# Manual



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

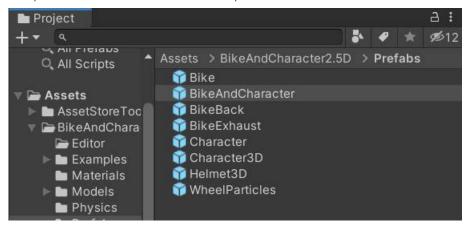
#### **Table of contents**

1.	Preparations after import	.2
	Using the demo	
	Configuration	

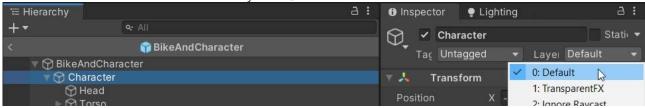
### 1. Preparations after import

These are some (optional) preparatins 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.

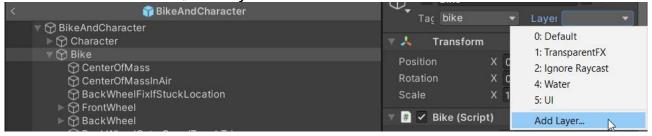
1. Open the "BikeAndCharacter" prefab under Assets/BikeAndCharacter25D/Prefabs.



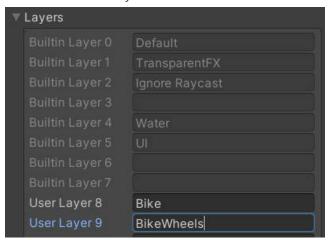
2. Select the Character and set the layer to "default"



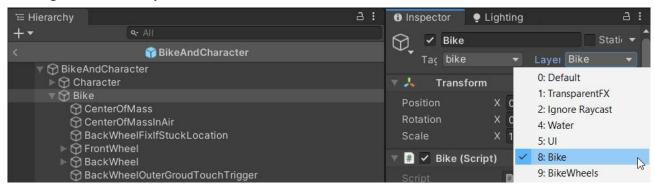
3. Select the Bike and slick "Add Layer ..."



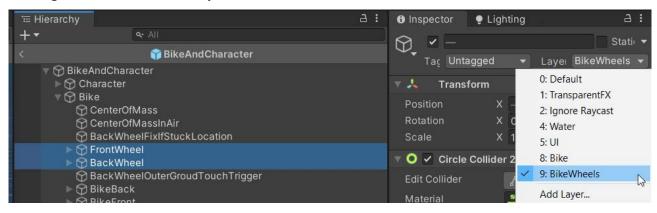
4. Add two new layers "Bike" and "BikeWheels".



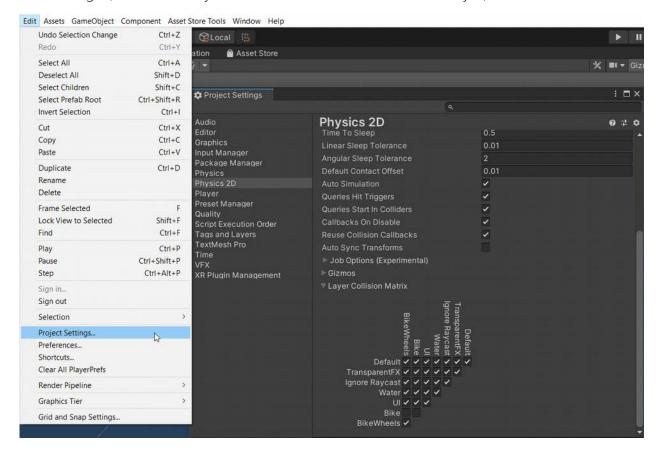
5. Assign the "Bike" layer to the bike (and the children)



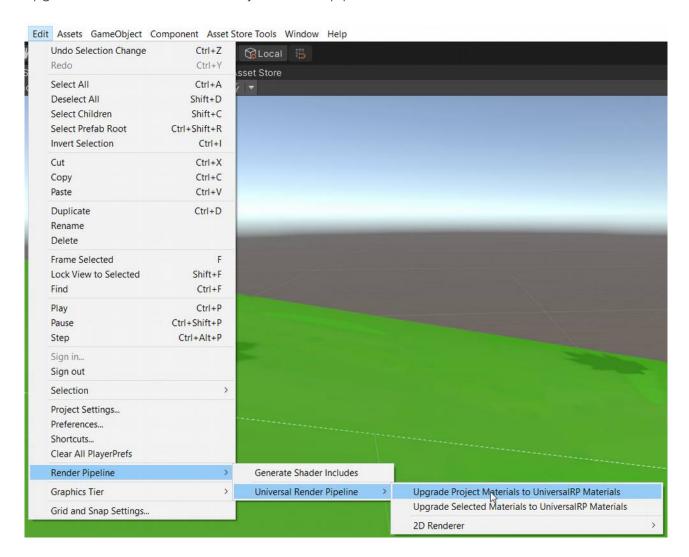
6. Assign the "BikeWheels" layer to the "FrontWheel" and "BackWheel" (and their children).



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).

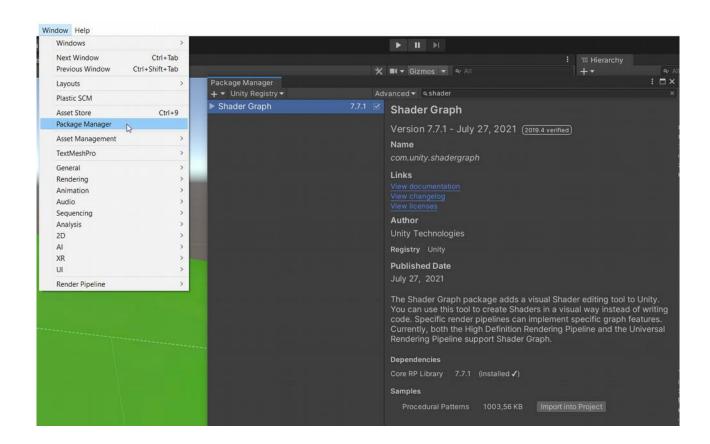


If you are not using the Universal Render Pipeline (URP) then you will have seen a warning after import. The default materials for the assets are URP material. You will have to use the material upgrade flow to convert them to your render pipeline.



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.

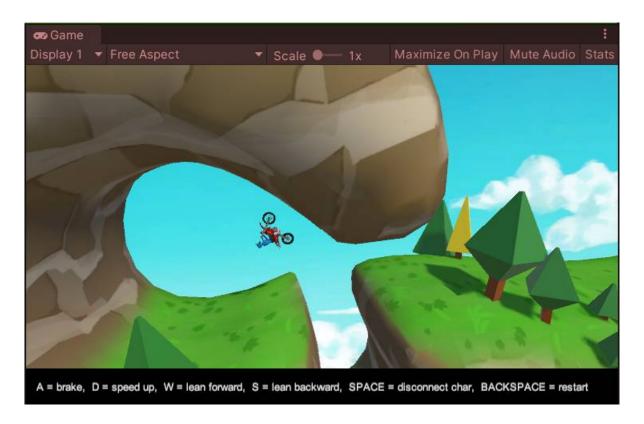


## 2. Using the demo

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).

