INTRODUCTION TO ANIMATE CC (FORMERLY KNOWN AS FLASH)

Introduction
Adobe Animate is a vector based application similar to Illustrator, though it has major differences in the drawing tools. First, however, it’s important to understand that a Flash file (Animate used to be known as Flash) can refer to any of three things. These are:

- SWF, a compact web format. These used to be only playable with the Flash browser plug-in, which could allow malware to be run. SWF files are very powerful and can do serious damage to your computer if intended to do so. For this reason most current browsers will not play SWF files and the format is effectively dead.

- Flash project files, with the extension FLA, that reference all parts of a Flash project; these can only run in Animate itself.

- The creative software itself, which Adobe is using to replace Edge Animate (no longer under development).

Because of the bad publicity surrounding the word Flash, Adobe has renamed the software Adobe Animate CC, replacing the former Edge Animate (which is no longer under active development). The Flash application saves several interactive and animation formats other than SWF. Adobe AIR, for example, does not need a player and is widely used to create mobile applications. The newly added HTML5 export option is also secure and this is the format we will use in DM72.

Starting up
Open Animate (as we’ll call it from now on) and create a new HTML5 Canvas. Animate will, behind the scenes, start to write HTML5 that will allow any current browser to play your animation and respond to any interactive elements. It’s important to note that unlike FLA files no browser plug-in needs to be downloaded and installed. This makes HTML5 less likely to contain malware as it can be inspected visually as well as prevented from executing, if needed, by the browser.
A blank canvas will appear on the screen, along with the Essentials screen layout. Note the Timeline window along the bottom of the screen along with the Properties panel to the right. There is no specific layer panel in Animate, but the stacking of frame sequences in the Timeline is the same thing. Layers in the Timeline window operate the same way as layers in Photoshop, except that they are viewed and controlled only in the timeline.

If you have a relatively low resolution monitor you may not see all the tools in the Toolbar to the extreme right of the screen. There are operation-specific tools at the bottom it’s important to see, so you may need to drag the left edge of the Toolbar slightly to the left to get a double column display. You can then click on Essentials in the top right of the screen and choose New Workspace, then save the new layout with a new name. Animate opens with the previously chosen workspace. Developing a comfortable, intuitive, efficient workspace is important, particularly if you have less than two monitors to work on. Laptop users can always plug a second monitor into the projector output at the back; desktop users may need to install a new graphic card.

Click on the Rectangle Tool (or use the key shortcut R). Notice that the information in the Properties panel, which was formerly about the canvas, now changes to show the properties of the rectangle you are about to draw.
This is a lot of information, and more than we’re used to in Photoshop or Illustrator. Let’s look at a few of them.

First, we have the name of the tool we’re using. Below that, because it’s the rectangle tool, there is Fill and Stroke. This looks familiar from Illustrator (there is no stroke active on the image to the left, as it is white with a line through it; the fill is blue) but there is also the notification that Object drawing mode is off. When object drawing mode is off, the fill and the stroke are independent of each other and can be edited separately as we’ll see in a moment. This is a change from Illustrator. In addition, when stroke lines cross each other, they automatically split into separate parts defined by the crossing point. The same is true of fills - unless they are the same color, in which case when one is dragged over the other and deselected they become one fill object. When Object drawing mode is on, the fill and stroke are locked together, as in Illustrator.

Below the Object drawing mode selection box we have a familiar Stroke width slider and value box, but under that we have Style. This allows us to choose from a selection of brushes and present dotted and dashed styles.

There is a Width drop-down menu, which offers options on how the stroke should be drawn. Choose the top - narrow start and end - and draw a rectangle with a green stroke and a blue fill partly on and partly off the canvas.

You should get something like the image below.

Note how the stroke width option is applied from top left, in the same way that the XY location of any point on the screen in Animate is calculated from top left. Now hit Control-Enter to view the HTML code in your default browser. You’ll see that the part of the image that is off the canvas is not shown. However it is visible on the pasteboard in Animate - a change from Photoshop, where items on the pasteboard are invisible.
Click the Selection tool (key shortcut V) at the top of the toolbar. Hold your cursor over one of the edges of your rectangle and you’ll see the cursor has a curved line next to it. Hold down the mouse button and drag to change the edge. Now hold it over one of the corners of the rectangle until the curved line changes to a mirrored L shape. Drag the corner of the rectangle around. Double click on the stroke to select it all, and drag it away. Note that the cursor now has a four-headed arrow. Single click to select just one part of the stroke (note how the style of the stroke changes) and pull that away from the rest.

Now click on the fill and drag it around, but don’t deselect it. Pull it over the stroke and see how the stroke remains unchanged when the fill is moved again. But then pull the fill over the stroke and deselect it. Reselect it and drag it away - the fill has cut the stroke where it overlapped.

This is a basic principle of drawing in Animate. Strokes divide themselves when and where they overlap. Separate elements of a stroke can be individually selected and moved. Fills also cut strokes, but they have to be deselected to do this.

Another principle is that fills can combine to form a new shape. Draw a new rectangle with the same properties as the first one, pull the fill away, and drag it over the other fill shape. Note how as long as it remains selected you can move it around without it affecting any other fill or stroke. But now, with the two fills overlapping, deselect it. When you select it again, the same color fills have combined.

But now make a new rectangle with a different color fill. Again, select just the fill, and drag it over the other fill. Deselect it. Then drag it away, and it has not combined with the other fill, but has cut the shape of the overlap away.

This is a very versatile way to create interesting shapes and strokes, quite different to both Photoshop and Illustrator. We can have some fun with this - particularly since Animate allows us to include interactive elements such as buttons for start/stop, conditional choices, and inputting information.

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