

Unity - Sprites & Spritesheets



For 2D Game Objects, Animated Particles & More



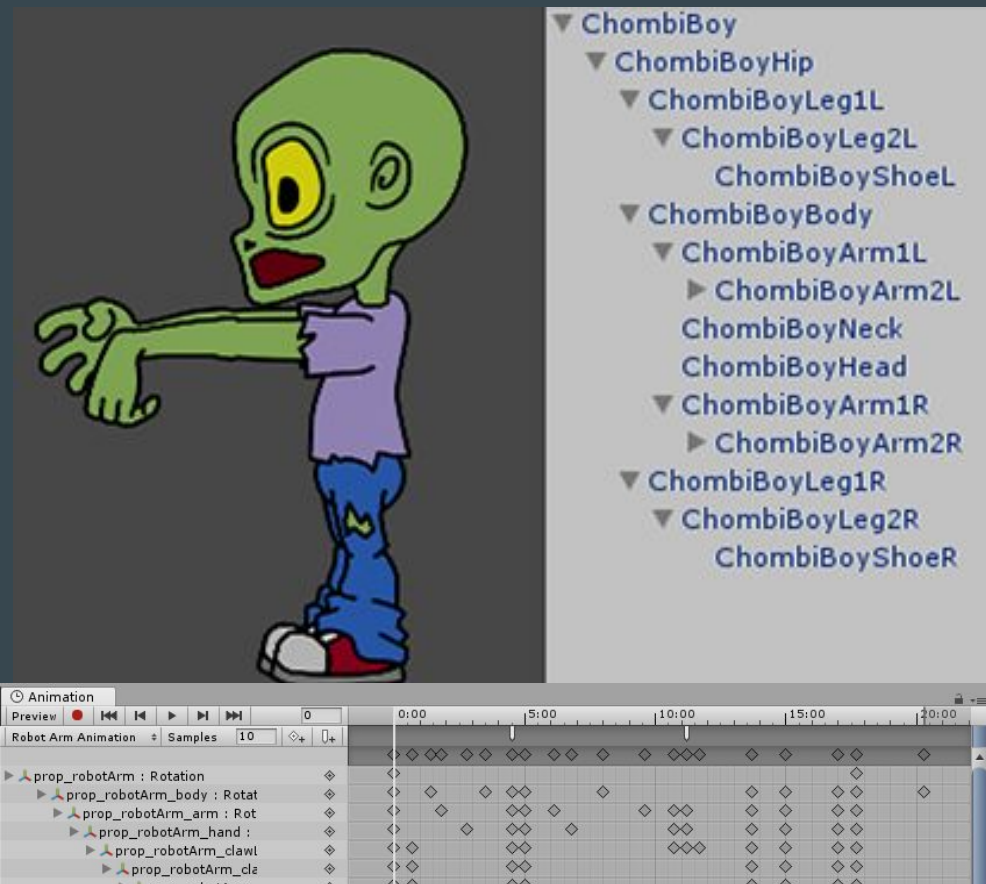
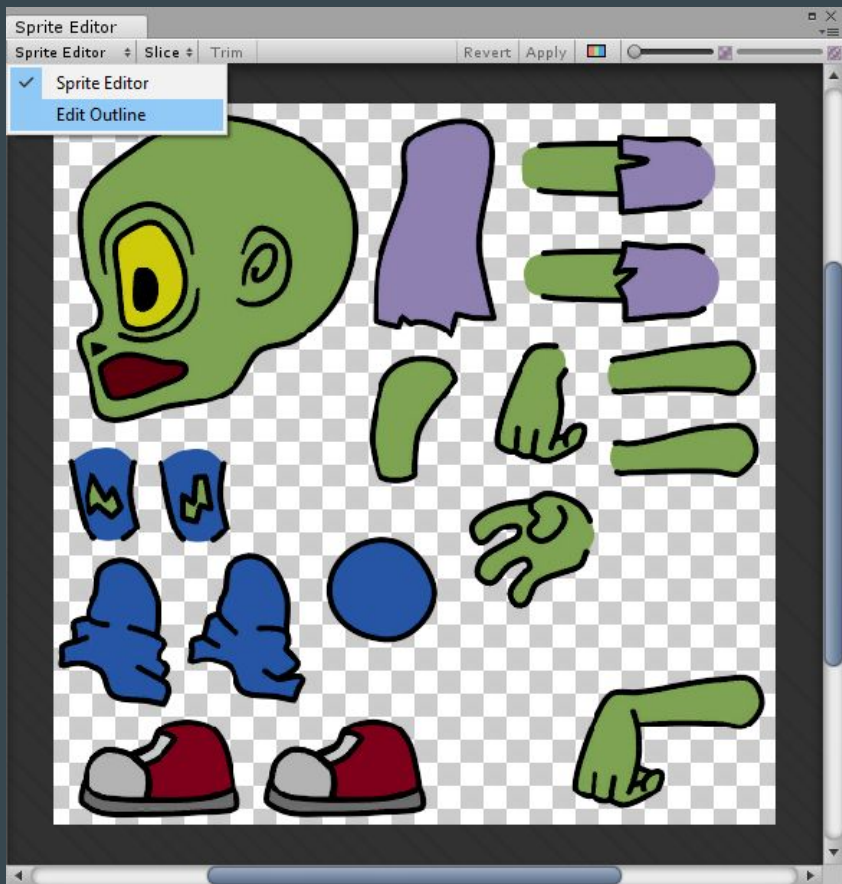
#DENORELLIART
#300DAYSOFANIMATION

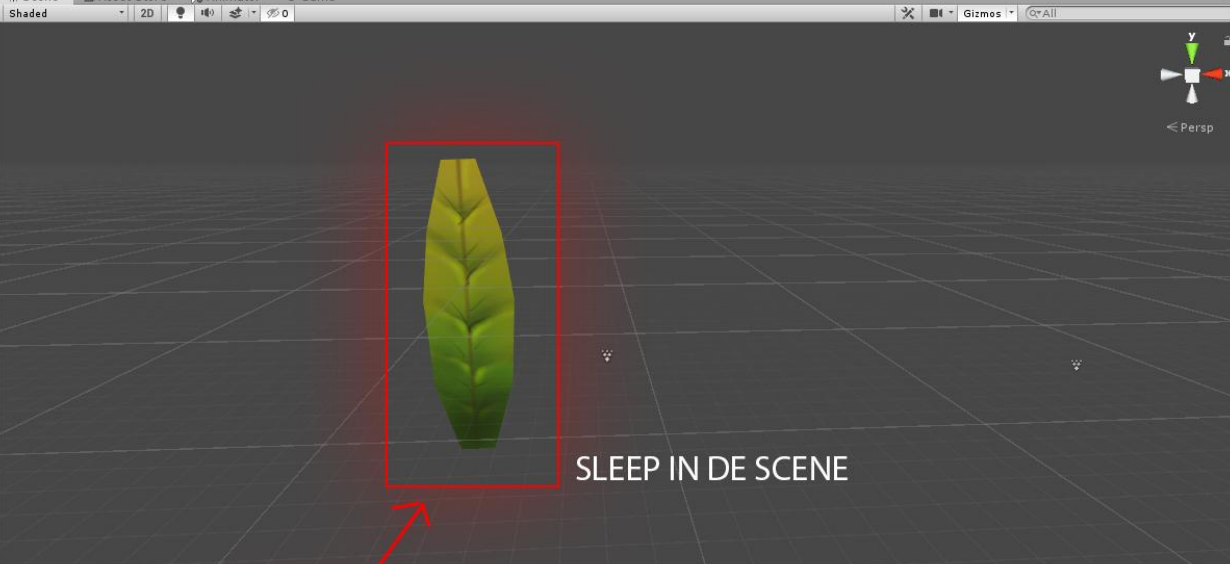


Wat zijn Sprites?

- Plaatjes speciaal bedoeld voor 2D graphics
- Vier manieren om met sprites te werken:
 - Losse sprites geanimeerd in een gameobject
 - Losse sprites geanimeerd in Unity met bones
 - Sprite animatie met losse sprites
 - Spritesheets

Losse sprites geanimeerd binnen een gameobject





Create Empty Ctrl+Shift+N

Create Empty Child Alt+Shift+N

3D Object

2D Object

Effects

Light

Audio

Video

UI

Camera

Center On Children

Make Parent

Clear Parent

Set as first sibling Ctrl+=

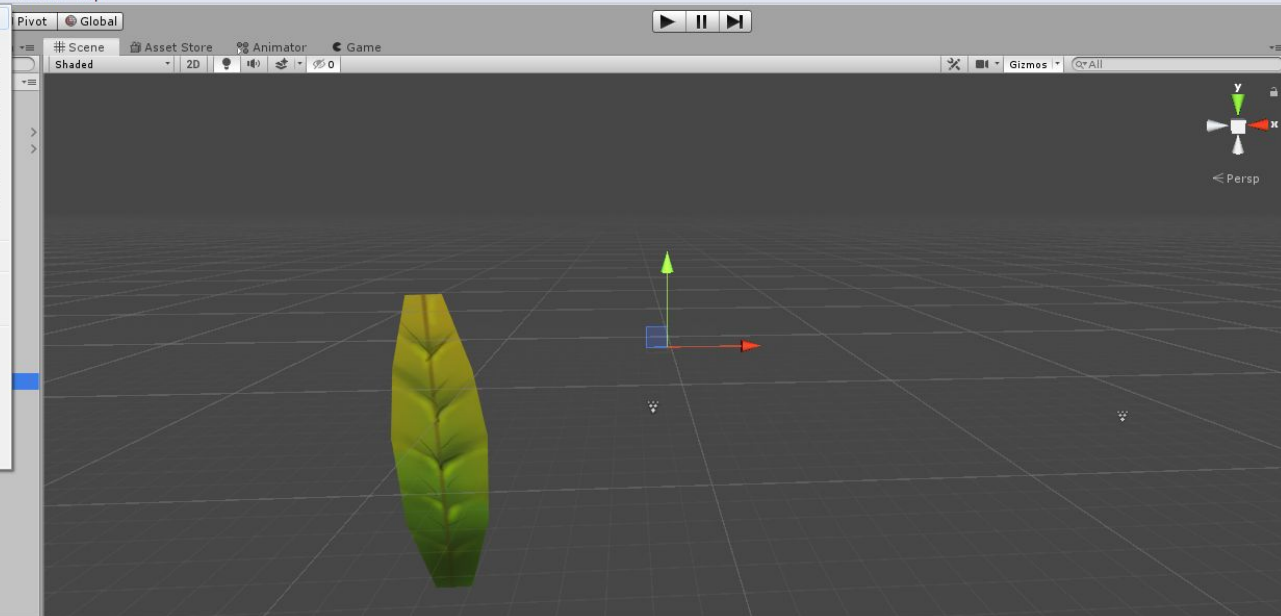
Set as last sibling Ctrl+-

Move To View Ctrl+Alt+F

Align With View Ctrl+Shift+F

Align View to Selected

Toggle Active State Alt+Shift+A



Inspector

GameObject

Tag Untagged Layer Default

Transform

Position	X -22.00478	Y 75.0177	Z
Rotation	X 0	Y 0	Z
Scale	X 1	Y 1	Z

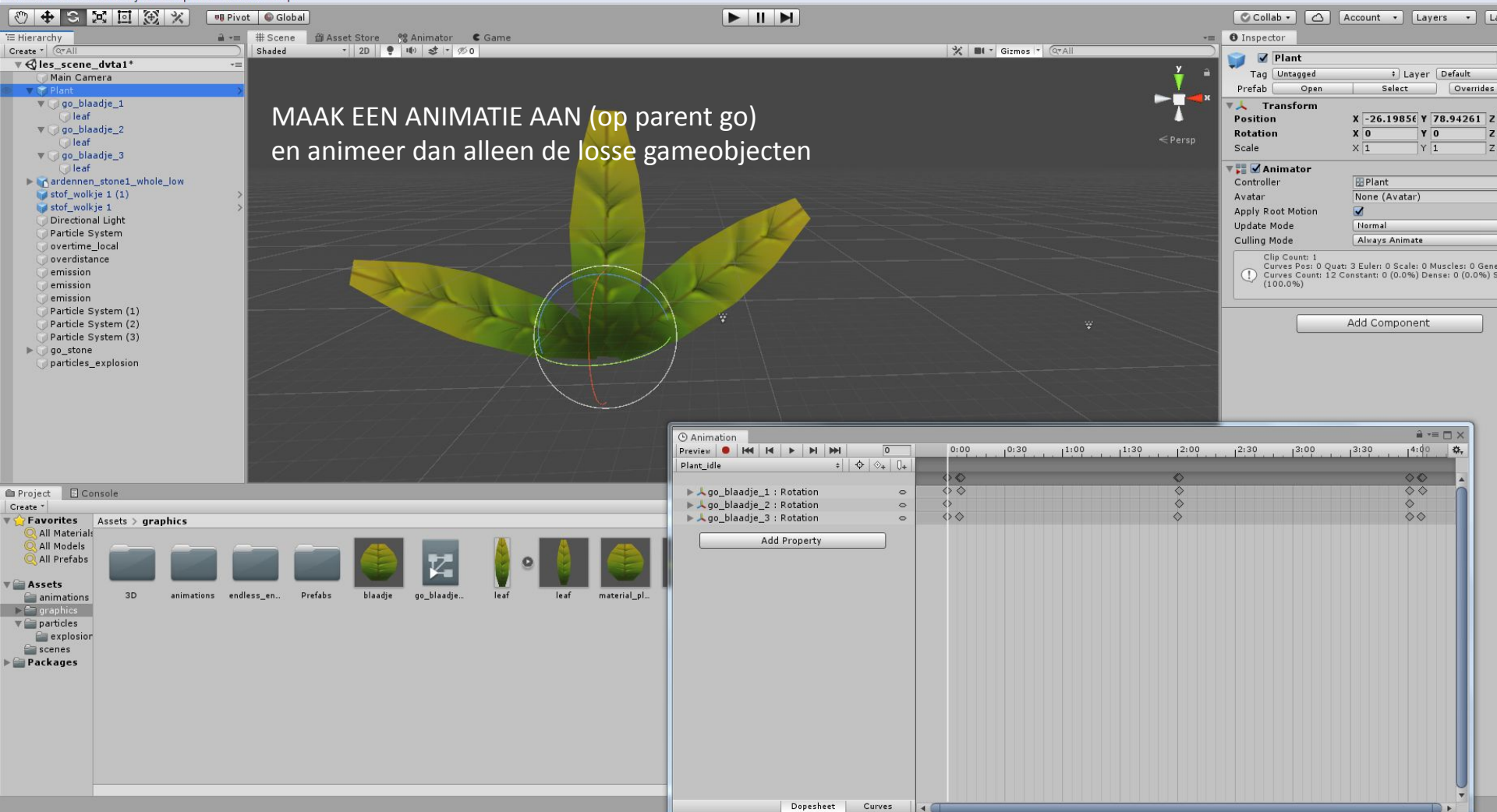
Add Component

Project Console

Create

Assets > graphics

3D animations endless_en... Prefabs blaadje go_blaadje... leaf leaf material_pl... Plant Plant plant 1 plant 1 plant2_idle plant2_walk Plant_idle





Sprite animatie met losse sprites



The screenshot displays the Unity 2019.2.2f1 interface. The main scene view shows a 3D environment with a green plant and a red arrow pointing to a particle system. The Hierarchy panel on the left shows the 'Assets' folder expanded, with 'particles' > 'explosion' selected. The Inspector panel on the right shows the '14 Texture 2Ds Import Settings' for the selected texture, with 'Texture Type' set to 'Sprite (2D and UI)' and 'Alpha Source' set to 'Input Texture Alpha'. The 'Create New Animation' dialog is open, showing the 'Organiser' tab with a search for 'explosion' in the 'Assets' folder. The 'Bestandsnaam' (Filename) is 'New Animation.anim' and the 'Opslaan als' (Save as) is 'anim (*.anim)'. The 'Animation' panel at the bottom shows a timeline with three animation clips: 'go_blaadje_1 : Rotation', 'go_blaadje_2 : Rotation', and 'go_blaadje_3 : Rotation'.

SLEEP MEERDERE SPRITES TEGELIJK IN DE SCENE
(MAAK AUTOMATISCH EEN SPRITEANIMATIE AAN)

Inspector

14 Texture 2Ds Import Settings

Texture Type: Sprite (2D and UI)
Texture Shape: 2D
Sprite Mode: Single
Pixels Per Unit: 100
Mesh Type: Tight
Extrude Edges: ☐
Pivot: Center
Generate Physics SH: ☒

Advanced

sRGB (Color Texture): ☒
Alpha Source: Input Texture Alpha
Alpha Is Transparency: ☒
Read/Write Enabled: ☐
Generate Mip Maps: ☐

Wrap Mode: Clamp
Filter Mode: Bilinear
Aniso Level:

Default

Max Size: 2048
Resize Algorithm: Mitchell
Format: Automatic
Compression: Normal Quality

14 Texture 2Ds

Create New Animation

Organiser

Nieuwe map

Naam

Gewijzigd op

Type

Grootte

Geen zoekresultaten.

Favorieten

Bureaublad

Downloads

Recente locaties

OneDrive

Bibliotheken

Afbeeldingen

Documenten

Muziek

Video's

Computer

Lokale schijf (C:)

Gezamenlijk (G:)

Bestandsnaam: New Animation.anim

Opslaan als: anim (*.anim)

Mappen verbergen

Opslaan

Annuleren

Animation

Preview

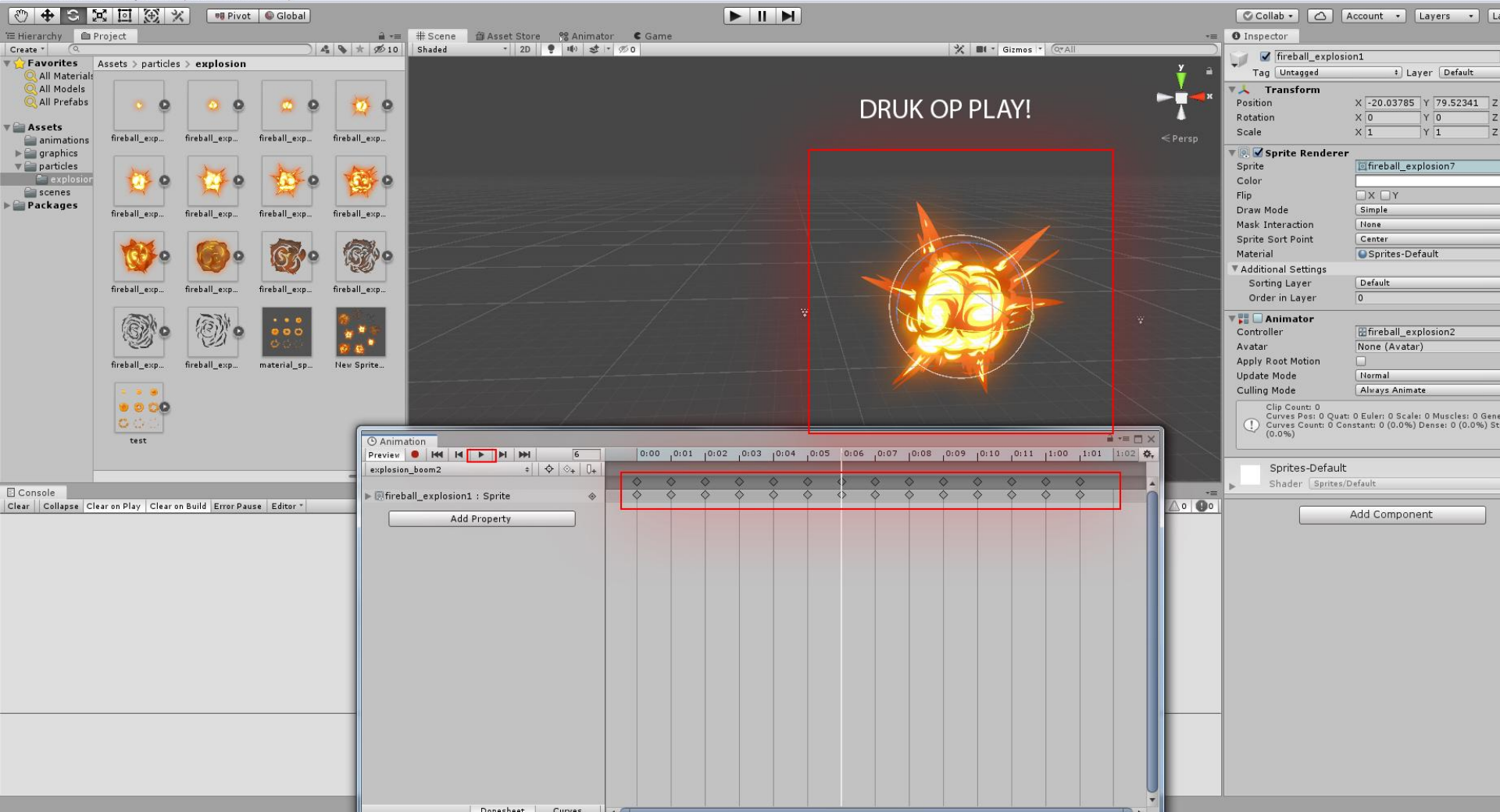
Plant_idle

go_blaadje_1 : Rotation

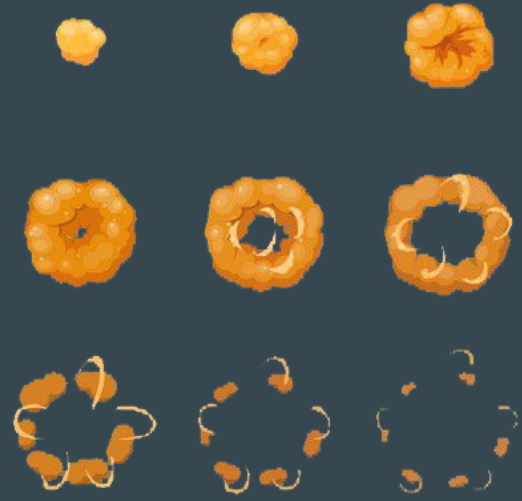
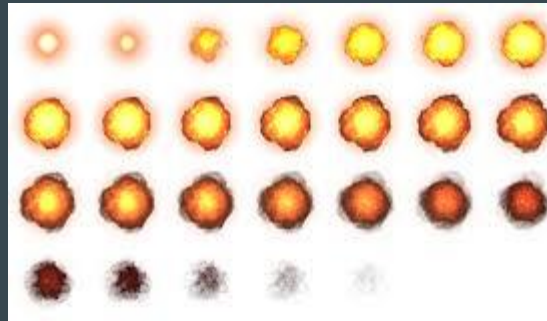
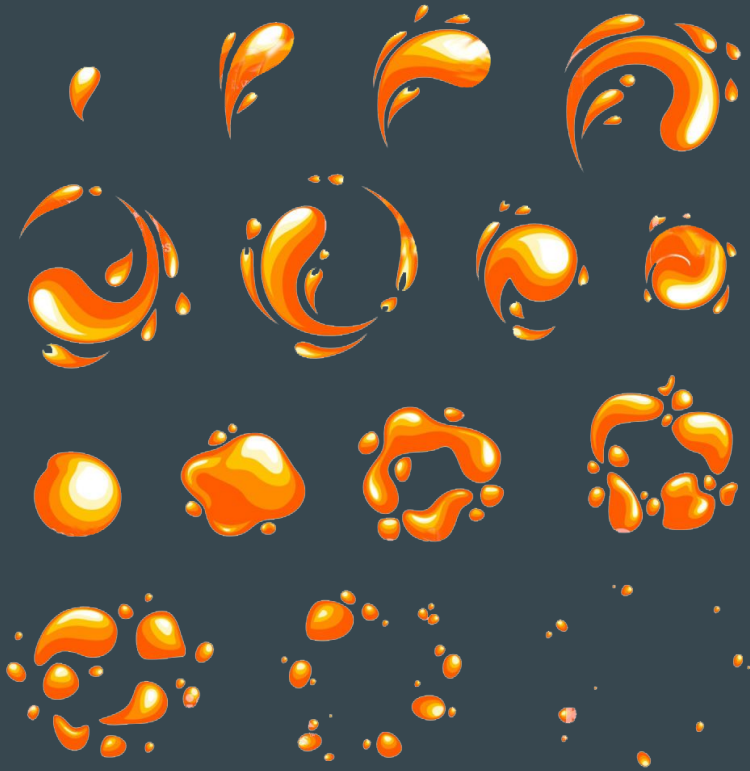
go_blaadje_2 : Rotation

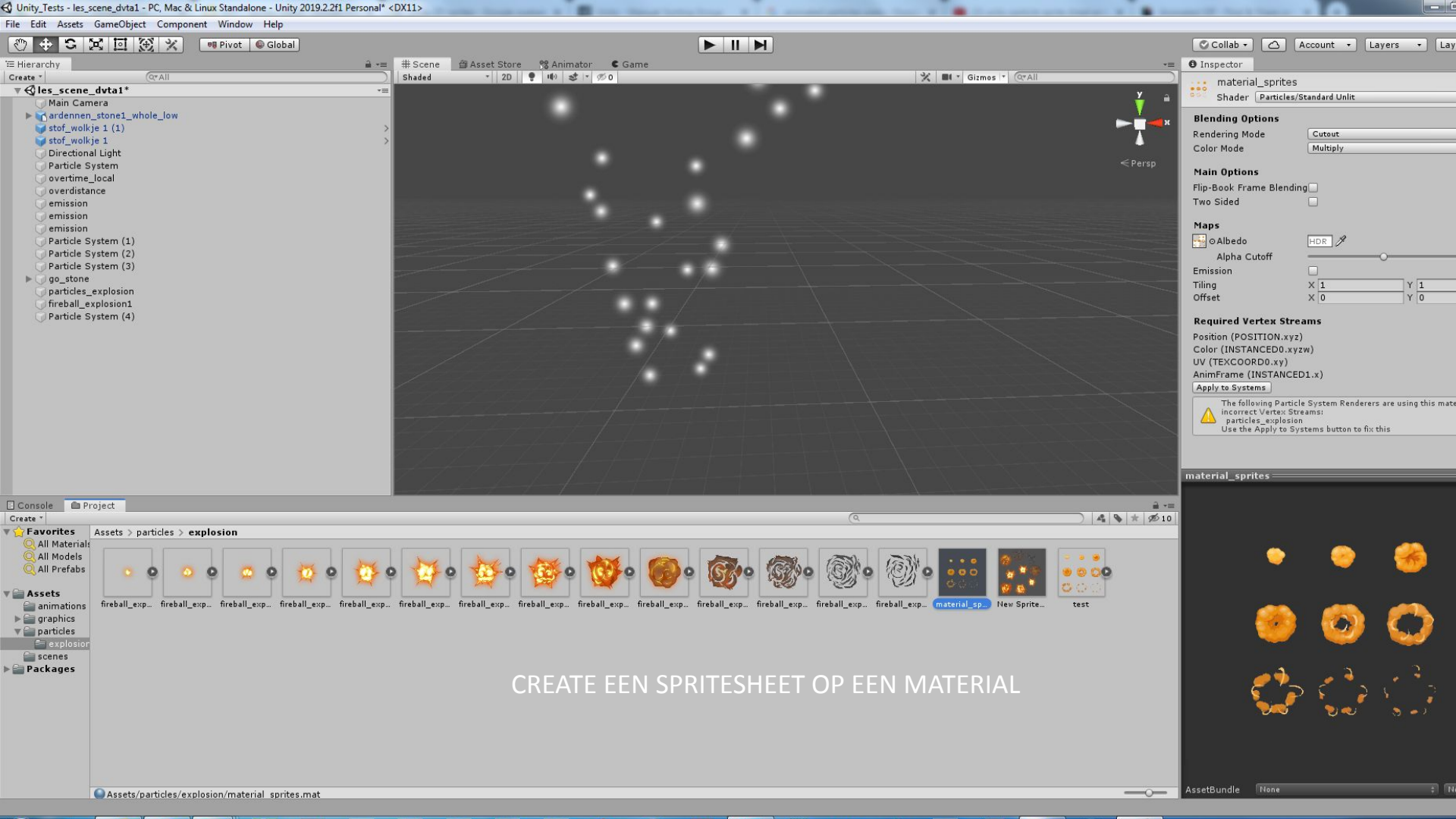
go_blaadje_3 : Rotation

Add Property

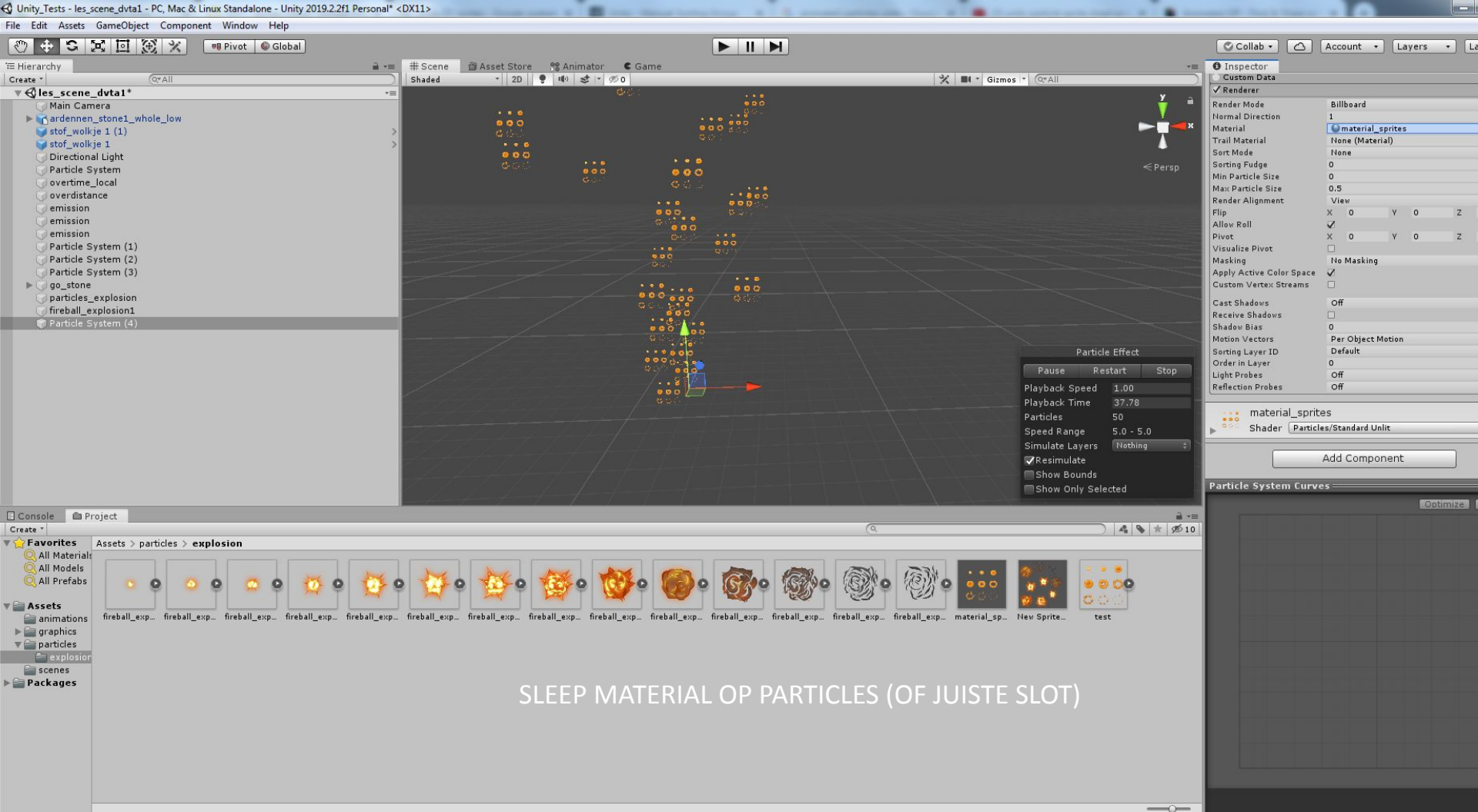


Spritesheets & Animated Particles





CREATE EEN SPRITESHEET OP EEN MATERIAL



Hierarchy

Create +

les_scene_dvta1*

- Main Camera
- ardennen_stone1_whole_low
 - stof_wolkje 1 (1)
 - stof_wolkje 1
- Directional Light
- Particle System
 - overtime_local
 - overdistance
 - emission
 - emission
 - emission
 - Particle System (1)
 - Particle System (2)
 - Particle System (3)
- go_stone
 - particles_explosion
 - fireball_explosion1
 - Particle System (4)

Scene

Asset Store

Animator

Game

Shaded

2D

0

Gizmos

QAll

REKEN UIT HOVEEL TILES JE HEBT
EN SPEEL MET CYCLES VOOR FPS

Particle Effect

Pause Restart Stop

Playback Speed 1.00

Playback Time 74.43

Particles 50

Speed Range 5.0 - 5.0

Simulate Layers Nothing

☒ Resimulate

☐ Show Bounds

☐ Show Only Selected

Inspector

Culling Mode Automatic

Ring Buffer Mode Disabled

☒ Emission

☒ Shape

- ☐ Velocity over Lifetime
- ☐ Limit Velocity over Lifetime
- ☐ Inherit Velocity
- ☐ Force over Lifetime
- ☐ Color over Lifetime
- ☐ Color by Speed
- ☐ Size over Lifetime
- ☐ Size by Speed
- ☐ Rotation over Lifetime
- ☐ Rotation by Speed
- ☐ External Forces
- ☐ Noise
- ☐ Collision
- ☐ Triggers
- ☐ Sub Emitters

☒ Texture Sheet Animation

Mode Grid

Tiles X 3 Y 3

Animation Whole Sheet

Time Mode Lifetime

Frame over Time

Start Frame 0

Cycles 7.24

Affected UV Channels Everything

- ☐ Lights
- ☐ Trails
- ☐ Custom Data

☒ Particle System Curves

Optimize

Console

Project

Create +

Assets > particles > explosion

fireball_exp... fireball_exp... fireball_exp... fireball_exp... fireball_exp... fireball_exp... fireball_exp... fireball_exp... fireball_exp... fireball_exp... fireball_exp... fireball_exp... fireball_exp... material_sp... New Sprite... test

The draw order of particles can be sorted by distance, oldest in front, or youngest in front.

Oefeningen 2D sprites

oefening 1: Maak een animated prefab aan die gebruik maakt van animated sprites!

oefening 2: Maak een nieuw particle effect met animated spritesheets aan

oefening 3: Maak een animatie aan de hand van losse sprites in game objecten