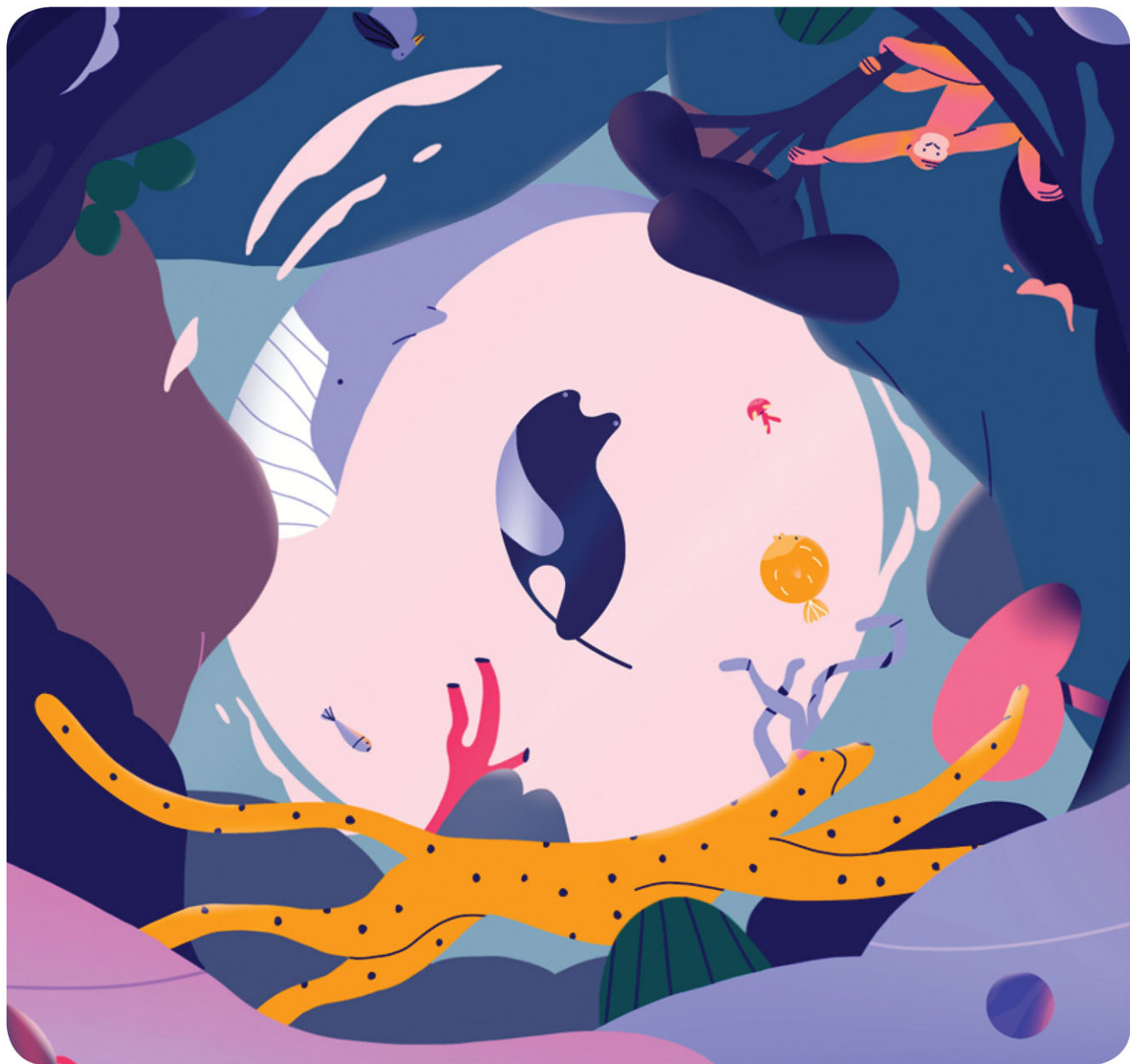# An Adobe Animate

2022
release

Adobe

Classroom in a Book®

The official training workbook from Adobe

Russell Chun

An **Adobe Animate** **2022** release
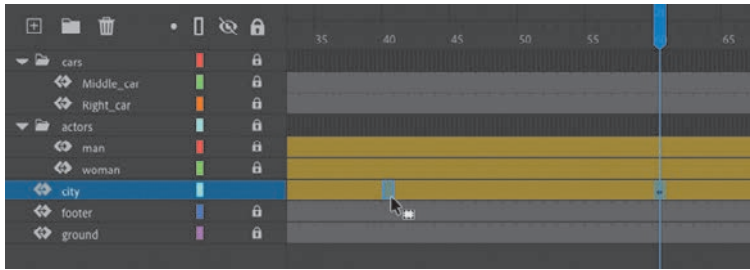
![Adobe logo]

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2 Drag the keyframe to frame 40.

Now, because the last keyframe in the motion tween is reached earlier in the animation, the motion of the cityscape proceeds more quickly.

Span-based vs. frame-based selection

By default, Animate uses frame-based selection, which means you can select individual frames within a motion tween. However, if you prefer to click a motion tween and have the entire span (the beginning and end keyframes and all the frames in between) be selected, you can enable Span Based Selection from the Frame View menu in the upper-right corner of the Timeline panel (or you can Shift-click to select the entire span).
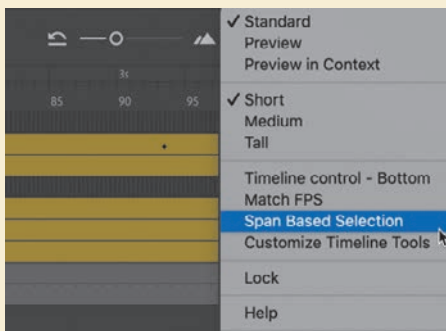
With Span Based Selection enabled, you can click anywhere within the motion tween to select it, and move the whole animation backward or forward along the timeline as a single unit.

If you want to select individual keyframes while Span Based Selection is enabled, hold down Command/Ctrl and click a keyframe.

Moving keyframes vs. changing time in tween spans

Managing the timing of your animation by moving keyframes and stretching or squashing tween spans can sometimes be frustrating because you will get different outcomes depending on what you've selected on the timeline and how you drag those selections.

If you want to simply move the location of a keyframe within a tween span, make sure that only a single keyframe is selected and that the tiny box appears next to your pointer as you begin dragging the keyframe to a new location.

If you want to select individual keyframes while Span Based Selection is enabled, hold down the Command/Ctrl key and click a keyframe.

Consider the following animation, where a ball moves from the left side of the Stage to the bottom edge and then to the right side, making a figure "V." On the timeline, three keyframes mark the three positions of the ball.
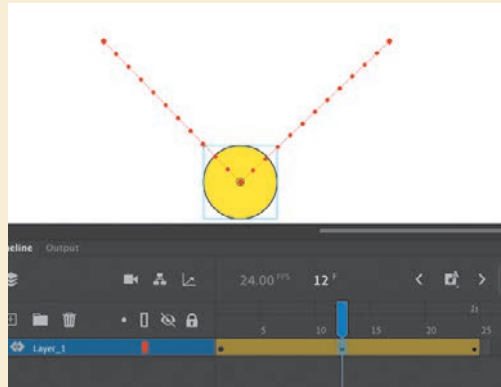

Moving the middle keyframe changes the timing of when the ball hits the bottom of the Stage.
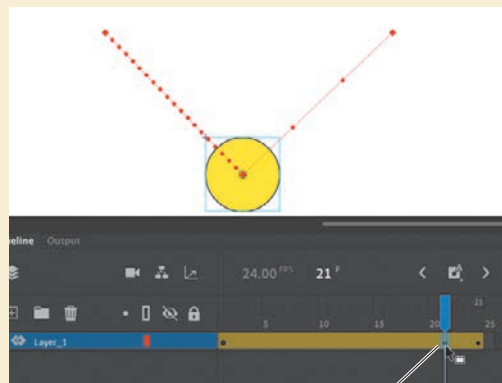
Keyframe moved

When you select a span of frames within a tween, you can compress or expand its duration by dragging the selection when the double-headed arrow appears near the right edge of the selection. A black flag appears indicating when the amount of compression or expansion is a multiple of the original length (x0.5, x2, x4, etc.).

Frames expanded (twice as much)

Frames compressed (half as much)
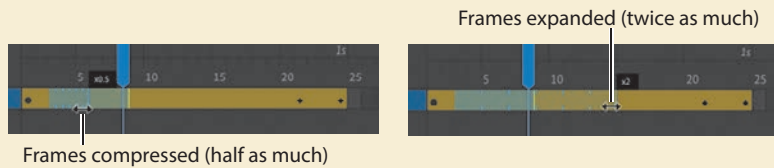
Understanding frame rate

The speed of your animation is tied to the frame rate of your document (shown in the Properties section of the Properties panel with the Document tab selected), but do not modify the frame rate to change the speed or duration of your animation.

The frame rate determines how many frames on the timeline make up 1 second of time. The default is either 30 or 24 frames per second (fps). The seconds are marked on the timeline. Frame rate is a measure of how smooth an animation appears—the higher the frame rate, the more frames there are to show the action. Animations at slower frame rates appear choppy because there are fewer frames to show the action. Slow-motion videography depends on very high frame rates to capture action that happens very quickly, such as a speeding bullet or a falling water droplet.

If you want to modify the overall duration or speed of your animation, don't change the frame rate. Instead, add frames to, or delete frames from, your timeline.

If you want to change the frame rate but keep the overall duration constant, select the Scale Spans option in the Properties panel before you modify the frame rate.
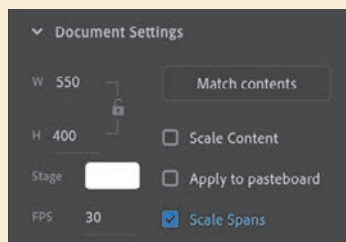
Animating transparency

In the previous lesson, you learned how to change the color effect of any symbol instance to change the transparency, tint, or brightness. You can change the color effect of an instance in one keyframe and change the value of the color effect in another keyframe, and Animate will automatically display a smooth change, just as it does with changes in position.

You'll change the cityscape in the beginning keyframe to be totally transparent but keep the cityscape in the ending keyframe opaque. Animate will create a smooth fade-in effect.
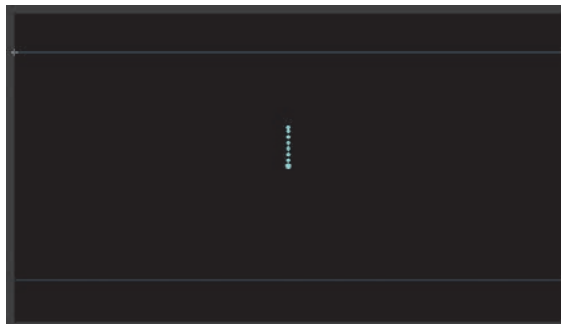
**1** Move the playhead to the first keyframe of the motion tween (frame 10).
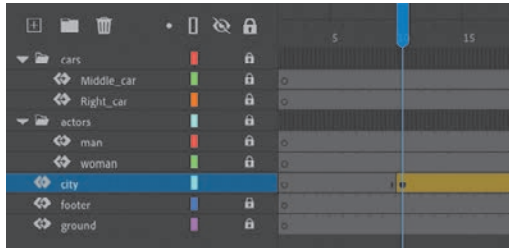
2 Select the cityscape instance on the Stage.

3 In the Color Effects section of the Properties panel, choose Alpha from the Style menu.

**4** Set the Alpha value to **0**%.
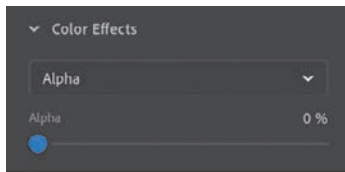
The cityscape instance on the Stage becomes totally transparent, but you can still see the blue bounding box around it.

5 Move the playhead to the last keyframe of the motion tween (frame 40).
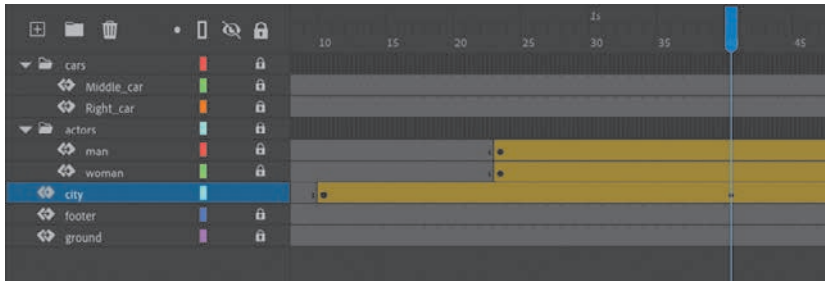
6 Make sure that the cityscape instance on the Stage is still selected.

7 In the Properties panel, in the Color Effects section, set the Alpha value to **100**%.

The cityscape instance on the Stage becomes totally opaque.
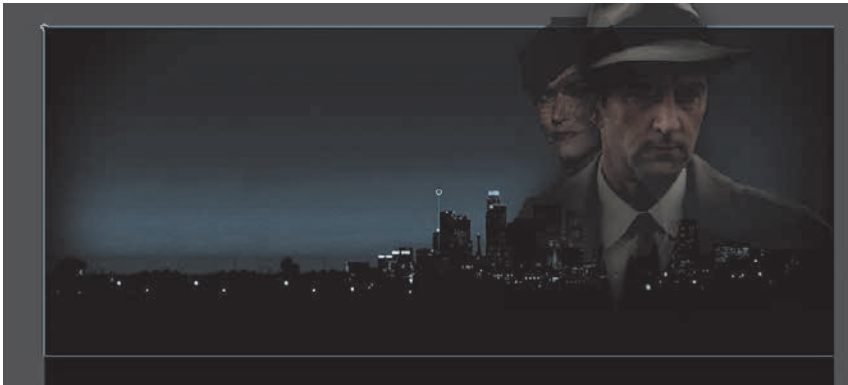
8 Preview the effect by choosing Control > Play (or pressing Return/Enter).

Animate interpolates the changes in both position and transparency between the two keyframes.

Animating filters

Filters, which give instances special effects such as blurs and drop shadows, can also be animated. You'll next refine the motion tween of the actors by applying a blur filter to one of them to make it appear as if the camera changes focus. Animating filters is no different from animating changes in position or changes in color effect. You simply set the values for a filter at one keyframe and set different values for the filter at another keyframe, and Animate creates a smooth transition.

● **Note** Filters can be applied, but not animated, in an HTML5 Canvas document.

1 Make sure that the actors layer folder on the timeline is visible.

2 Unlock the woman layer.

3 Move the playhead to the beginning keyframe of the motion tween in the woman layer, at frame 23.
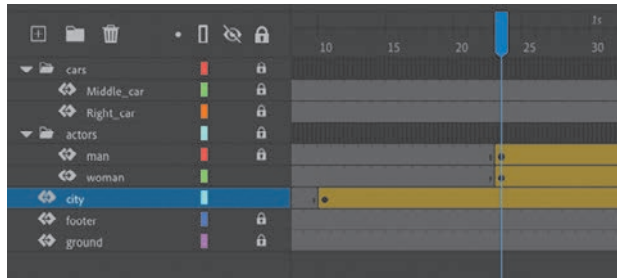
4 Select the instance of the woman on the Stage. You won't be able to see her because she has an alpha value of 0% (totally transparent). Click the upper-right side of the Stage to select the transparent instance. Or click frame 23 in the woman layer in the timeline to highlight it, then click the Object tab in the Properties panel.
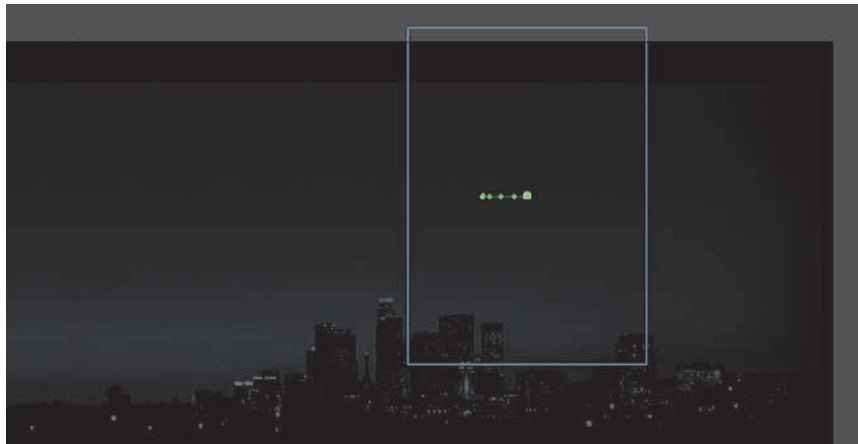
5 In the Properties panel, click the Add Filter (+) button in the Filters section, and choose Blur from the menu to add a blur to the instance.