

# FLEX PICTURE EBOOK

**An e-book for inclusive learning**

**Step-by-step tutorial on how to use FPB tools**

Co-funded by the  
Erasmus+ Programme  
of the European Union



This project (2022 - 1 - FR01 - KA220 - SCH - 000088072) has been co-funded by the Erasmus+ programme of the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

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# The FPB-Animation

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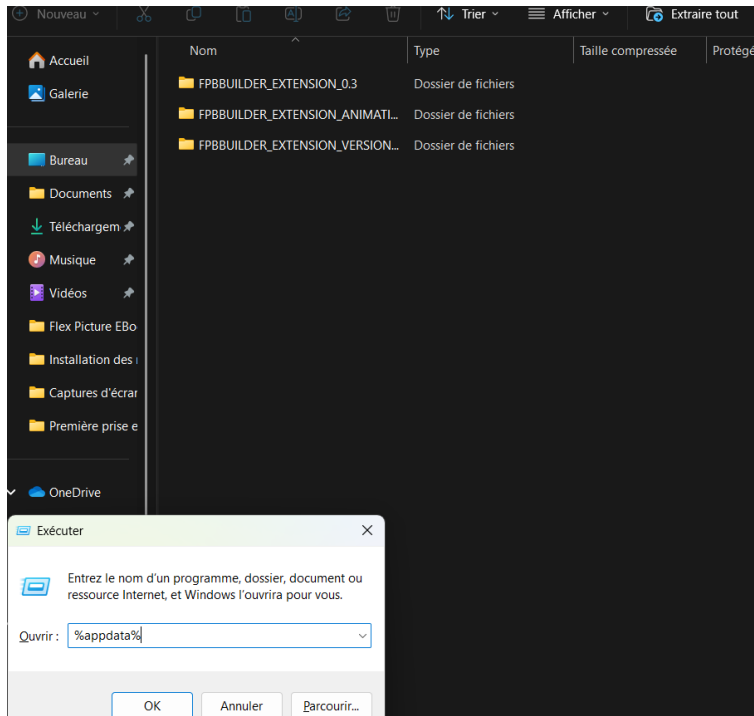
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## Installing FPB extensions - Download

Before you start using the tools in Illustrator, you need to install the FPB extensions in the Adobe suite. To do this, you need to download the [Illustrator Plugins ZIP file](#) and extract the files before following these steps:

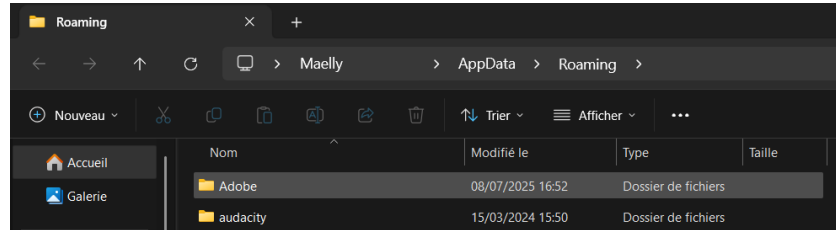


1. Open the search window by pressing the **Windows + R** keys

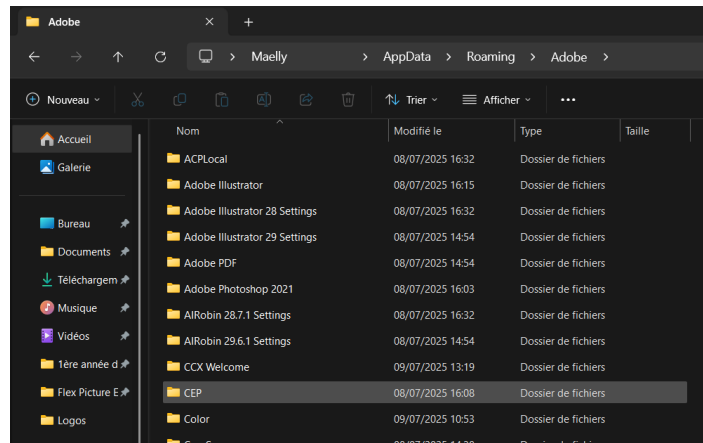
2. Enter **%appdata%** in the search bar



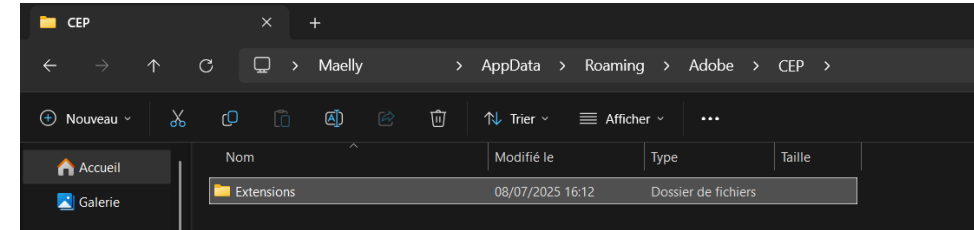
## Installing FPB extensions - CEP folder



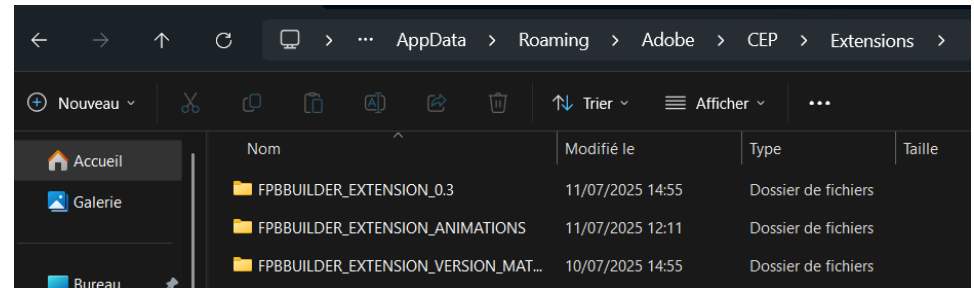
3. Open the **Adobe** folder



4. Open the **CEP** folder. If it does not exist, create it and then open it.



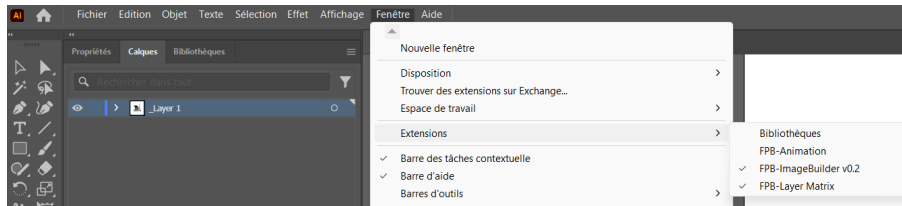
5. Open the **Extensions** folder. If it does not exist, create it and then open it.



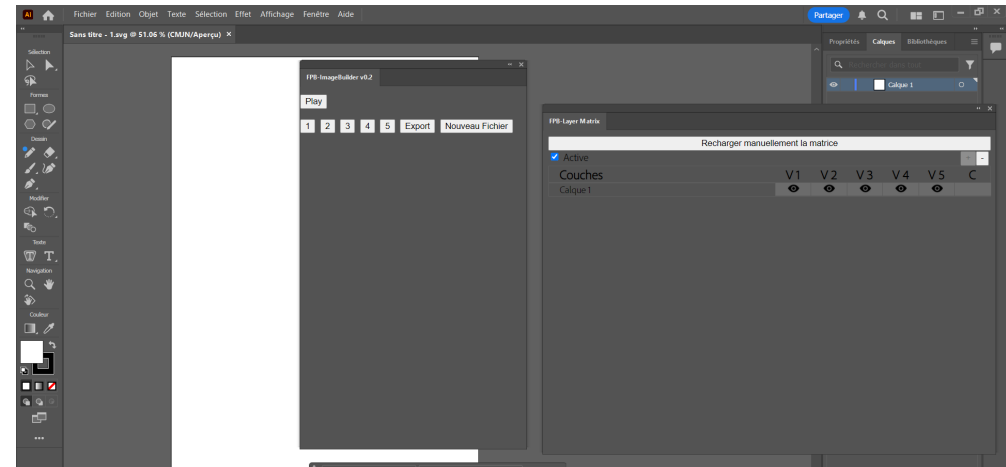
6. Place the previously downloaded and extracted FPB folders in the **Extensions** folder.

## Installing FPB extensions – Opening in Illustrator

You can now open Illustrator. Close any documents that are already open, create a new 748x1024 pixel document in portrait mode, and add the new FPB-ImageBuilder v0.2 and FPB-Layer Matrix extensions to your artboard.



7. In the **Window** tab, click **Extensions**. You will then see the three FPB extensions. Enable only **FPB-ImageBuilder** and **FPB-Layer Matrix**. The FPB-Animation extension will be explained later.

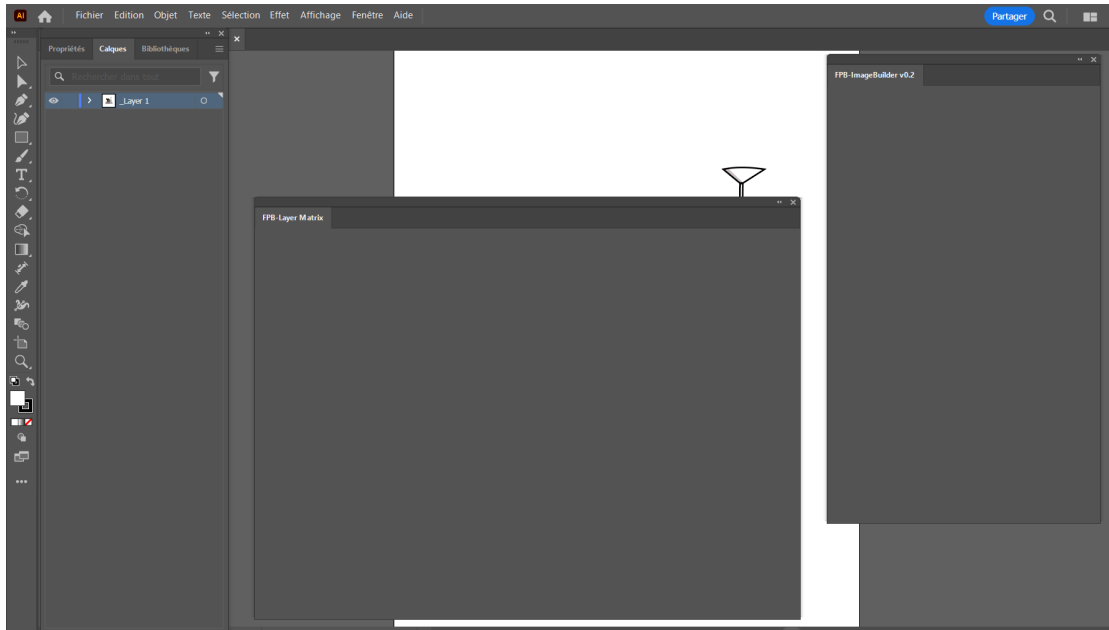


8. The two extensions should appear as shown above.

If this is not the case, please refer to the **Bug Fix** section below.

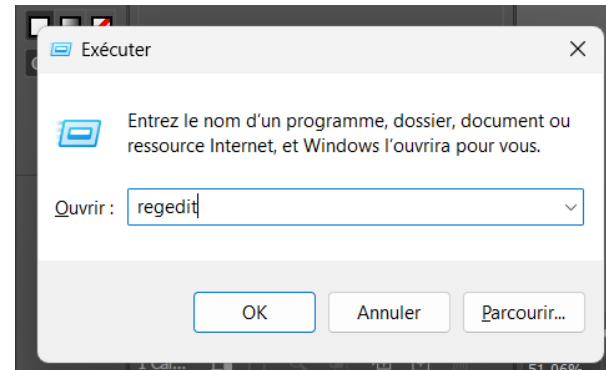
## Extensions are not displaying, what should I do?

If your extensions are not displaying correctly, this is probably due to the version of Adobe Illustrator software you are using.



*Example of incorrect extension display that you may encounter.*

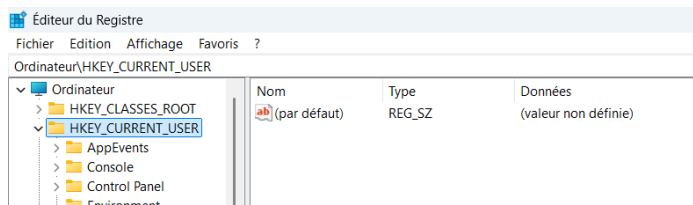
Here are the steps to follow to resolve the issue:



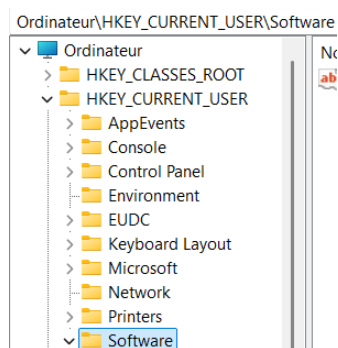
1. Open the search window by pressing the **Windows + R** keys.

2. Enter **regedit** in the search bar

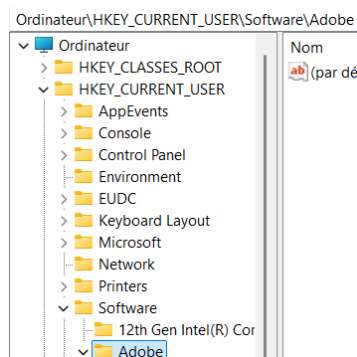
3. Allow the **Registry Editor** to make changes.



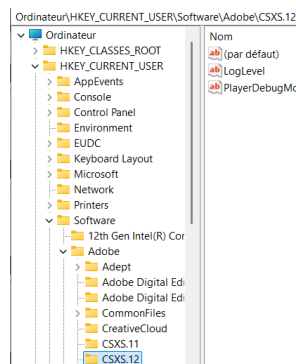
4. Open the **HKEY\_CURRENT\_USER** file



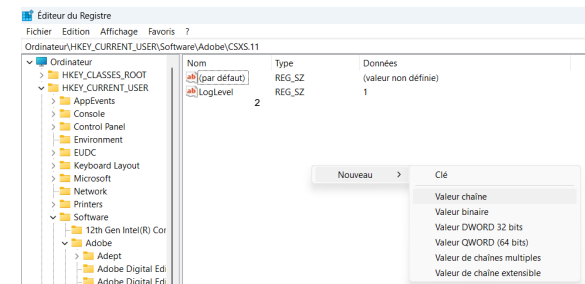
5. Open the **Software** file



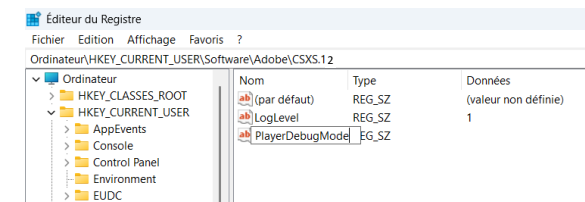
6. Open the **Adobe** file



7. Open the **CSXS.12** file (for version 29) or **CSXS.11** file (for versions 27 and 28)

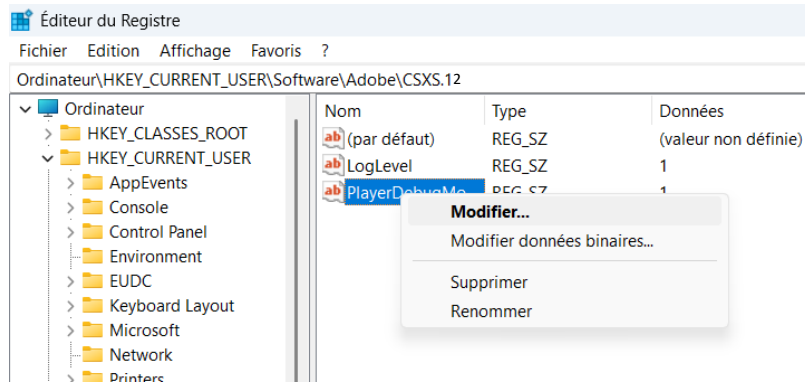


8. In the folder, right-click to create a new entry (**New**), then select **String Value**.

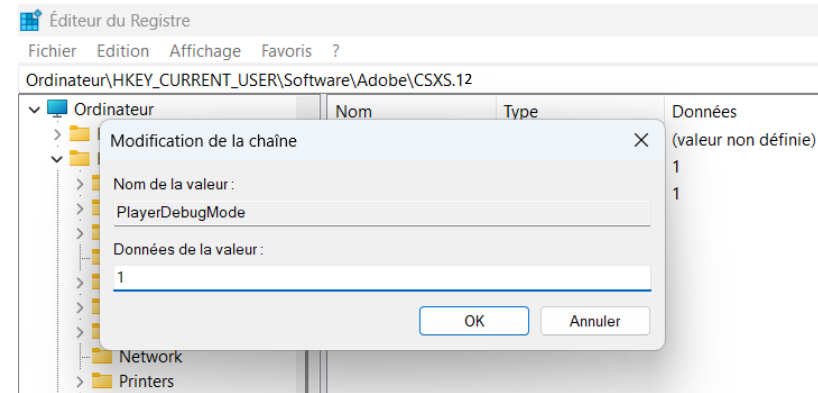


9. Enter **PlayerDebugMode**





10. Right-click on the file that has just been created and select **Edit**.



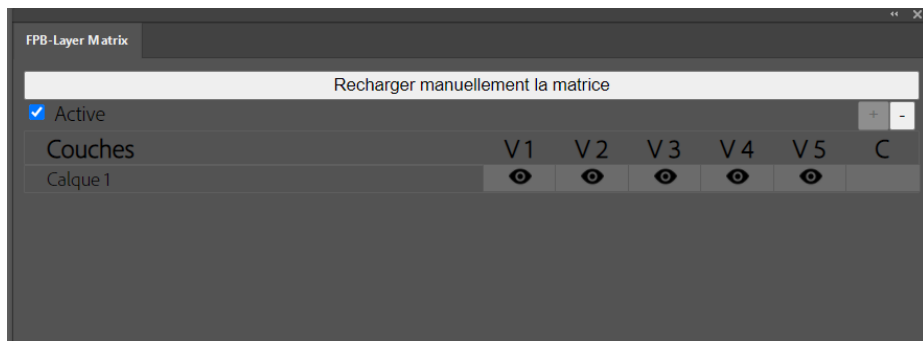
11. In the bar, enter the value **1**.

**You can now restart Illustrator and repeat the installation from step 7 (page 6).**

## Getting familiar with FPB extensions

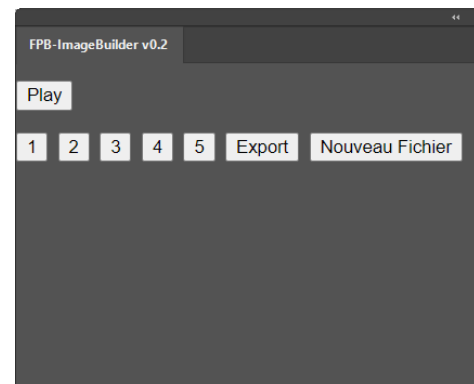
You now have access to two FPB extension windows.

### The Matrix window



This extension allows you to select the layers and sub-layers you want to display or hide, depending on the degree of visual complexity.

### The display window

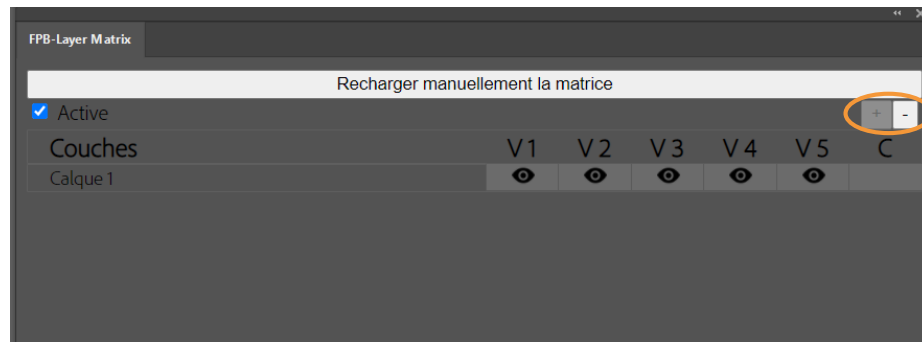


This extension allows you to view the changes made in the Matrix window and the Animation window.

## Getting familiar with FPB extensions

Furthermore, you are not required to use all five levels of visual complexity offered.

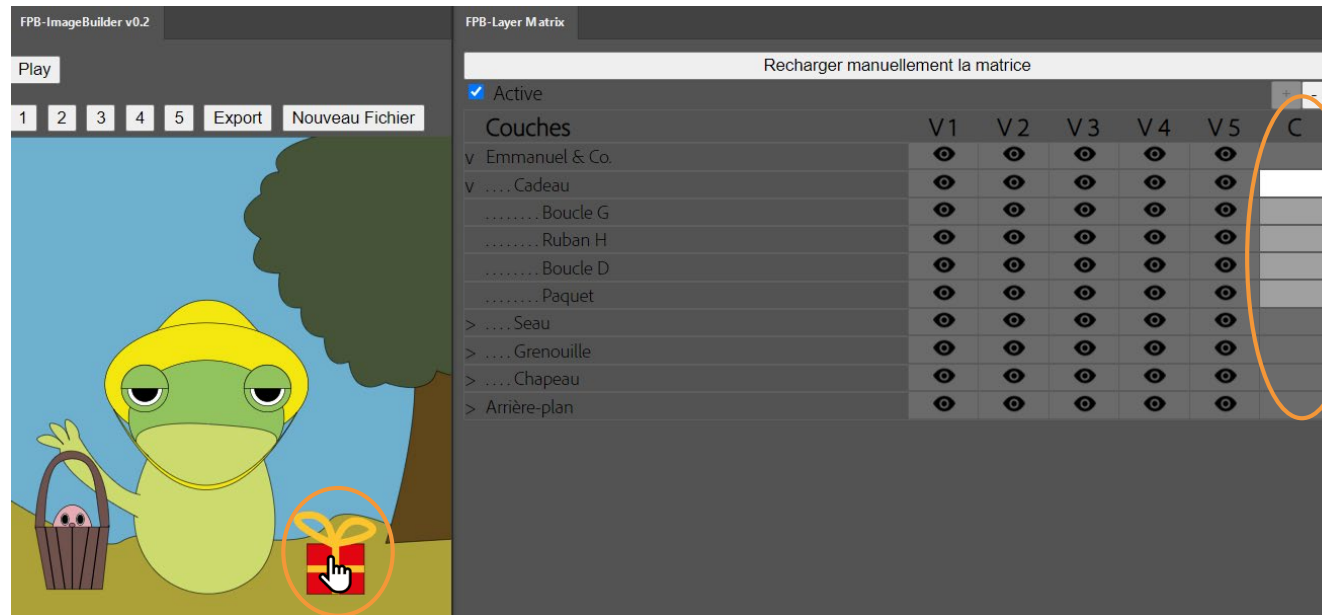
### The Matrix window



You can remove and add them as needed using these icons.  
It is not possible to go beyond five levels.

## Getting familiar with FPB extensions

To the right of the visual complexity columns, you will find the C column. This allows you to select the layers and/or sub-layers that the reader will be able to click on in the final version of the Ebook in order to isolate and/or zoom in on them.



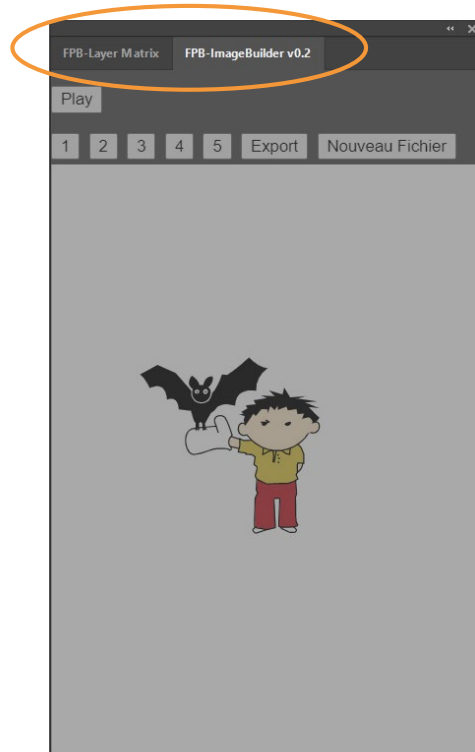
## Best practices

To add a new page to edit with FPB tools, simply click on the **New File** tab in the ImageBuilder extension: the page will then automatically be in FPB format (748 x 1024 pixels).



## Best practices

The two FPB plug-ins cannot be combined in the same window, as this may cause them to malfunction. Remember to keep them open separately, even if this takes up more space.

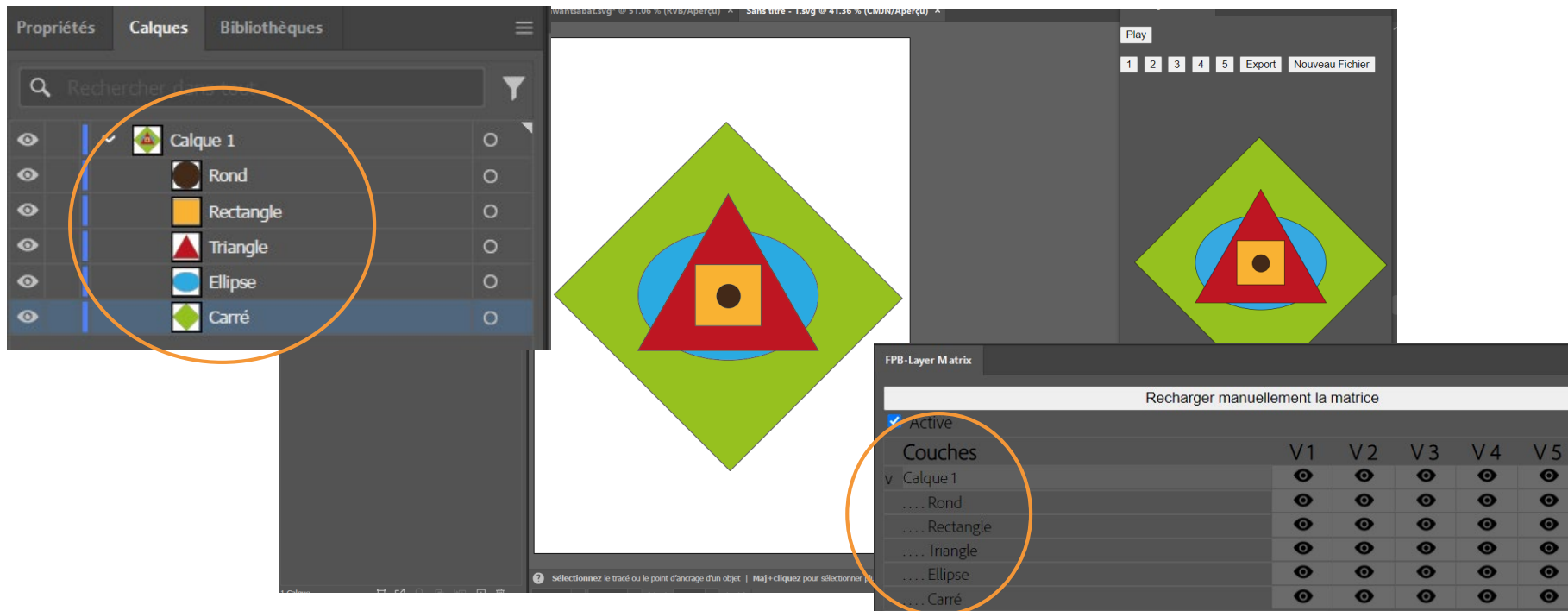


The ImageBuilder display window becomes greyed out and no longer responds to requests.

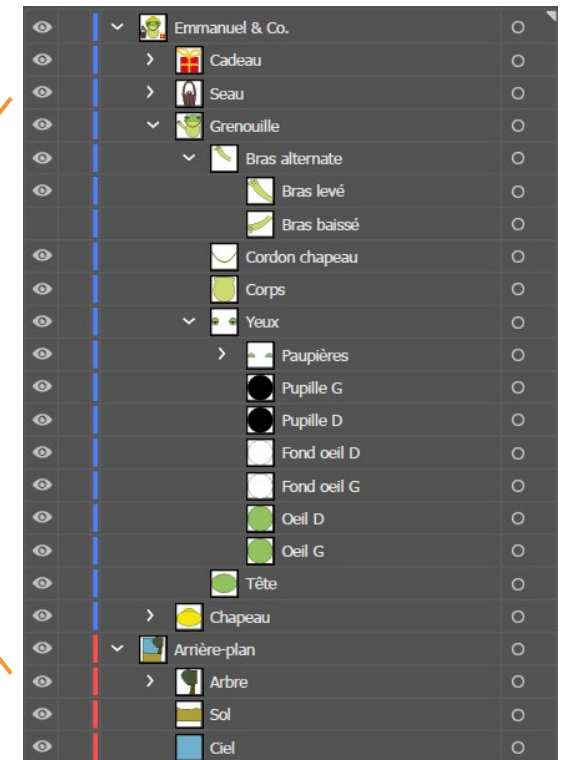
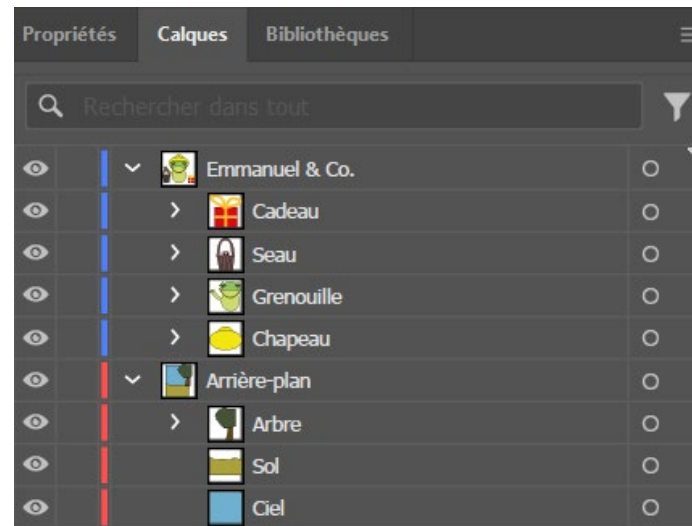
## Best practices

It is essential that you **name your sub-layers**. This makes it easier to find your way around and to show/hide the right sub-layers according to the levels.

1. Think ahead about clickable elements: main sub-layers
2. Think ahead about the elements that will be hidden (shadows, patterns, etc.)



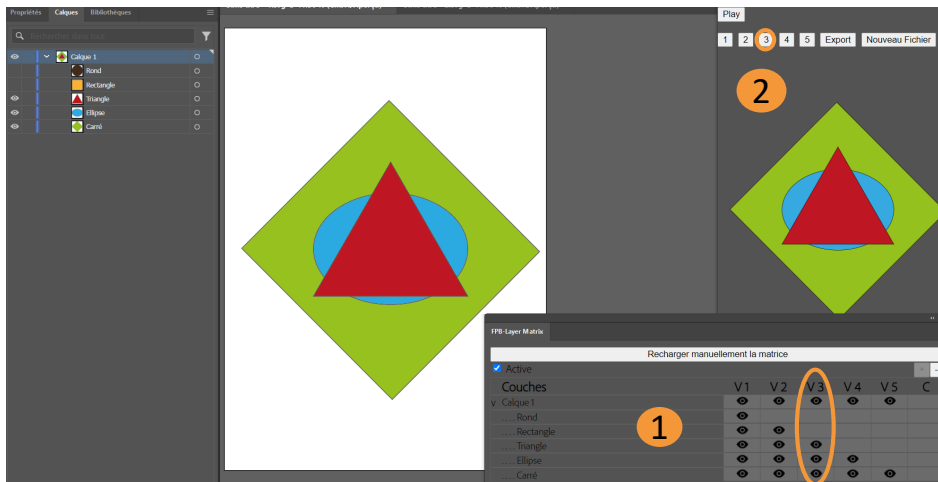
Group layers or sub-layers in a logical manner (particularly details that will appear or disappear together). Individual sub-layers must be created for each element that will be animated, even if it visually belongs to a single entity (e.g. the frog's arms).





## Simplified example of FPB

- 1 Hide the desired layers
- 2 Select the level you want to preview and press **Play** to see the results of your changes.



By clicking in column C that elements will automatically be clickable or not in the EPUB.

By masking using the tool, the layers will automatically be visible or not.

## Concrete example of GCD: *Emile wants a bat*



V1



V2



V3



V4

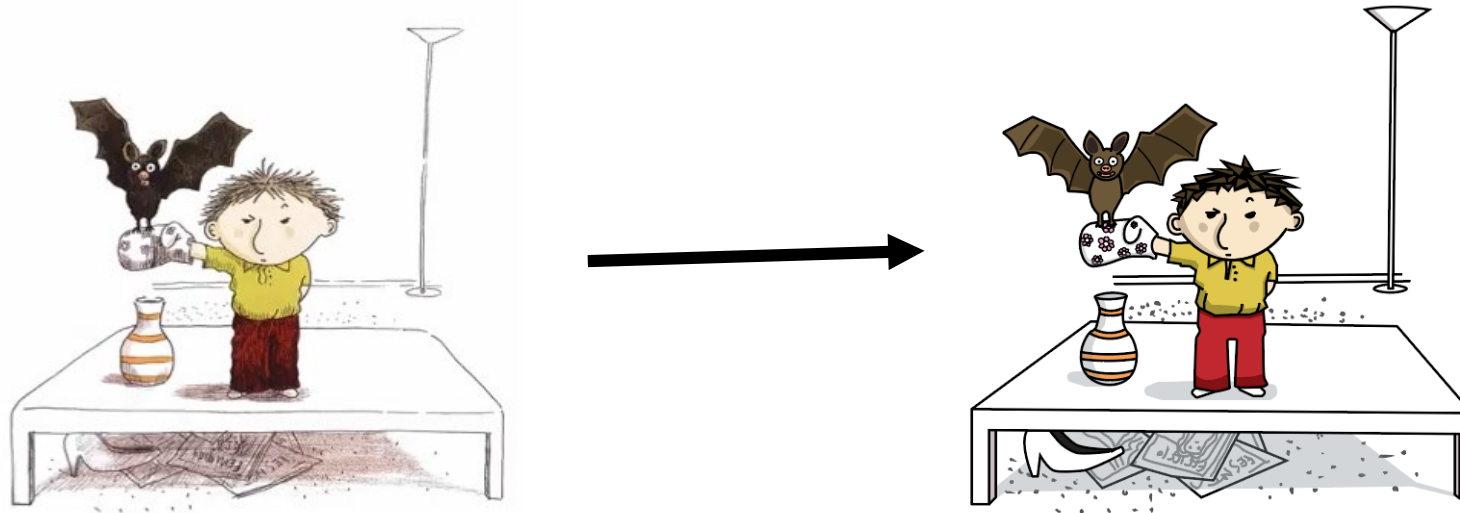


V5

Couches	V1	V2	V3	V4	V5
v _Layer 1	o	o	o	o	o
v ... Layer 1 2	o	o	o	o	o
v ... Layer 1	o	o	o	o	o
> ... bat high contrast					o
v ... bat group	o	o	o	o	
... Layer 11	o	o	o	o	
... ears	o	o	o	o	
... outline	o	o	o	o	
... left wing 2	o	o	o	o	
... left wing outline					
v ... detail	o	o			
... lv 1 asddf					
... dark shade					
v ... bat face	o	o	o	o	
v ... mout	o	o			
... tooth	o	o			
... nose	o	o	o	o	
... eyes	o	o	o	o	
> ... detail lv2	o	o			
v ... mid shade	o	o			
... dark 123					
... shade lv 1					
v ... bat bg	o	o	o	o	
... lv 2	o	o	o	o	
... lv1					
v ... emil group	o	o	o	o	o
v ... hair	o	o	o	o	o
... hair shade	o	o			
v ... Face	o	o	o	o	o
... ear lines	o	o			

## A quick reminder about adapting illustrations

The creation of your FPB begins with an original project or a book to be adapted. If the illustrations are not vector-based, they must be converted by redrawing the entire design. For the first level of visual complexity, the image is reproduced as faithfully as possible, but is still adapted with a few simplifications and reinforced contours.



*Converting a raster image to a vector image*

For more information on adaptation, please refer to the [Practical Guide](#).

## FPB example: *Emile wants a bat*

The aim of FPB is therefore to enable variations corresponding to five levels of visual complexity to be created for each illustration. The characteristics of these levels should be adapted according to the chosen title.



V1

- Clean lines, rarely interrupted
- Simple background textures allowed
- Shadows are shapes
- Clear outlines



V2

- Remove shadows
- Remove background textures
- Remove unnecessary objects
- Simple details are permitted

\*New layout for the environment\*



V3

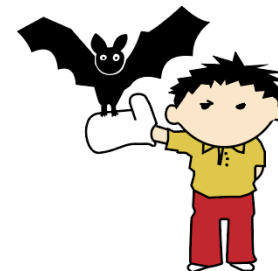
- Remove perspective from the image
- Move background objects
- Remove details that add depth
- Some lines inside objects are allowed

GCD example: *Emile wants a bat*

V

4

- Remove the environment
- Only the most important elements are retained
- Remove additional details



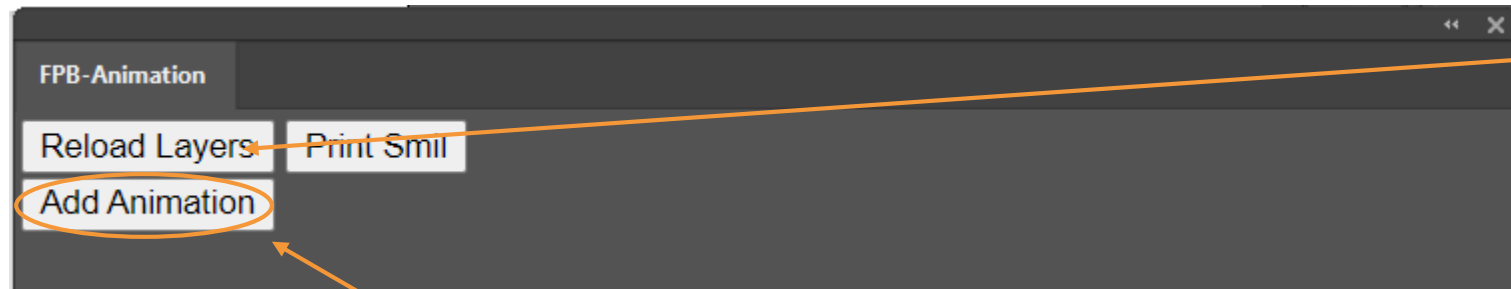
V5

- Maximise contrast (you can use this [website](#) to help you) - remove outlines where necessary
- Remove all details that are not necessary for identifying the object
- You can separate objects if necessary (*e.g. the head and body of the bat*)



## The FPB-Animation extension

To create animations, open the FPB-Animation extension:



**Reload Layers** will allow you to reset the layers in case of incorrect display.

Click on **Add Animation** to create an animation.

## The FPB-Animation extension

When you add an animation, you can choose between four different options.

When the animation starts → Start: as soon as the Play button is activated. Otherwise, before or after another existing animation.

The screenshot shows the FPB-Animation interface. At the top, there are buttons for 'Reload JS', 'Reload Css', 'Reload Layers', and 'Print Smil'. Below these is a table with columns: Name, Type, Layer, Direction, Dur, Start, Del, and Rep. The first row is 'Anim 1'. The 'Layer' column shows 'Layer 1 2', 'Direction' shows 'Forward', 'Dur' shows '0.5', 'Start' shows 'Start', 'Del' shows '0', and 'Rep' shows '1'. To the right of the table are two buttons: a red square with a minus sign and a blue square with a checkmark. A dropdown menu is open under the 'Add Anima' button, showing options: Path, Transform, Alternate, and Sound. Annotations with arrows point to various elements: 'The four options' points to the dropdown menu; 'Layer/sublayer on which the animation will act' points to the 'Layer' column; 'Animation duration in seconds (e.g. 0.5 = 1/2 sec)' points to the 'Dur' column; 'Forward or backward' points to the 'Direction' column; 'Delay between clicking the Play button and the start of the' points to the 'Start' column; 'Number of animation repetitions' points to the 'Rep' column; 'Delete the animation' points to the red minus button; and 'Make the animation active' points to the blue checkmark button. A text box at the top right explains the 'Start' option: 'When the animation starts → Start: as soon as the Play button is activated. Otherwise, before or after another existing animation.'

Name	Type	Layer	Direction	Dur	Start	Del	Rep
Anim 1		Layer 1 2	Forward	0.5	Start	0	1

Annotations:

- The four options (points to the dropdown menu)
- Layer/sublayer on which the animation will act (points to Layer)
- Animation duration in seconds (e.g. 0.5 = 1/2 sec) (points to Dur)
- Forward or backward (points to Direction)
- Delay between clicking the Play button and the start of the (points to Start)
- Number of animation repetitions (points to Rep)
- Delete the animation (points to the red minus button)
- Make the animation active (points to the blue checkmark button)

## FPB-Animation: Path

The **Path** animation allows you to select an object and move it along a path that you have drawn using the Pen tool.

The screenshot shows the FPB-Animation interface with the following settings for 'Anim 1':

- Type:** Path
- Layer:** Layer 1 2
- Direction:** Forward
- Dur:** 0.5
- Start:** Start
- Del:** 0
- Rep:** 1

Annotations and their explanations:

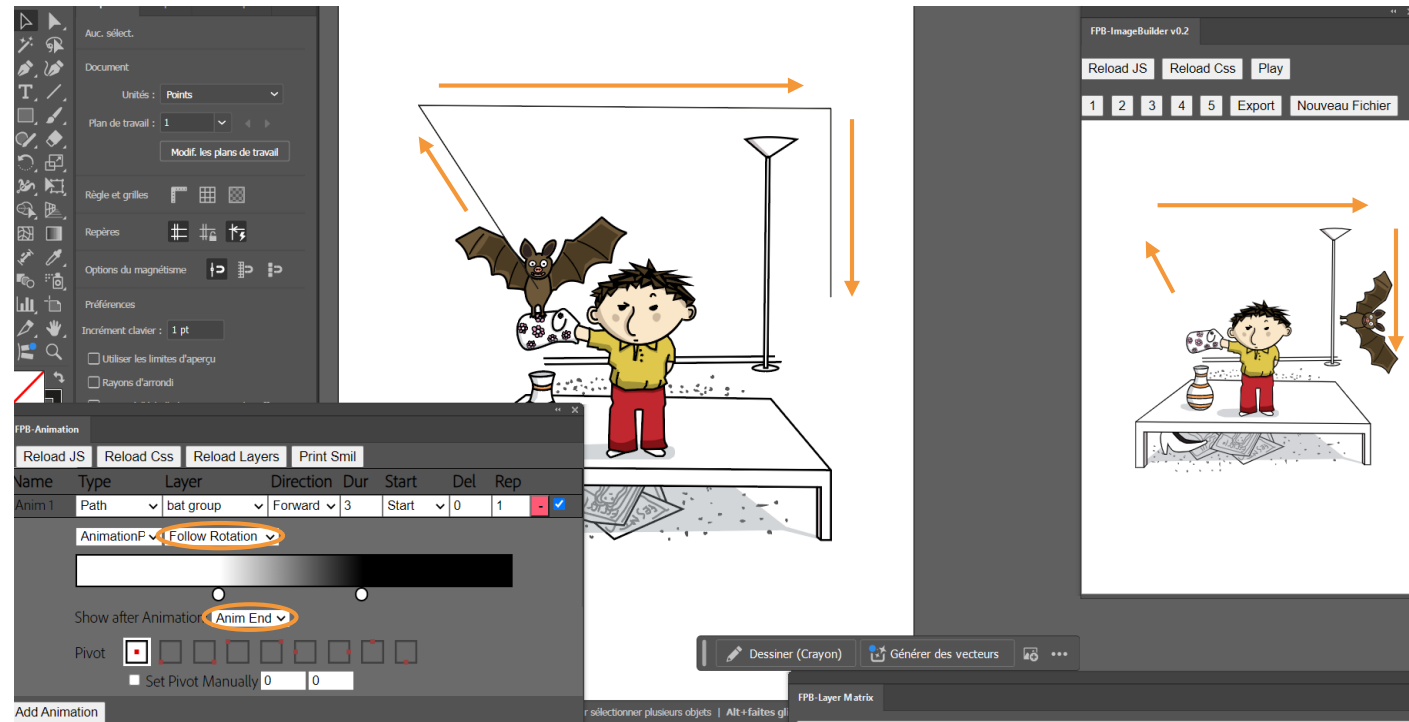
- Sublayer containing the path outline:** Points to the 'Layer 1 2' dropdown menu.
- The selected object rotates according to the path taken or not:** Points to the 'Follow Rotation' dropdown menu, which has options: 'Follow Rotation', 'Follow Rotation', and 'Dont Follow'.
- Before: the object returns to its initial position at the end of the animation:** Points to the 'Show after Animation' dropdown menu, which has options: 'Before', 'Before', and 'Anim End'.
- Or Anim End: the object remains where it has reached:** Points to the 'Anim End' option in the 'Show after Animation' dropdown menu.
- Pivot:** Points to the 'Pivot' checkbox and the 'Set Pivot Manually' input fields (0, 0).

This command can be used on **Path**, **Scale** and **Rotate** animations. It allows you to select the point on the object from which the animation will act.



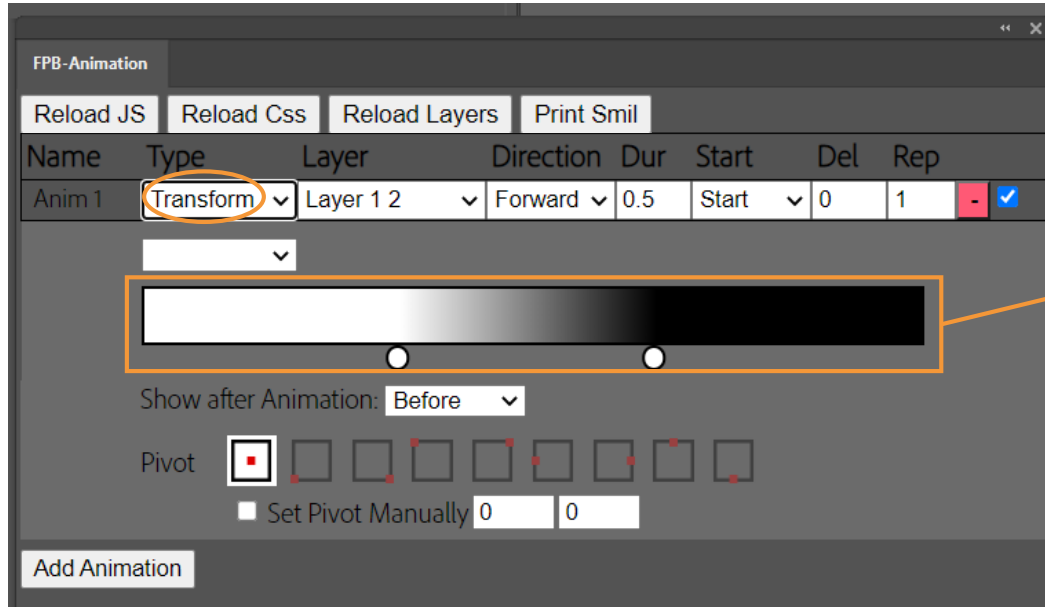
## FPB-Animation: Path

Example of an object that remains in the position it has reached and whose rotation follows the curves of the path.

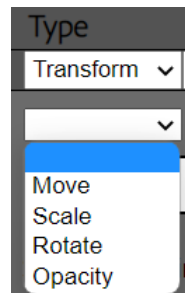


Remember to make your path transparent once it is complete so that it does not appear in the final rendering.

## FPB-Animation: Transform

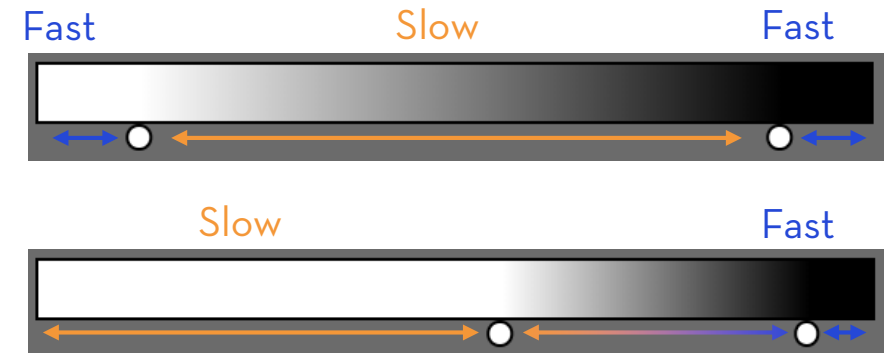


This scale allows you to adjust the pace of the animation: the more an area is stretched, the slower it is. Conversely, the more it is reduced, the faster it is.



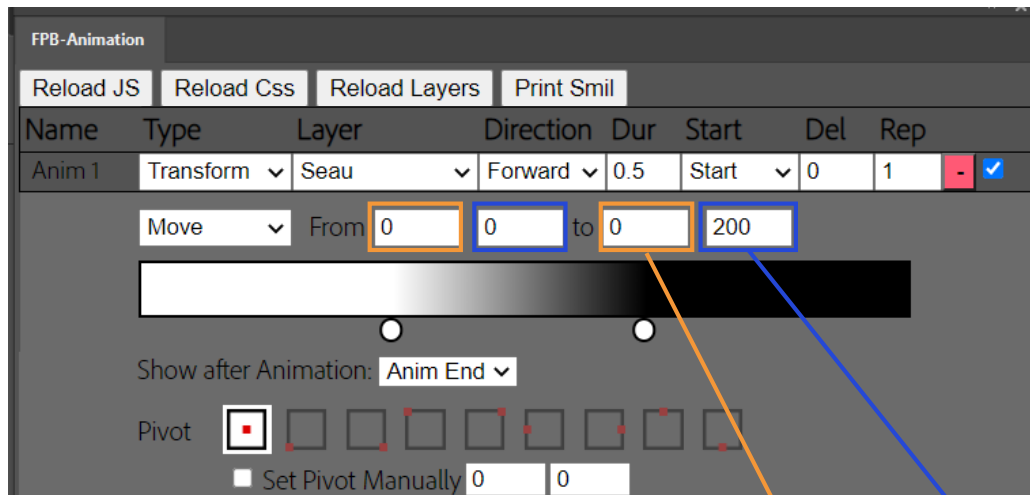
You can choose between four different actions.

E.g.  
:



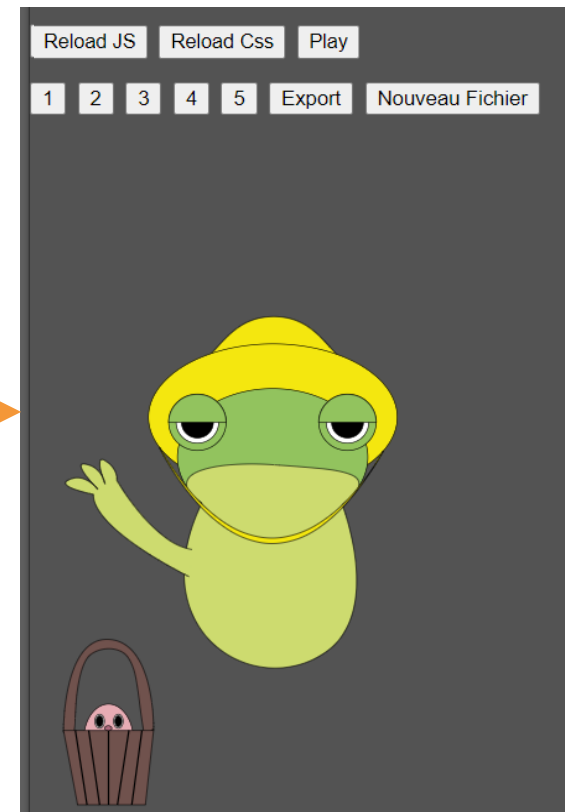
## FPB-Animation: Transform - Move

The **Move** action allows you to select an object (Layer) and move it from one point to another.



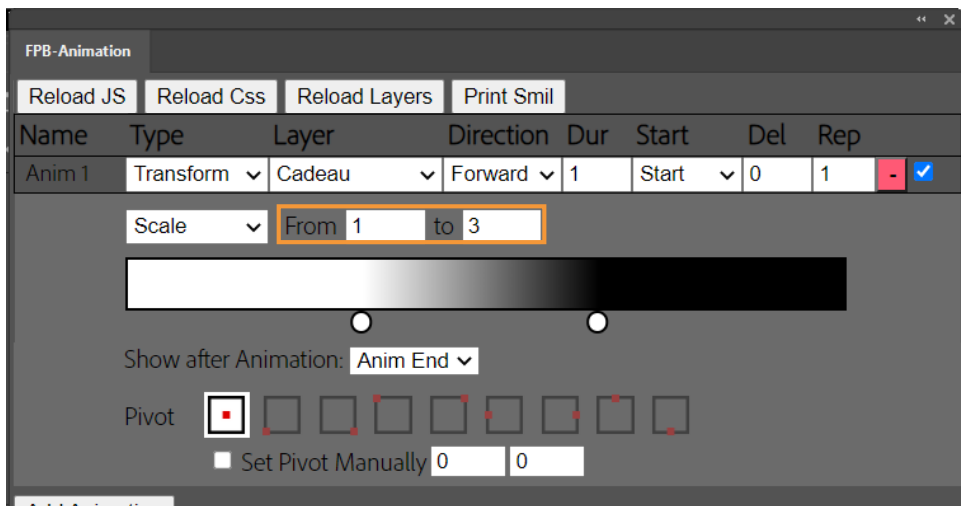
"From: 0; 0" corresponds to the initial location of the selected element.

Abscissa; Ordinate  
X; Y



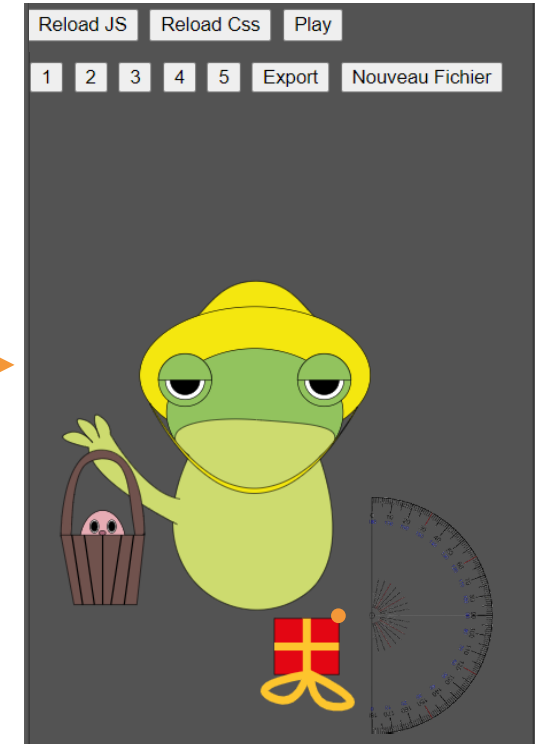
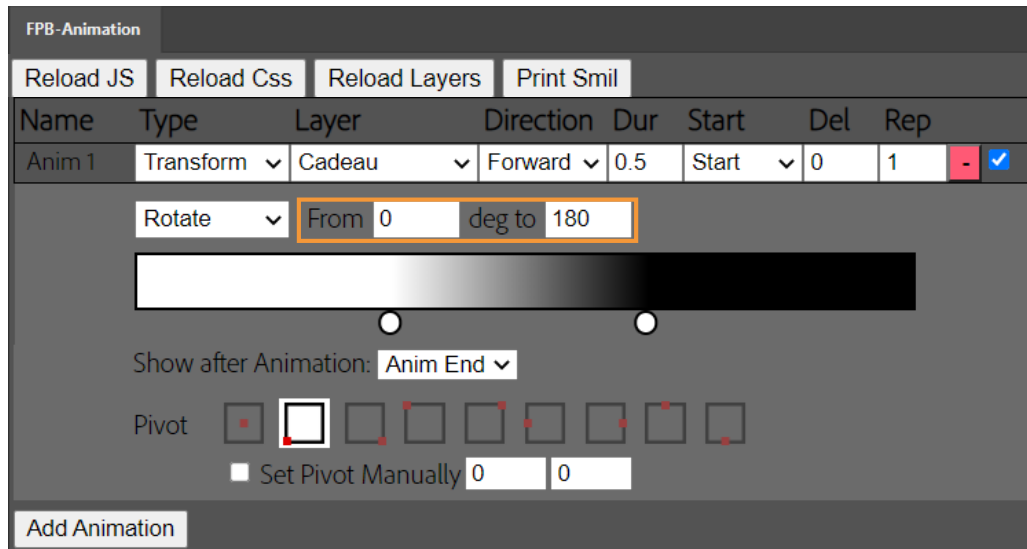
## FPB-Animation: Transform - Scale

The **Scale** action allows you to select an object (Layer) and enlarge it.



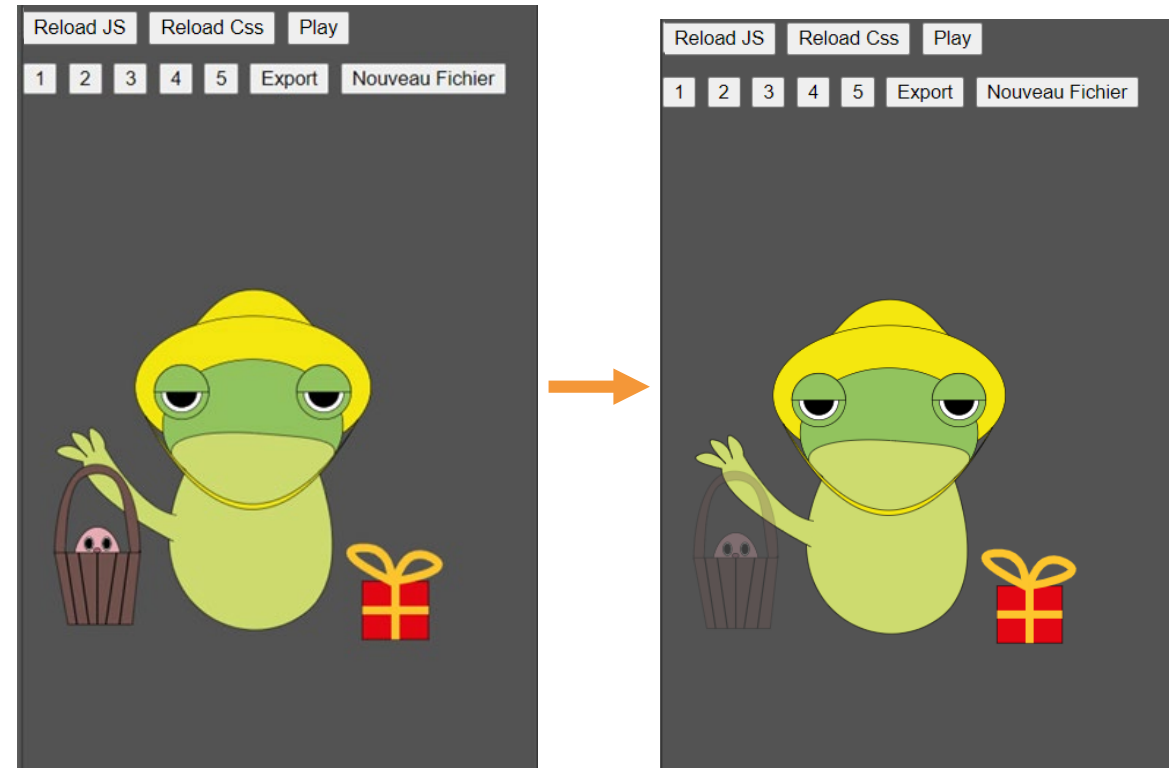
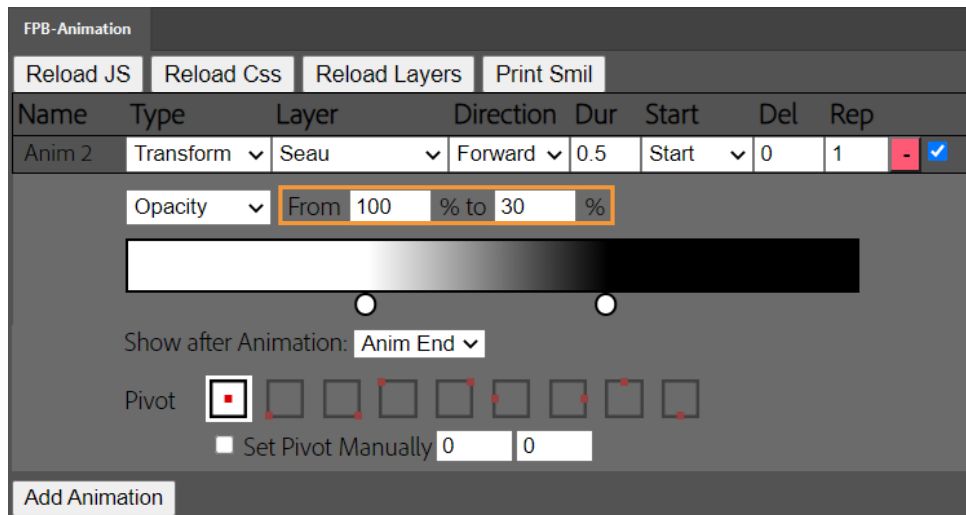
## FPB-Animation: Transform - Rotate

The **Rotate** action allows you to select an object (Layer) and rotate it to the desired angle.



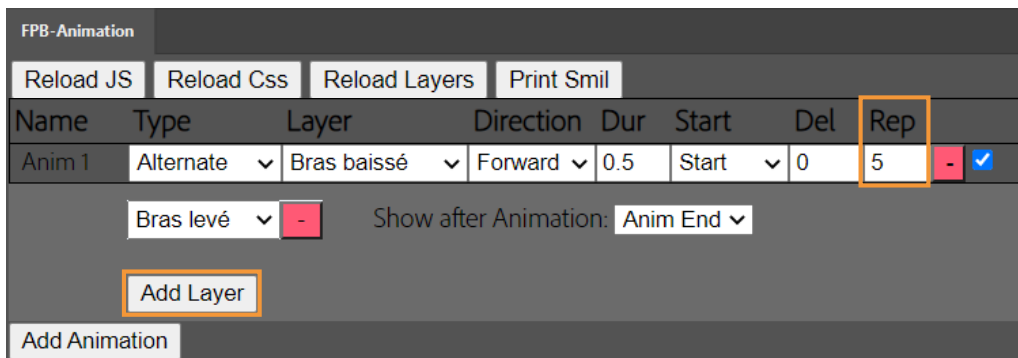
## FPB-Animation: Transform - Opacity

The **Opacity** action allows you to select an object (Layer) and adjust its opacity. This allows you to make it appear or disappear as you wish.



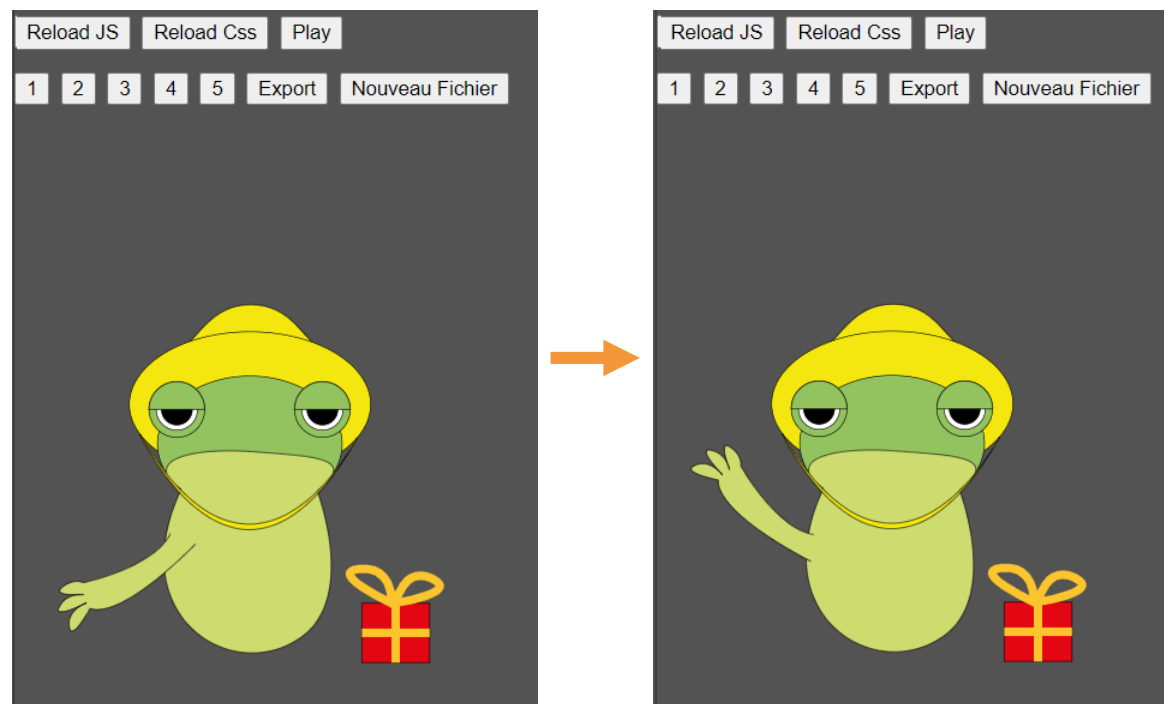
## FPB Animation: Alternate

The **Alternate** animation allows you to select multiple objects that will alternate over a certain period of time with repetitions (or not).



In this example, we alternate between two layers, which gives the impression of movement in the frog's left arm.

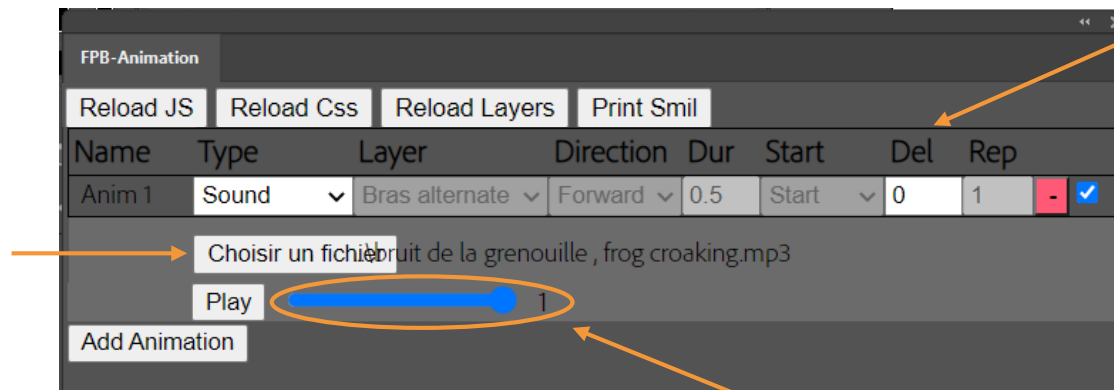
It is possible to add more layers and juggle them all together.



## FPB-Animation: Sound

The **Sound** animation allows you to add sound effects or a soundtrack to your illustration. However, the settings are limited: the audio duration will be applied and can only be delayed using the Delay (in seconds) setting.

Import your audio file

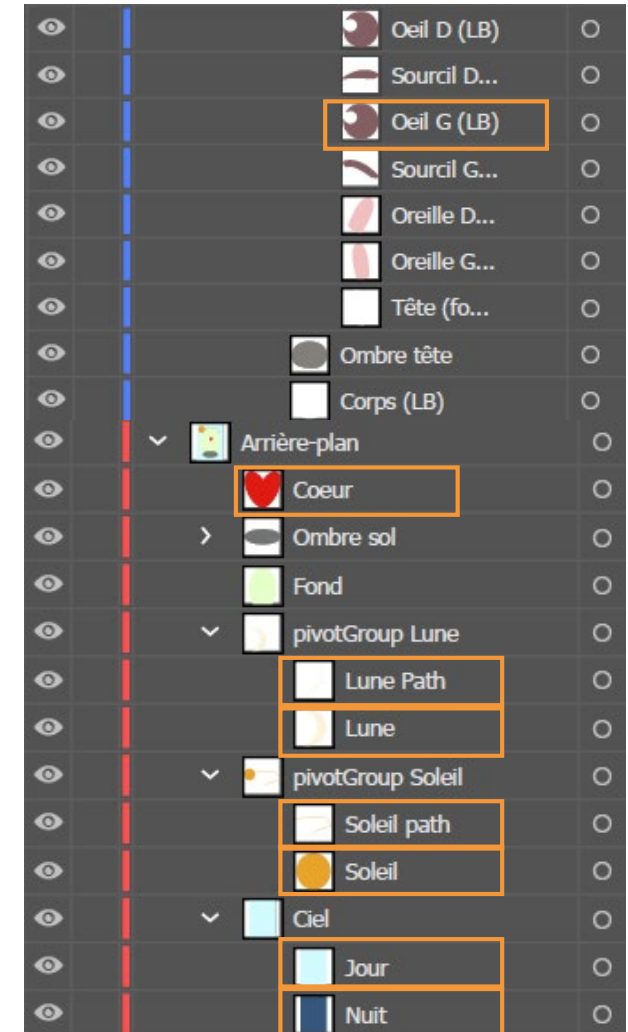
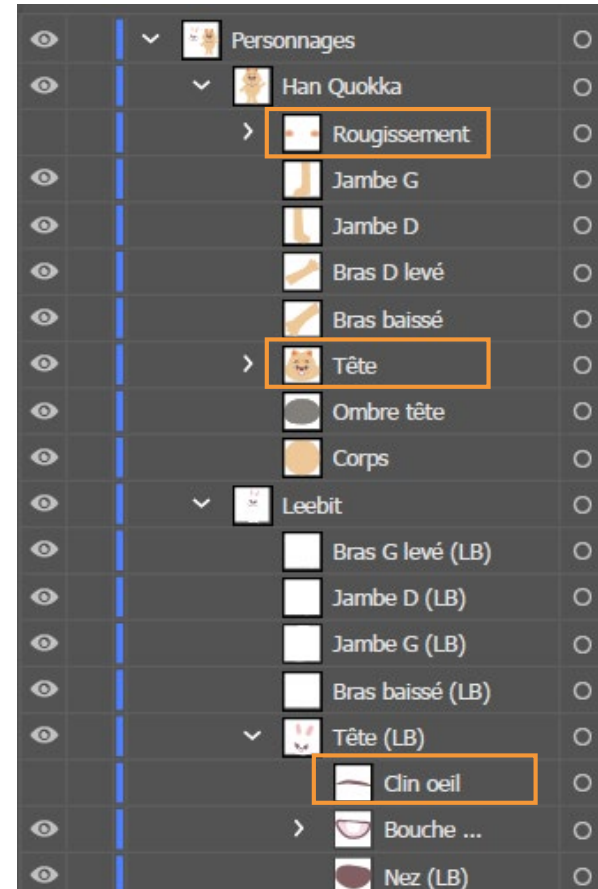
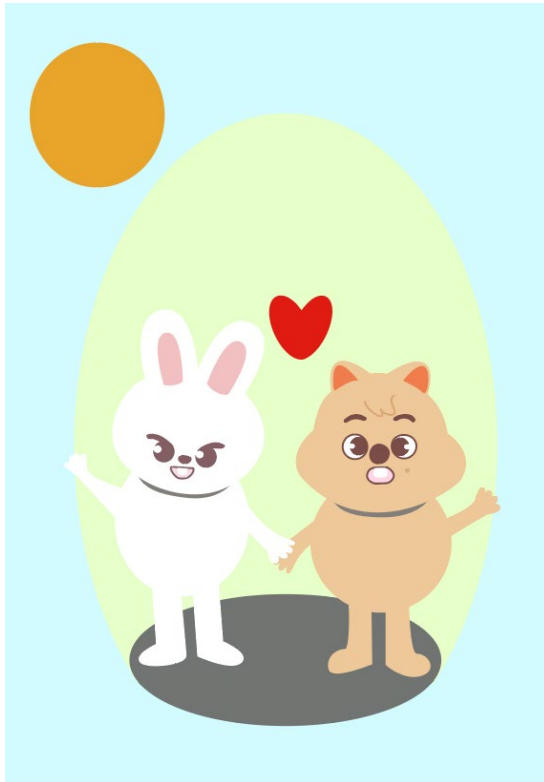


Adjust the volume



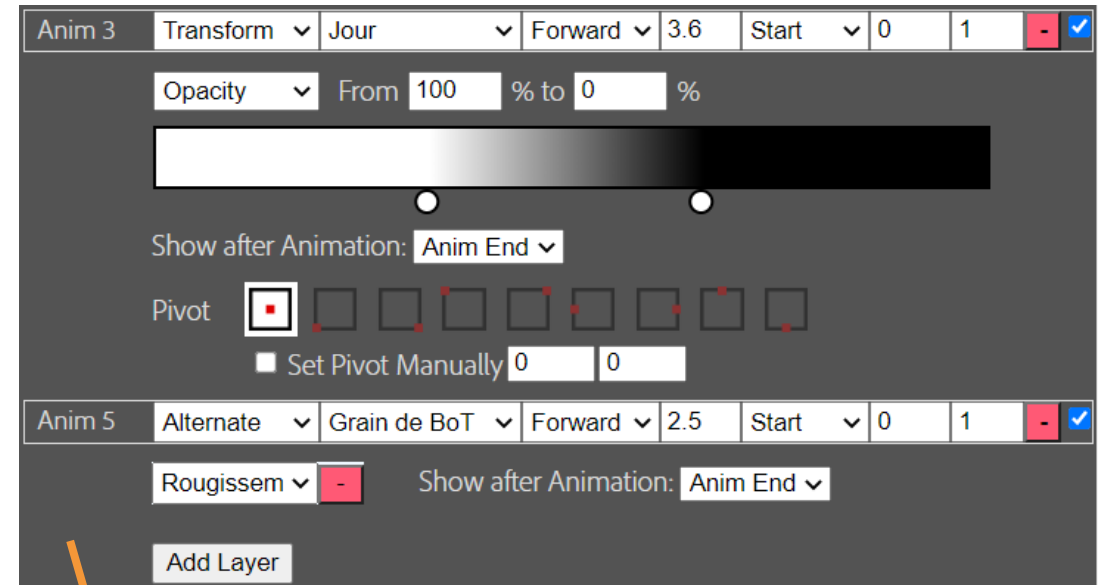
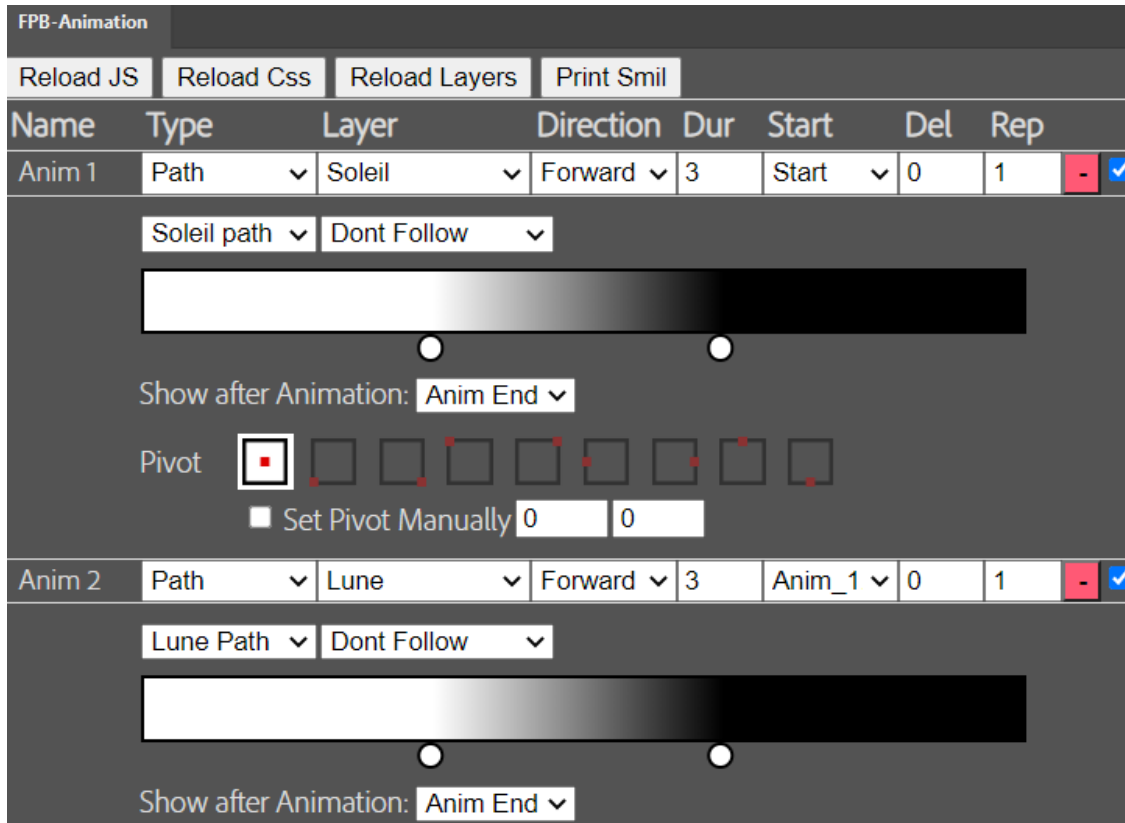
## FPB-Animation: Combination of animations

Layers used for the example and initial illustration.



## FPB-Animation: Combining animations

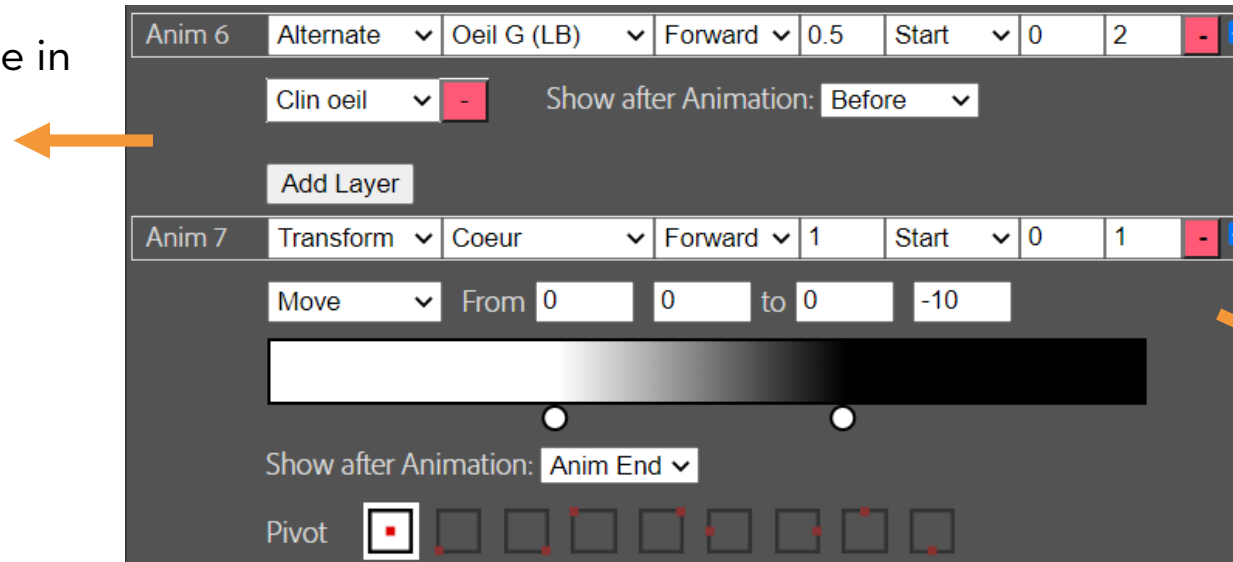
Animations can be combined and layered if they are relevant to the child's understanding.



The mole disappears and is replaced by redness within two and a half seconds.

## FPB-Animation: Combining animations

The rabbit blinks twice in half a second

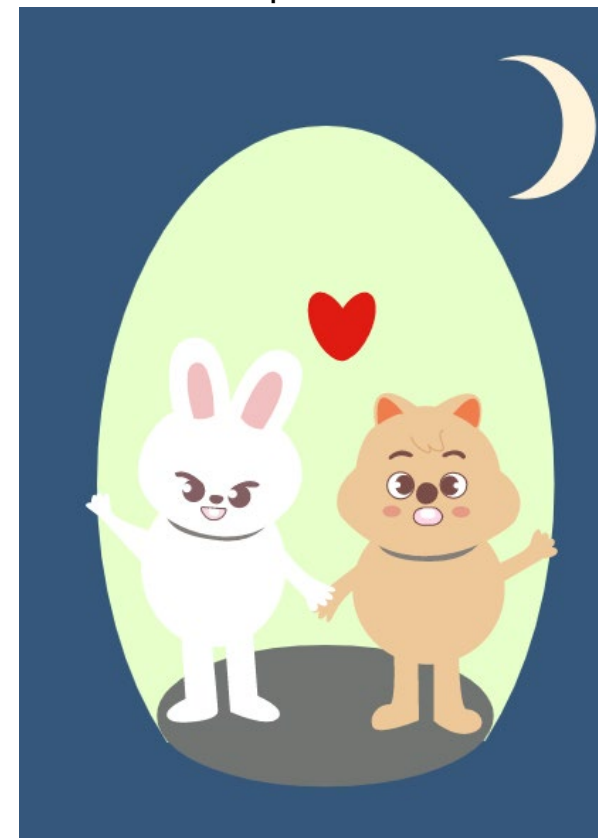
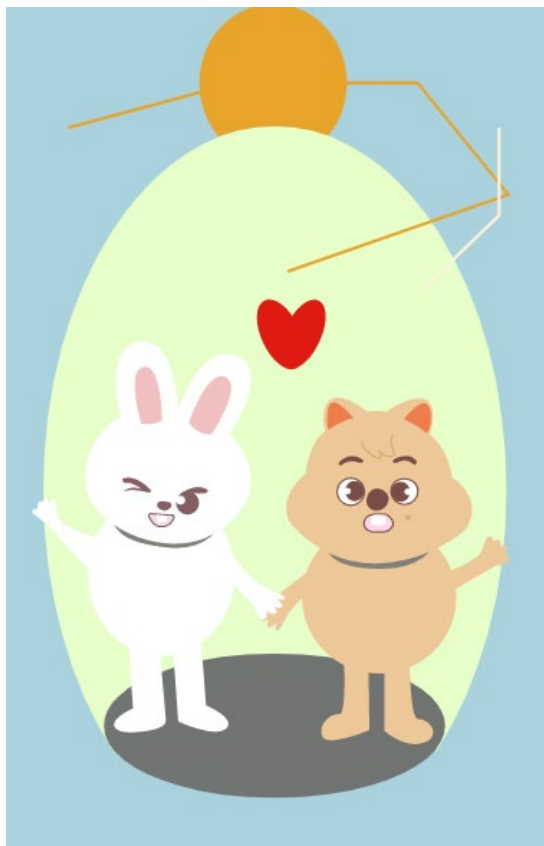


The heart rises by 10 in one second

On the next slide, the paths for the Path animation have been made visible for a better understanding of the animation.

## FPB-Animation: Combining animations

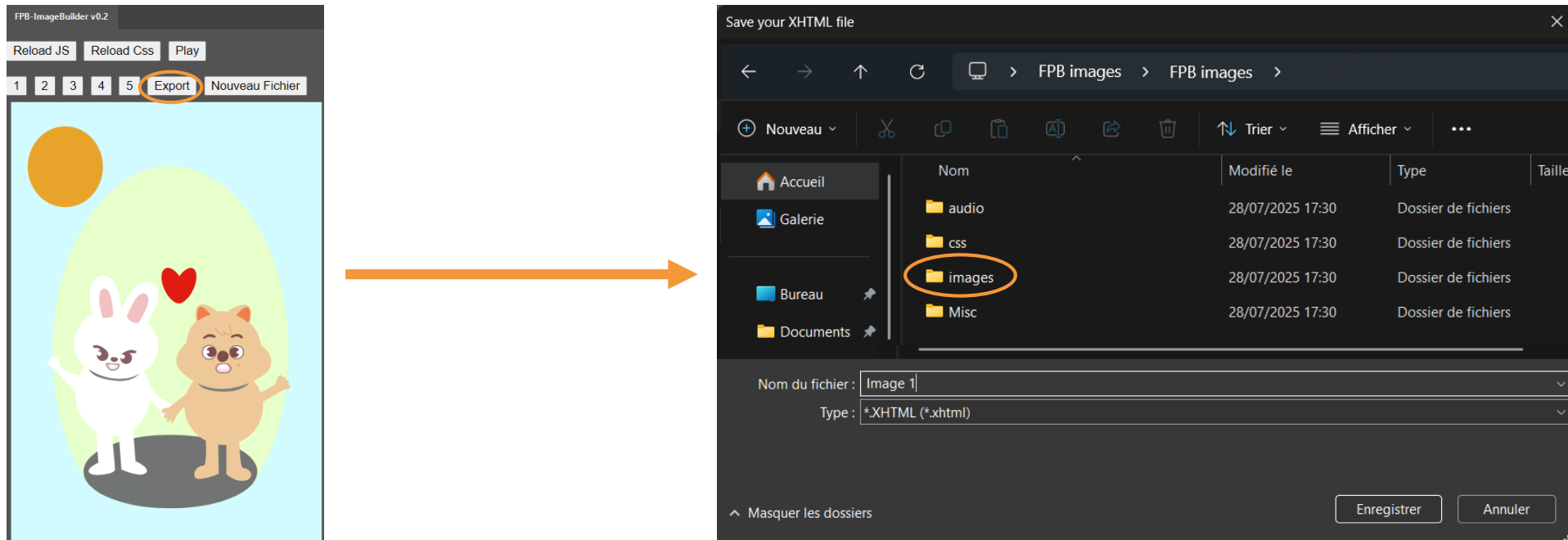
Initial position



Final position

## What next?

Once your illustrations are ready, you can check one last time that all the levels are working by playing them in the **ImageBuilder** window. If you are satisfied with the result, you can then export them one by one. To read them correctly, you must place them in the **FPB images** folder, which you can find and download [here](#).



## And then?

Before inserting them into the builder that creates the EPUB3, you can view your illustrations by clicking on them; they will open in your browser.



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