How to start making pixel art #3

A basic Aseprite animation

Pedro Medeiros Follow
Aug 28, 2018 · 6 min read

This article was supported by Patreon! If you like what I'm doing here, please consider supporting me there :)

Also, this is the part 3 of a series of articles, read the whole series here in the Pixel Grimoire.

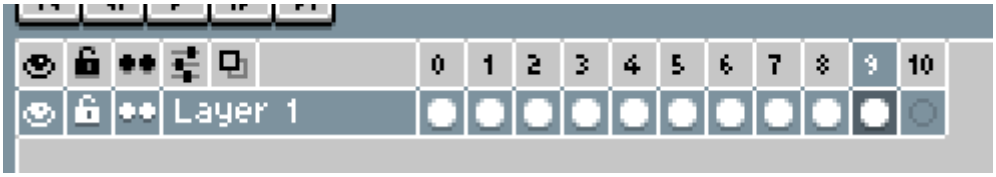
What is an animation?

The breakdown of an animation

An animation is an illusion of movement caused by a sequence of images played in a specific order that shows progressive phases of that motion. Our job as animators is to make that sequence look as convincing as possible.

The timeline

The fist thing we need to understand is the timeline. It's a way to represent multiple images in a single file. Each column is a complete image and has a number assigned to it, we call it a **frame**.



The Aseprite timeline. You can see that the frame 9 is selected and 10 is empty.

The easiest way to create a new frame is to press ALT+B. This will make an empty frame right in front of your currently selected frame, and select it. You can change the selected frame by clicking on it or by pressing the ‘ , ’ and ‘ . ’ keys (look for the ‘<’ and ‘>’ symbols, it’s easier to remember like this.

The preview window

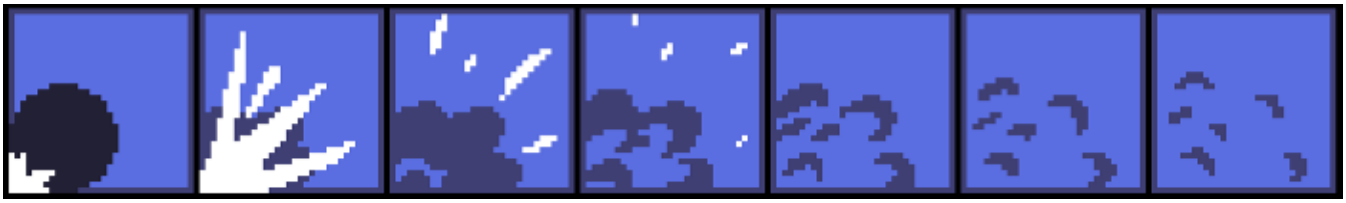
Experiment by drawing some colors on multiple frames and hitting play (*Enter*). You can also preview your animations using the preview window that can be toggled by pressing *F7*.

You are probably thinking “There’s no way I’ll remember all these shortcuts” and that’s OK. Memorizing shortcuts takes some time and muscle memory, but know that mostly everything can be done using only the mouse. When you can’t remember a shortcut look for that command in the menus or in the Aseprite official quick reference.

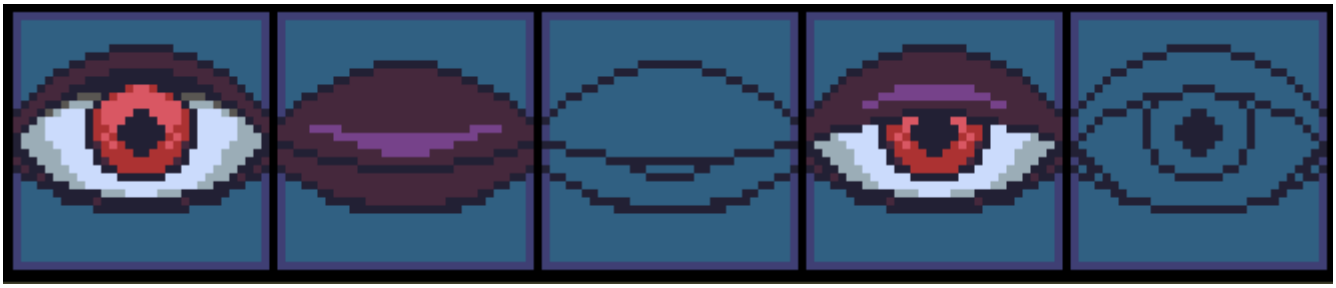
A very simple animation

There are many techniques on how to animate, the order you should draw the frames and how to optimize everything, but for now I’ll try to explain the simplest technique I know: a straight-ahead animation of a bouncing ball.
“Straight-ahead” means we’ll draw one frame directly after the other, as opposed to

drawing all the important poses of the animation first and then the middle ones. Start with a 32x32 file with a palette of your choosing.

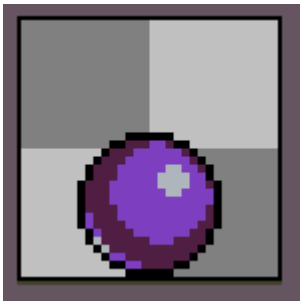


An example of a straight-ahead animation



In a pose-to-pose animation you draw the key frames first and then fill the gaps

The first frame for this animation I call the "*Still*". It serves both as a concept art, to define the style of your animation, and as the resting position of this sequence.



Frame 1 — Still

You need to pay attention to the amount of details you'll be adding to this frame, because the next ones will be following the same style.

After this is done we can duplicate this frame (ALT+N) and just move it upwards 4 pixels. Like this:

Frame 2

And now for the next frames, make it go up 3 pixels, then 2, 1 and let's hold it in place for one frame before reversing it.

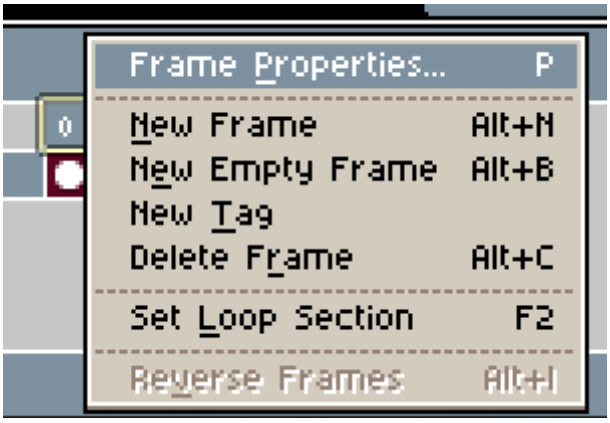
All frames

We made a little bouncing animation! Well, it's not very good yet, but we're going to improve it.

A very simple bouncing animation

Timing

While cleverly using timing is a complex subject and could even have a whole tutorial dedicated to it, I'll focus now on the simple technical aspect of it and let you experiment.



Accessing frame options

So let's add some timing. The ball stops when it hits the ground, waits for a little while and then magically jumps up again. To increase the duration of a frame, **right click** on a frame's number and choose *Frame properties*. Then you can type how long you want the frame to last. Let's try 300 milliseconds for this.

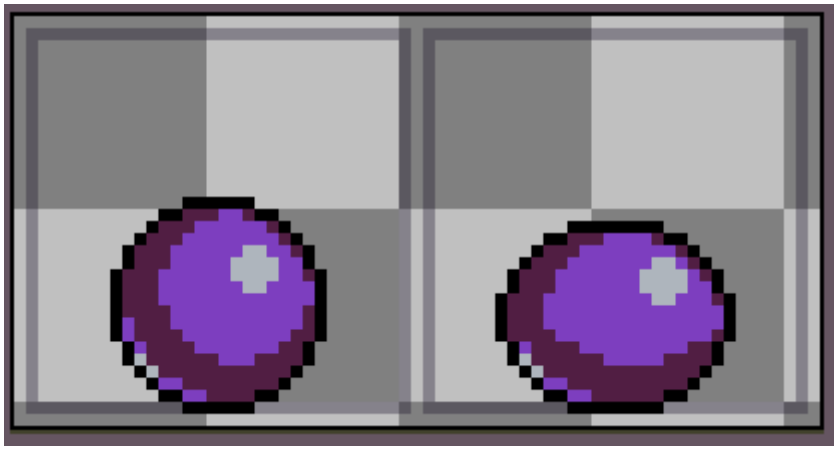
Remember you can also select multiple frames to change their duration at the same time. This can be especially useful to speed up or slow down a whole animation at once.

Squash and Stretch

Here's my old tutorial about squash and stretch, it can be used as a quick reference if you need it

A simple thing we can do here to improve this animation is to add some squash and stretch, a really cool technique to make the movement seem more fluid and natural. It consists in elongating or flattening the moving object in the direction of the movement while keeping the volume.

Let's duplicate the first frame and squash it horizontally while flattening it a little vertically, so we can keep the total volume. Keeping the volume is very important so your object doesn't look like it got smaller or bigger. Of course that's a rule we learn to break as we get more experienced, but for now let's stick to it. This is also called an "anticipation frame" and it's mostly used to make the movement happening on the next frames look more intense.



Squashing to anticipate the jump

Now let's duplicate and change the frame right when the ball hits the ground in a similar way, maybe making it even more exaggerated.

Contact with the ground

The last thing is to stretch vertically (always flattening horizontally) the first frame of the jump and the last frame of the fall, when the ball is at their fastest. And we are done! Let's see our result:

An improved bouncing animation

A bouncing loop, made by removing the still and anticipation frames

Saving the animation

While saving the file in the *.aseprite* format will preserve the animation, you will probably want to export your animation to post it online or to use it in your game.

Online, the easiest way is to save your image as *.gif*, using the *File>Export…* command. Just check the *Export for twitter* if you want to change the last frame's duration to 1/4 of the duration so it loops perfectly even after Twitter converts it to MP4.

When exporting for games you will usually want to save as *.png*, as usual, but the animation will have to be broken down in a sprite sheet or image sequence. To save it as an image sequence, simply export the file to *.png* format with a number in the end of

the file name, like “bounce00.png” for example. This will create multiple files, like “bounce01.png”, “bounce02.png” and so on.

Some game engines will need the file in the sprite sheet format. You don’t need to do that manually, just check *File>Export Sprite Sheet* and play around with the settings, you can change a lot of parameters there.

Now what?

Try experimenting with simple movements!

Next, I would recommend experimenting more with the timeline and to try making other animation tests. You can look on my tutorial gallery and select a tutorial of your interest and try to mimic it.

Another idea is to try the classic beginner’s exercise of making an animated flour sack walking and jumping around. Just keep the resolution and color count low for now, so things don’t get overcomplicated.

Keep reading the part 4 here!

Design Pixel Art Animation Tutorial