the bike (and the children)



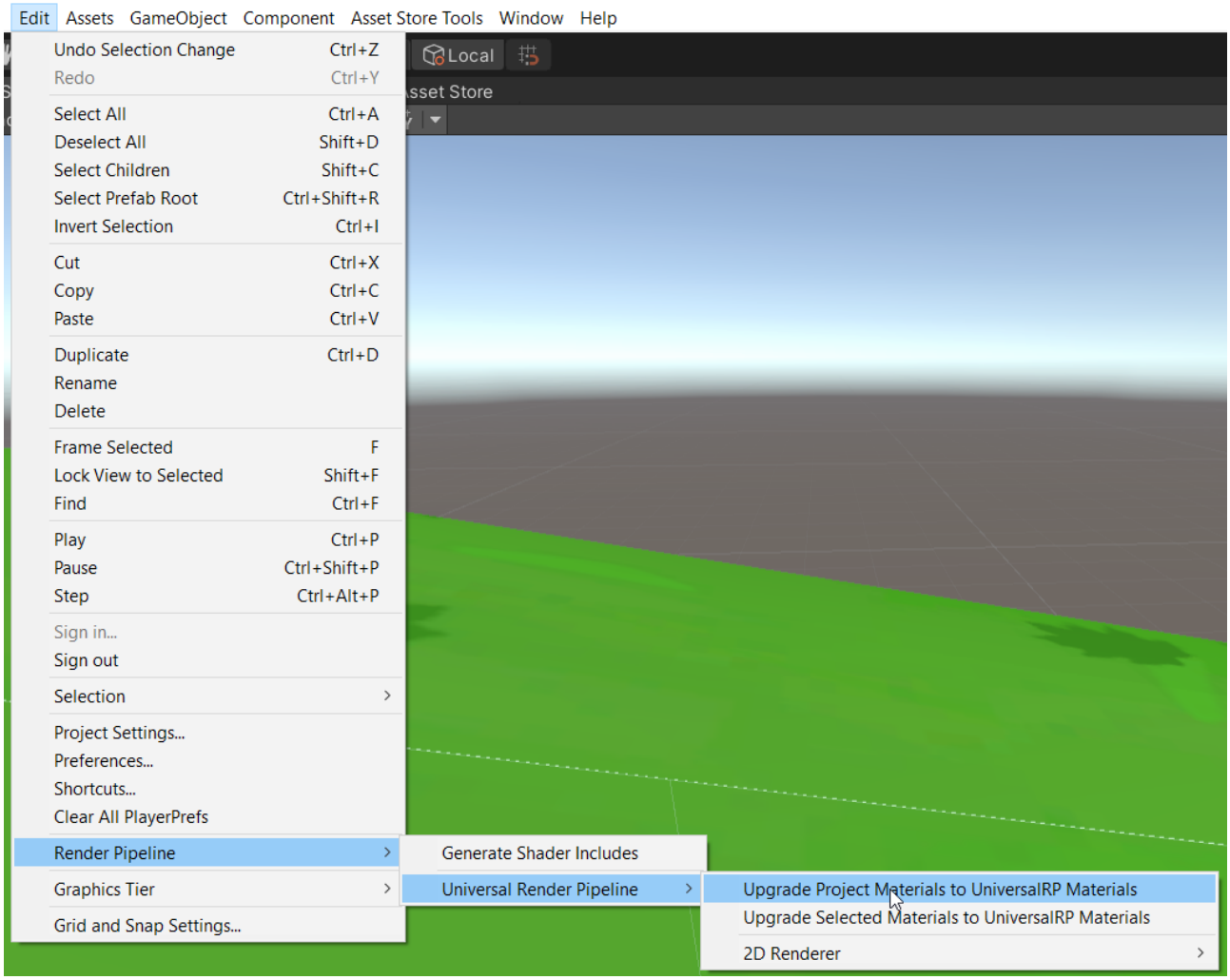
6. Assign the „**BikeWheels**“ layer to the „**FrontWheel**“ and „**BackWheel**“ (and their children).



7. Last step: Go to „**Edit > Project Settings ...**“ and then configure the collision martix as shown in the image („BikeWeels“ layer should not collide with the „Bike“ layer).

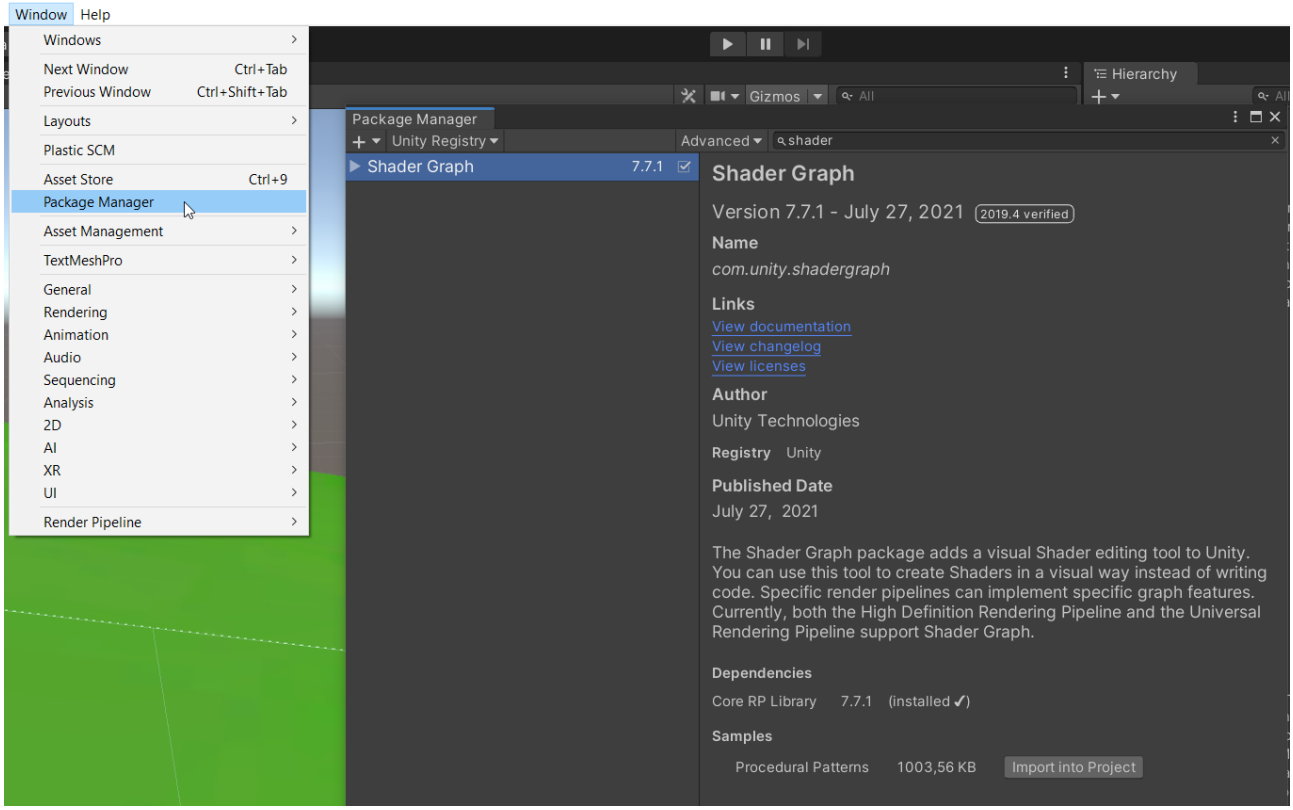


If you are not using the Universal Render Pipeline (URP) then you will have seen a warning after import. The default materials for the assets are URP material. You may have to use the material upgrade flow to convert them to your render pipeline.



The tri-planar shader of the terrain is a shadergraph shader. If you do not have the Shadergraph package installed then you will have seen a warning after import. The shader is not necessary for the asset to work but it will make the demo scene look prettier (fixes the pink ground).

You can find the shader graph package in the package manager.

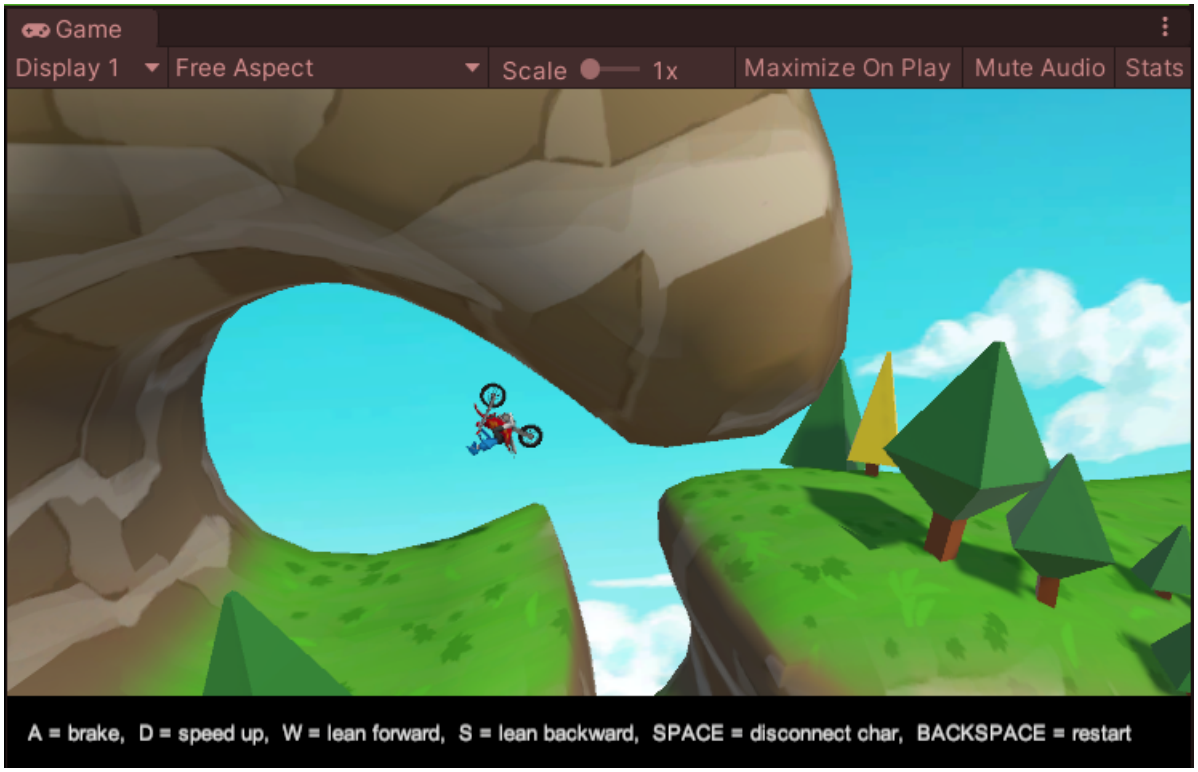

Window
Help
Windows
Next Window Ctrl+Tab
Previous Window Ctrl+Shift+Tab
Layouts
Plastic SCM
Asset Store Ctrl+9
Package Manager
Asset Management
TextMeshPro
General
Rendering
Animation
Audio
Sequencing
Analysis
2D
AI
XR
UI
Render Pipeline
Hierarchy
Gizmos
All
Package Manager
Unity Registry
Advanced
shader
Shader Graph 7.7.1
Shader Graph
Version 7.7.1 - July 27, 2021
2019.4 verified
Name
com.unity.shadergraph
Links
View documentation
View changelog
View licenses
Author
Unity Technologies
Registry Unity
Published Date
July 27, 2021
The Shader Graph package adds a visual Shader editing tool to Unity. You can use this tool to create Shaders in a visual way instead of writing code. Specific render pipelines can implement specific graph features. Currently, both the High Definition Rendering Pipeline and the Universal Rendering Pipeline support Shader Graph.
Dependencies
Core RP Library 7.7.1 (installed ✓)
Samples
Procedural Patterns 1003,56 KB
Import into Project

2. Using the demo

Under **Assets/BikeAndCharacter2.5D/Examples/DemoWithTerrain** you will find a „ready to play" demo scene. Open it and press play in the editor.

Once the demo scene is running press „Backspace" to spawn a bike into the scene.
You can control the bike with the ASDF keys or the Arrow keys.

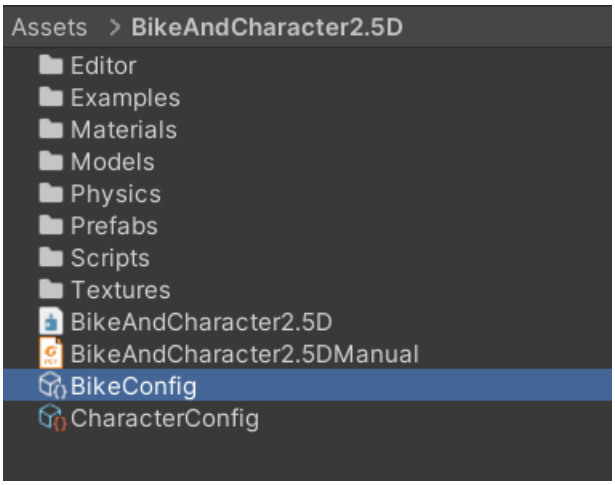
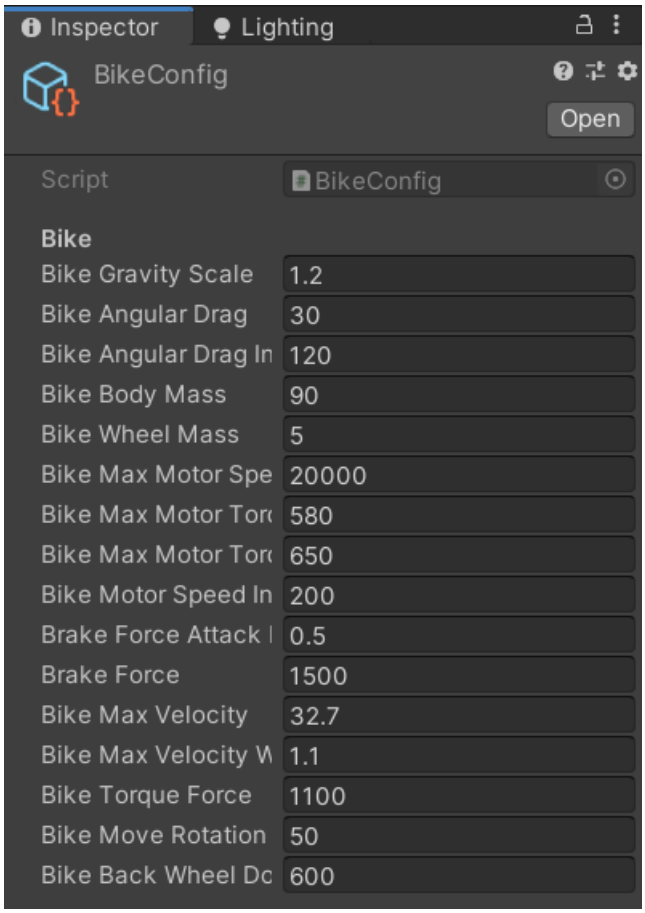
Press SPACE to disconnect the character from the bike. Press SPACE again to reconnect it to the bike.



Take a look at the scripts under **Assets/BikeAndCharacter2.5D/Examples** to get a feeling for how things work.

Under **Assets/BikeAndCharacter2.5D/Models/Blender** you will find the original Blender files of all the models. Though the actual models used in the prefabs are the .fbx files under **Assets/BikeAndCharacter2.5D/Models**.

2. Configuration

The most important configuration values are stored in Scriptable Objects. These is one for the bike under **Assets/BikeAndCharacter2.5D/BikeConfig** and one for the character under **Assets/BikeAndCharacter2.5D/CharacterConfig**.

You can experiment with changing these vaulues even during runtime (in the Editor).