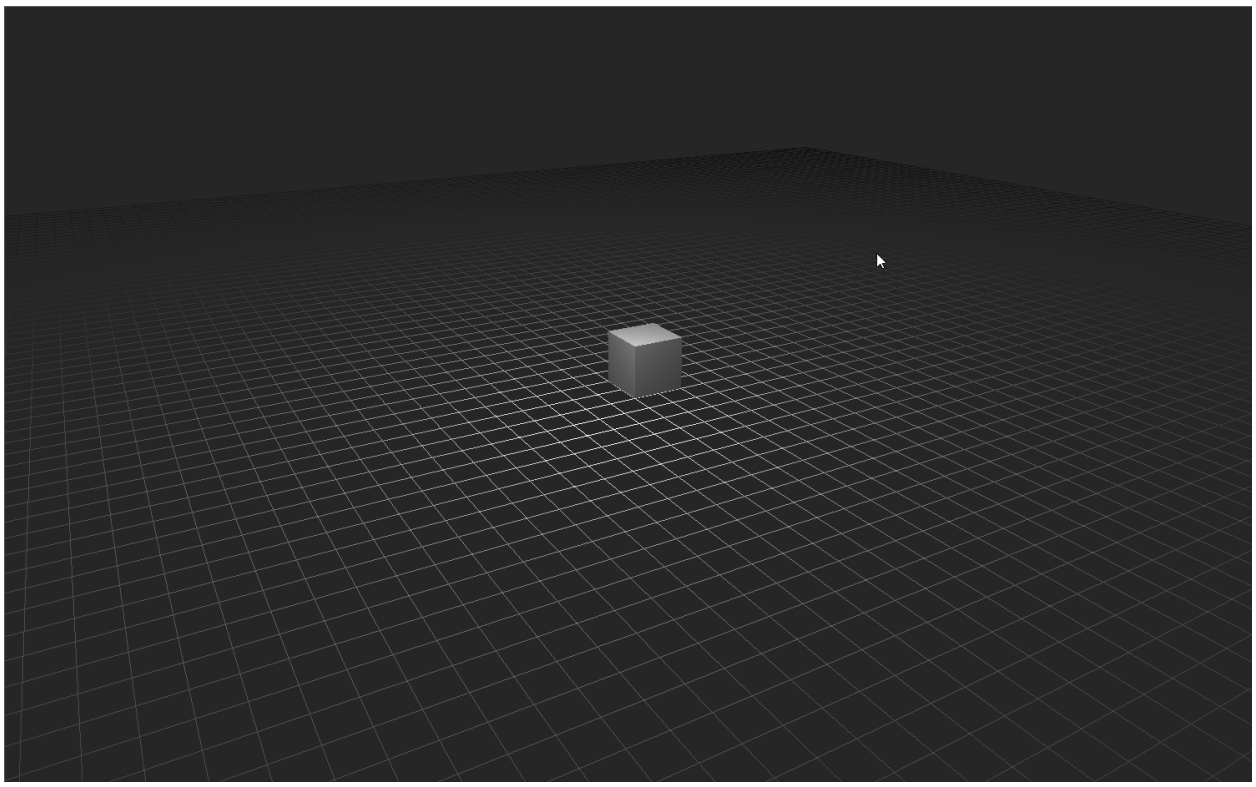
User documentation

Installation :

Simply run the **setup.msi**. You can found it in the **RealSetup** folder.

Usage

The Level Editor is a tool which allow you to **create 3d scene** and then **save** it. You can also use some **LUA scripts** on your objects, anime model and basically load BSP files.



Here is a basic view of the editor. This panel (on the left) is the **rendering view**. Here you can navigate in the scene.
To select a view, just click on it.
When a view is selected, you can move in it using :

- W : forward
- S : backward
- A : left
- D : right
- Mouse middle button : click and hold this button to rotate the camera

The menu toolbar

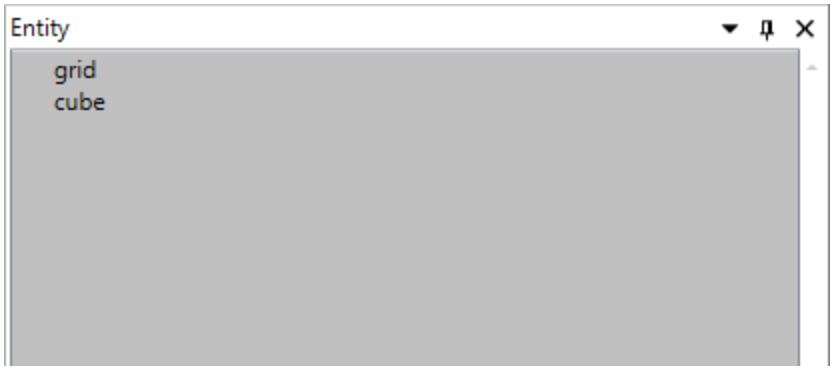
Here are the five main options of the editor.

- File : allow you to create a new scene, to save it, to load another, or to quit.
- Add : allow you to add multiple kind of object.
- Viewport : allow you to add manage rendering view, this will split your screen.
- Window : allow you to reopen some tools.
- BSP file : allow you to load BSP files.

The tools

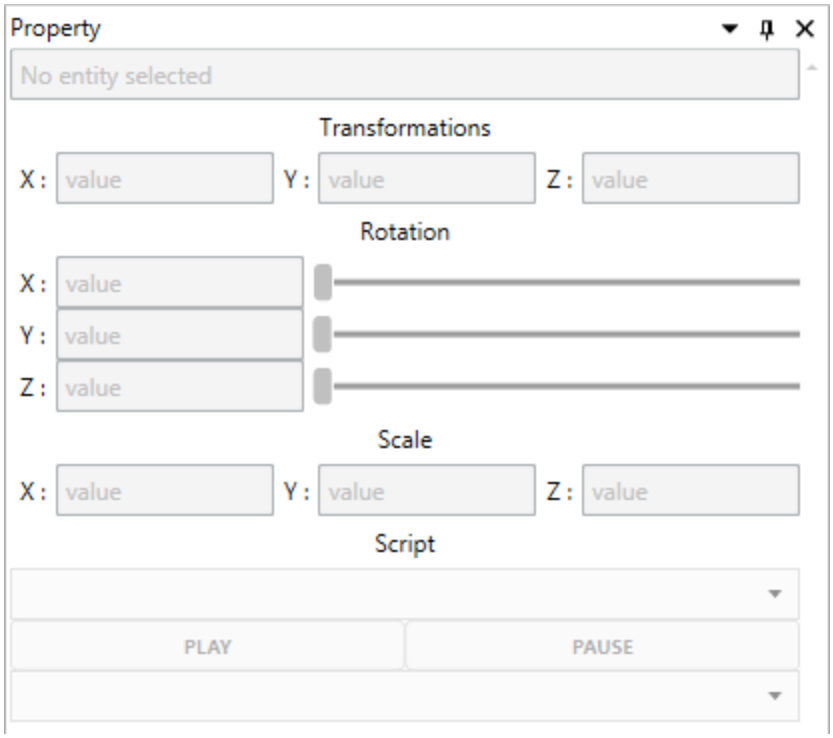
The editor provide you many tools :

Entity tool (scene explorer) :



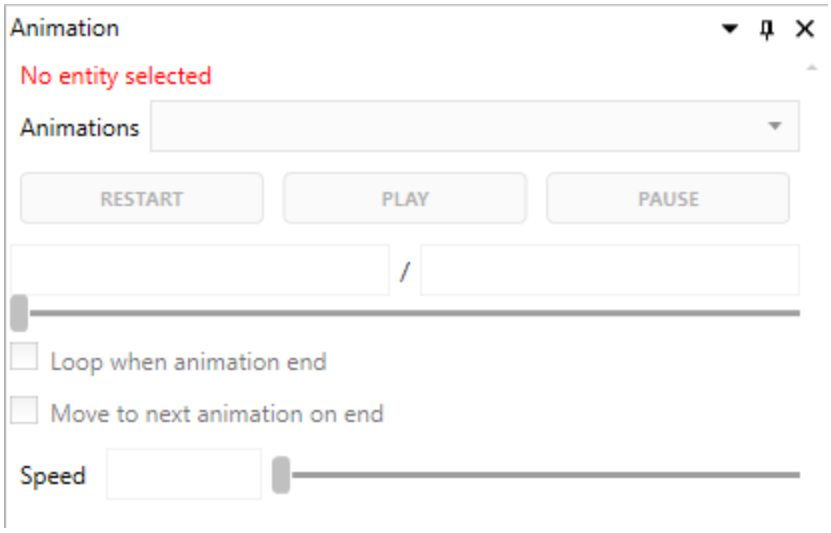
Here you can see all the objects in the scene, select them or delete them using the **delete key**.

Property tool :



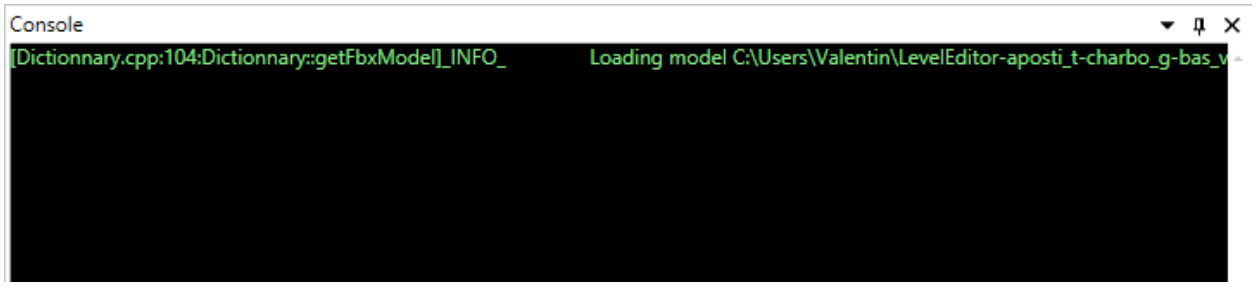
This tool is very important since it control all your entities transformation. You can **move** your entities, **rotate** them, **scale** them. You can aslo apply some **LUA scripts** to your entities (see the script tool below). This tool will not be usable if you don't select an entity (select them using the *scene explorer* or click on them in the *rendering view.* Some objects will not be clickable such as the grid or complexes objects.

Animation tool :



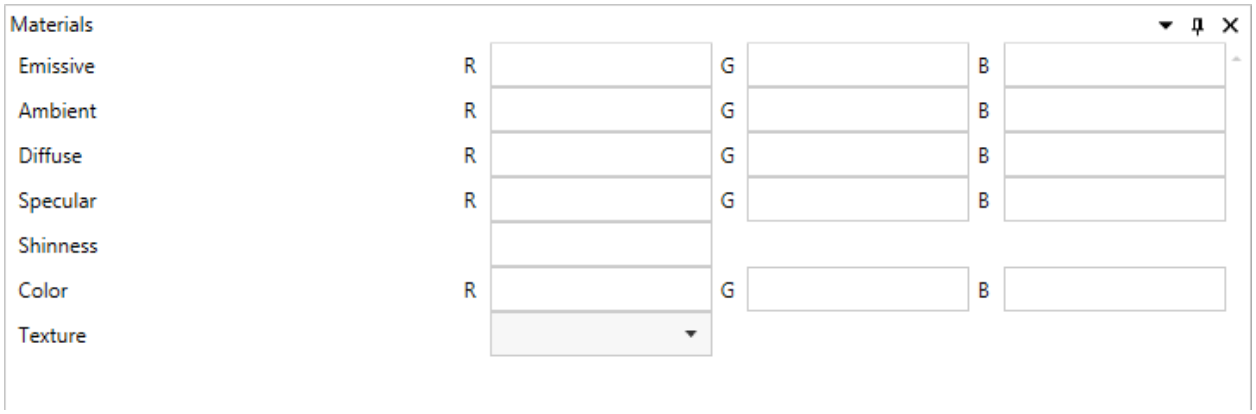
This tool allow you to manage the **animation of FBX object** (if they have some). You can **choose which animation to display using the combobox**. Then you can **play**, **pause** or **restart** the animation. You can choose to **loop** on the current animation or let them **move to the next when over**. You can also **control the speed** on the animation on a scale of **0x** to **10x**. To finish, you can use the **slider** to perform the animation.

Console tool :



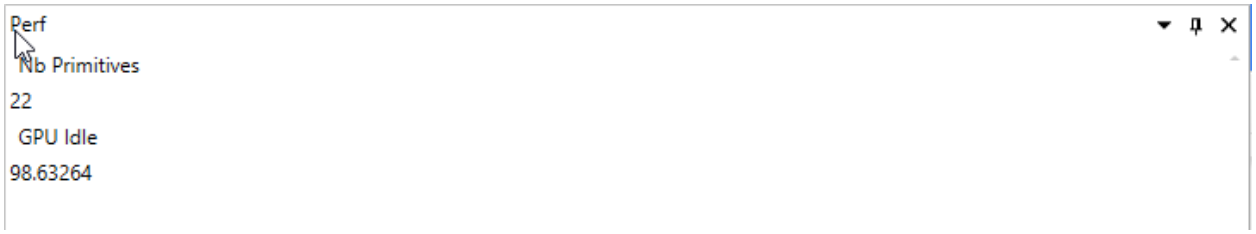
With the console, you can **monitor** the engine. It is a **read-only** console.

Material tool :



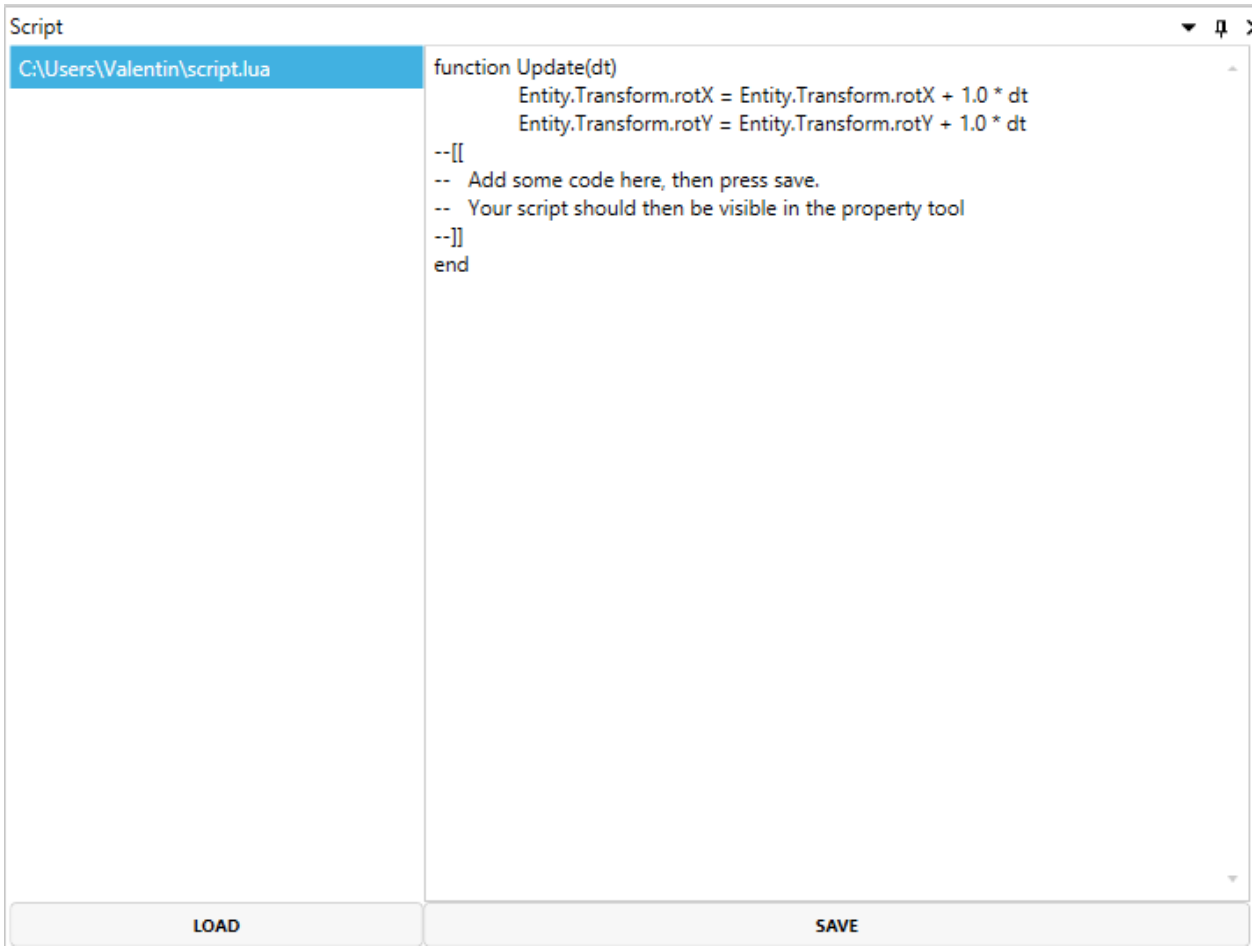
This tool allow you to change a lot of **options** for the **selected entity**. To add new **textures**, see the *texture tool* below.

Performance tool :



This tool allow you to monitor the **number of primitives** actually being **rendered** by the engine and the **GPU idle**. This tool use an extern library which is “Nvidia perfkit”. This tool is not fully functionnal, but since it doesn’t got an impact on the user experience, this tool is still visible.

Script tool :



This tool allow you to create lua script and apply them to entities.
Here is an example of script.

```
function Update(dt)

    Entity.Transform.rotX = Entity.Transform.rotX + 1.0 * dt

end
```

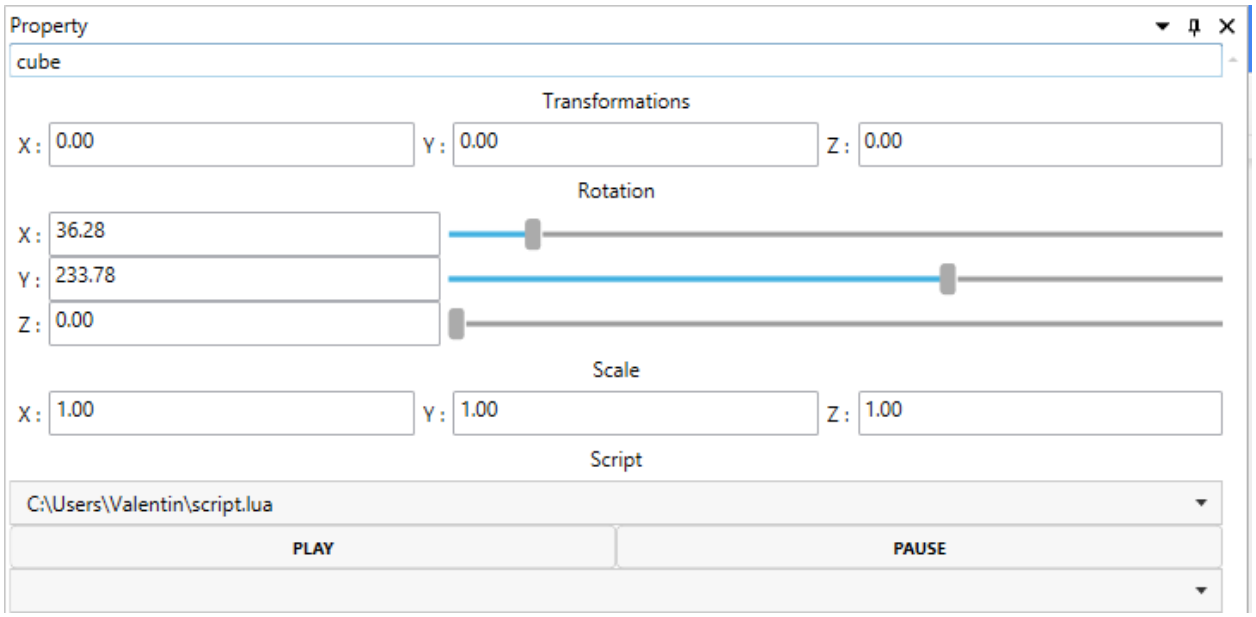
All the informations about an entity are contained in the namespace Entity.Transform.

```
rotX = rotX + 1.0 * dt -> WRONG

Entity.rotX = Entity.rotX + 1.0 * dt  -> WRONG

Transform.rotX = Transform.rotX + 1.0 * dt -> WRONG

Entity.Transform.rotX = Entity.Transform.rotX + 1.0 * dt -> GOOD
```

In the namespace Entity.Transform, you have access to :

- transX
- transY
- transZ
- rotX
- rotY
- rotZ
- scaleX,
- scaleY,
- scaleZ

When your script is saved, you can access it in the *property tool*

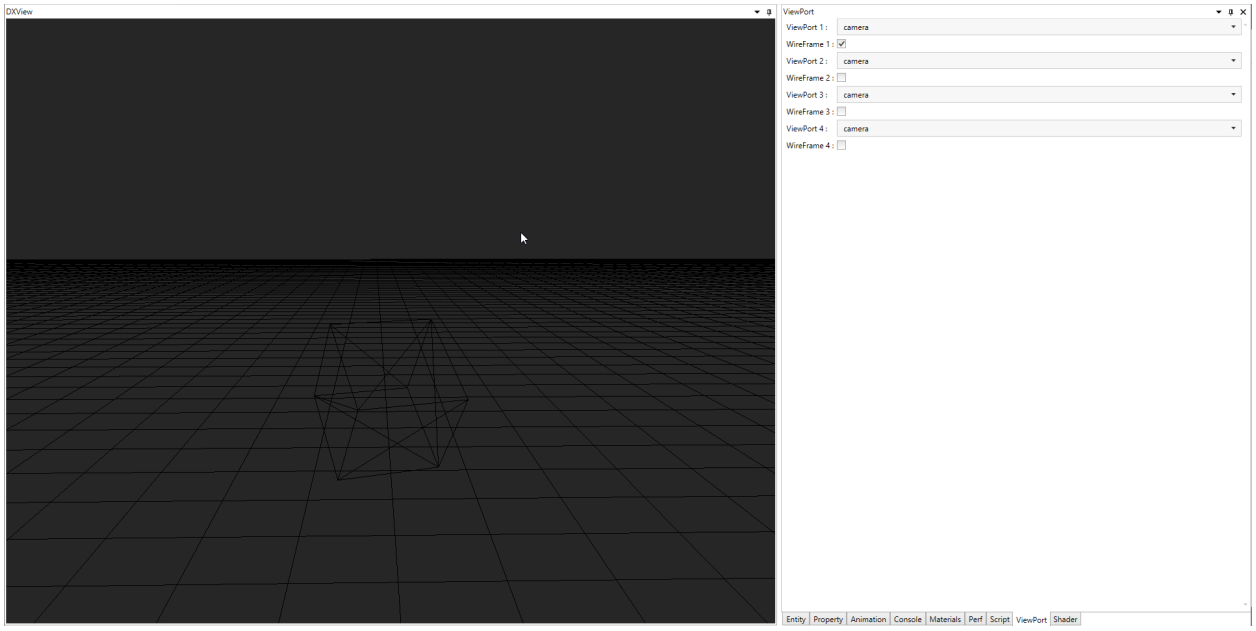


The dt represent the time elapsed between two frame.

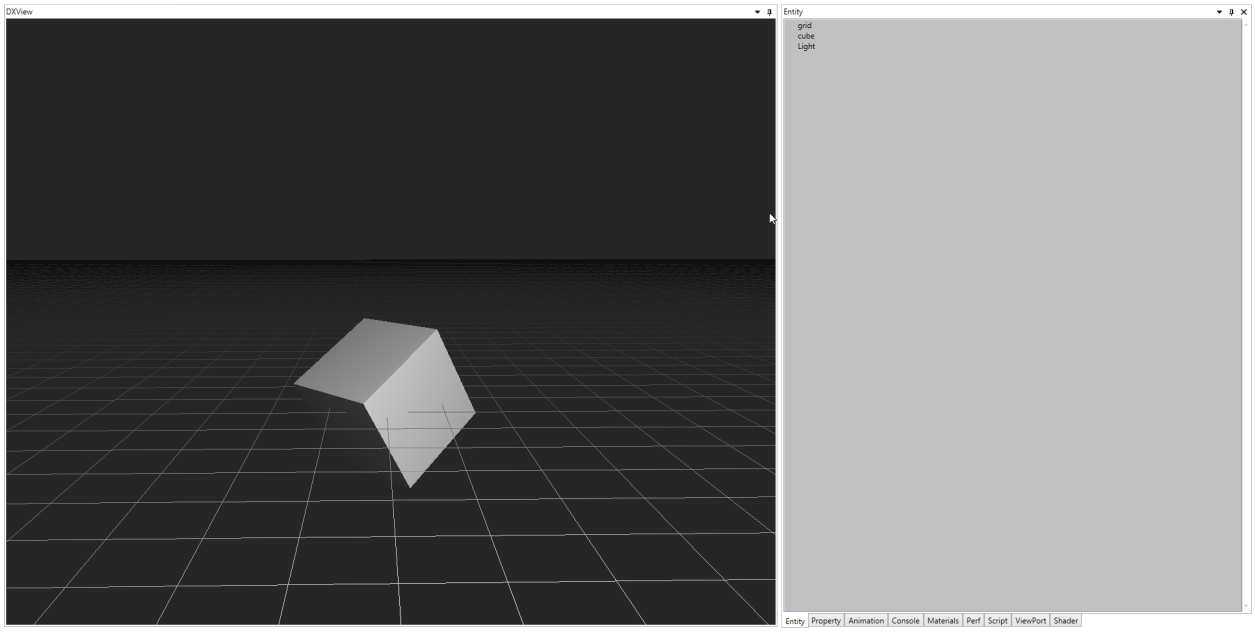
Viewport tool :

This tool allow you to manage the editor's cameras, you can select which camera is on which viewport and active or not the **wireframe** not.

With wireframe on :



With wireframe off :



Shader tool :
This tool is unused.

Have fun !