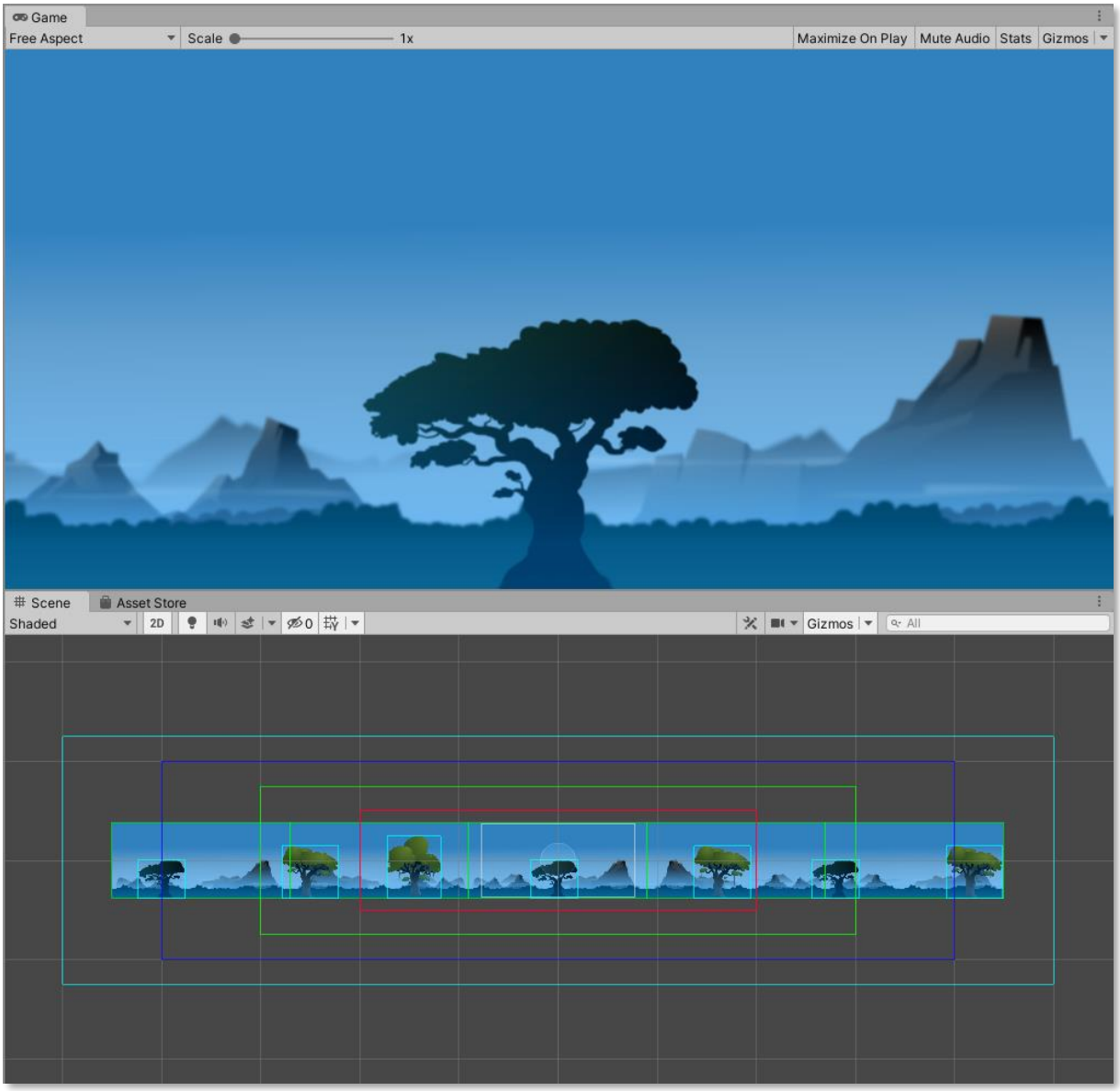
INFINITE SCROLLER 2D

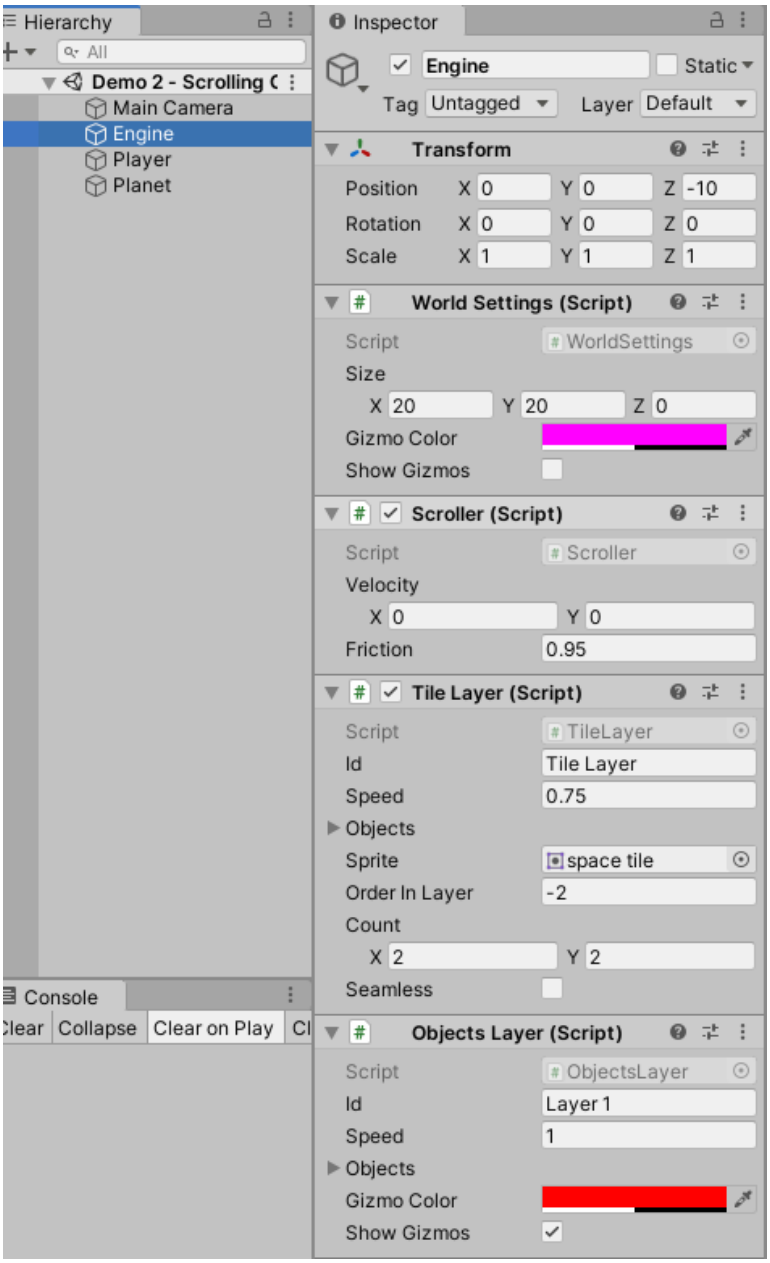
Documentation version 1.0

Questions about this product? Send an email to support@playniax.com

The infinite scroller can be used to loop the background so that the world looks infinite. Our game Defenstar used a similar system. It does not move the Unity camera but instead move the objects trough the scene.



Setup



You need to create a GameObject add atleast the WorldSettings.cs, Scroller.cs and a Layer component. Th example on the left shows a Tile Layer and Object Layer.

WorldSettings.cs (Script)

WorldSettigs defines the width and the height the your world. The gizmo will show the borders in the Unity Scene window. The other scripts depend on the world settings.

Scroller.cs (Script)

The scroller controls the scrolling (fake camera)

The **velocity** is the scrolling speed and direction. You can set its values here for autoscroll or call the functions Translate or Scroll from your script.

TileLayer.cs (Script)

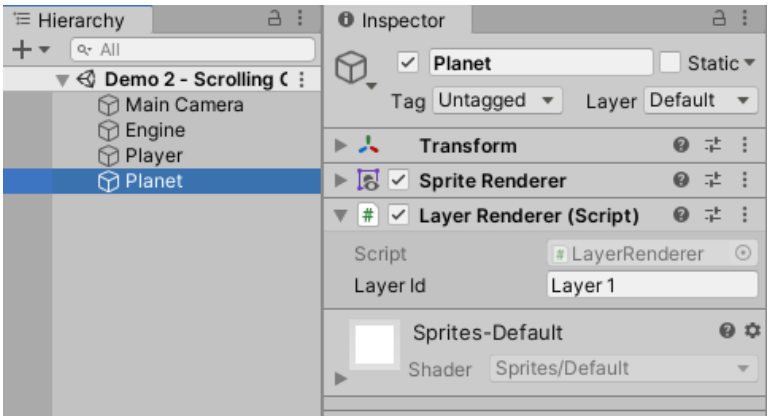
The tile layer takes a sprite image and uses it as a background tile. You can set the **Order In Layer** and range with **Count.**

ObjectLayer.cs (Script)

The object layer ‘renders’ the sprites. You can set the relative speed with **Speed**

Both the tile layer and the object layer must have a unique id. The id is used by the LayerRenderer.

If you want a sprite to respond to the scroller you must add a LayerRenderer component to a sprite and tell it what layer to use.



LayerRenderer.cs (Script)

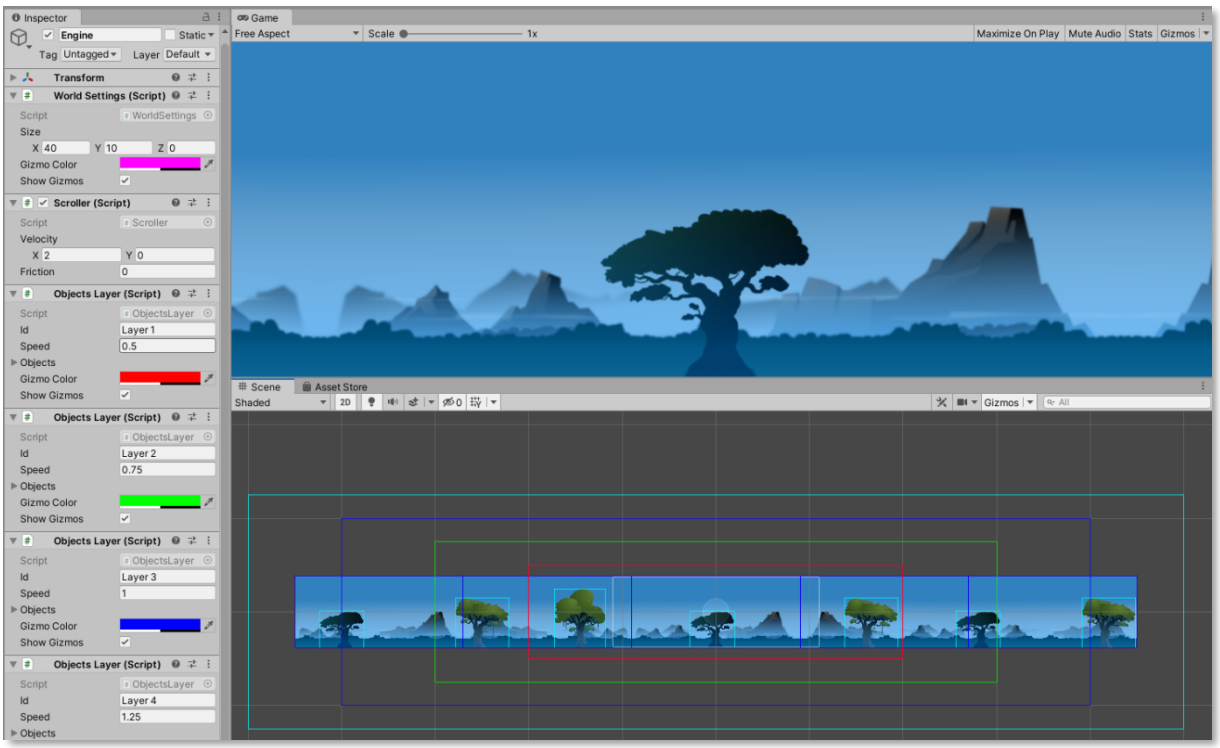
If you want a sprite to respond to the scroller you must add a LayerRenderer component to a sprite and tell it what layer to use.

In this case the sprite (Planet) will be rendered on Layer 1!

The player does NOT have a LayerRenderer because we want it to stay static.

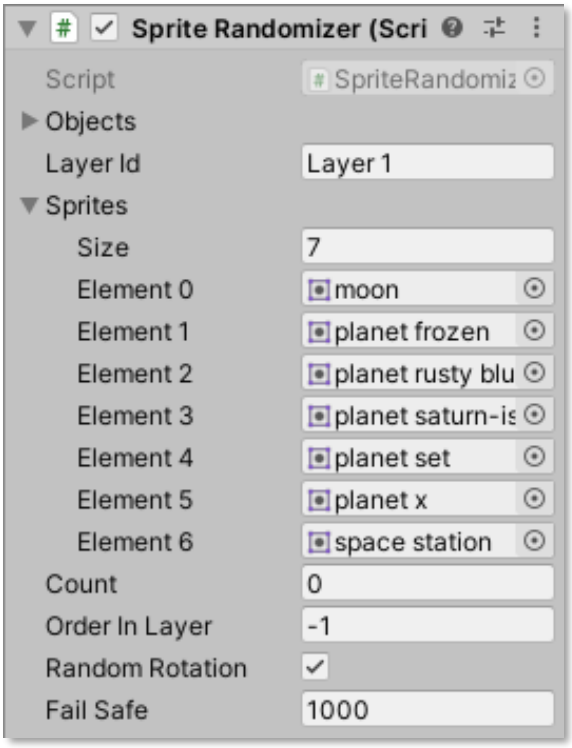
Gizmos

The Gizmos will show the outer edges of a layer and borders around the sprites in the same color as its layer. Keep your sprites within these borders. Also make sure your ‘world’ is big enough at least the size of the screen size plus the biggest sprite divided by 2.



The Sprite Randomizer

The sprite randomizer can fill your background with random sprites. Just create a list of sprite images and tell it what layer to use. It will prevent sprites overlapping each other. You can set the Order In Layer and Count. If Count is zero it will limit the number of objects to the number of sprites in the Sprites list.



Scroller Functions

To Scroll from any script use the following command (example):

Scroller.instance.velocity += New Vector2 (0, 1) * Time.deltaTime;

Set the scroller friction variable for friction. By default this is set to zero.

The Player.cs script is an example. Use the cursor keys to control the spaceship (demo 2 and 4).