

Flash: Creating a Web Animation

Objectives

Using Flash, create a basic animation for your web page.

1. Define essential Flash animation terms including: **keyframe**, **shape tween** and **motion tween**.
2. Define and identify the Flash **Timeline**.
3. List the three steps used to create an animation.
4. Explain the process used to create a graphic symbol.
5. Demonstrate the steps used to publish a Flash movie.

Introduction

Today's web sites are interactive. They consist of text, graphics, animation, audio and video. A popular application for creating rich interactive web pages is Macromedia® Flash. In this session, we will explore the Flash Timeline, basic animation, symbols and publishing a movie for the web.

About Flash

As mentioned earlier, Flash is an authoring tool for creating multimedia web sites. Flash uses a plug-in to embed its content into a web page. A **plug-in** is a piece of software that adds functionality to a web browser. According to Macromedia, more than 98 percent of web users can receive Flash content.

Animation

Flash provides two methods for creating an animation on the Timeline: **frame-by-frame** and **tween**. Frame-by-frame animation is achieved by creating an image in every frame. In tween animation, you create starting and ending frames and Flash creates the frames in-between.

Terms to know

Timeline – The Timeline shows layers and frames. This is where content is organized and animation happens.

Stage – Workspace for creating and placing all movie content.

Frame – A cell on the Timeline that represents a still image.

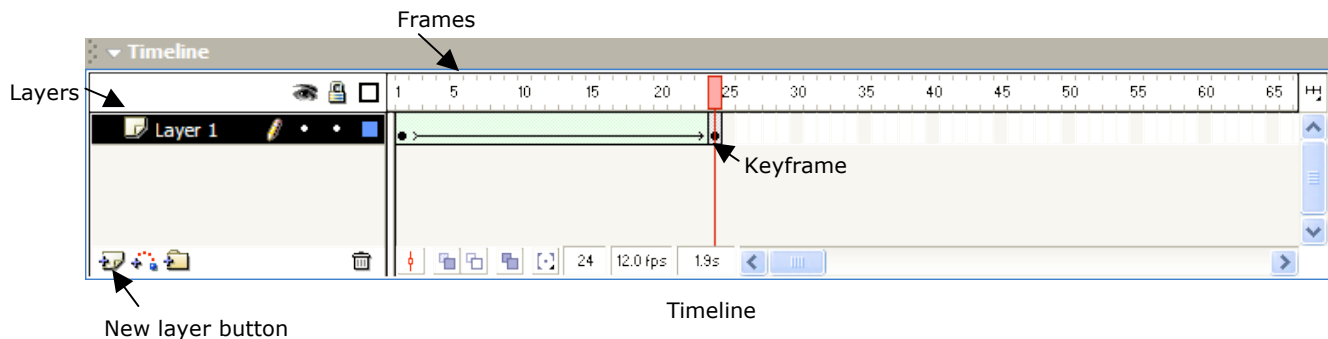
FPS – The number of frames played per second.

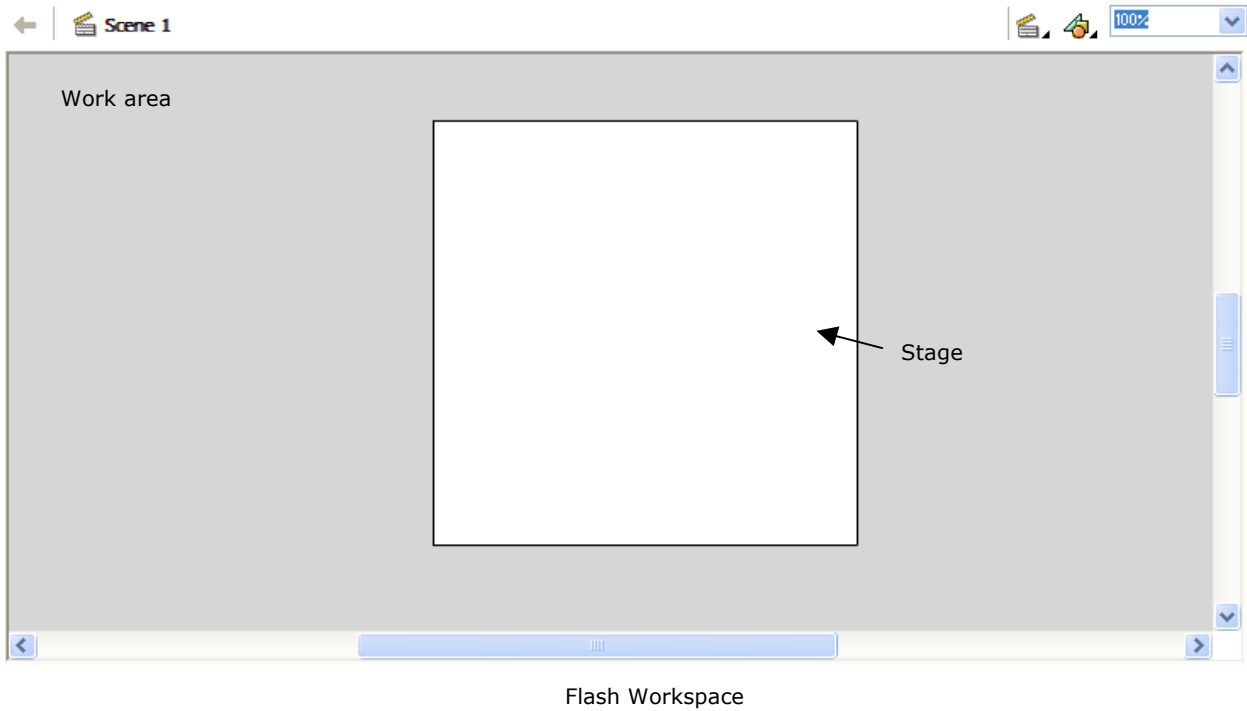
Keyframe – A frame that defines a change in animation.

Shape tween – An animation that transforms one shape or object into another.

Motion tween – An animation that gives the appearance of objects in motion.

Layers – Rows on the Timeline that organize and allow stacking of items on the stage.





Graphic symbols

Symbols are an important part of Flash. There are three types: graphic, button and movie clip. We will focus on graphic symbols. **Graphic symbols** are best for images and animations. Converting an image to a graphic symbol allows you to use a motion tween and reduce the movie download time.



Notes

Creating a tween animation

Animation in Flash consists of **three** steps:

1. Draw an object or import a image to animate.
2. Add keyframes and adjust position, scale OR rotate.
3. Add more frames to adjust the timing.





Shape tween animation

As mentioned earlier, shape tween animation transforms one object into another. Flash can tween the color, size, location or transparency of shapes. In the following example, we will create a circle that transforms into a square.



1. With Flash open, create a new document (**File > New > Flash Document**). Set the stage background color and dimensions. This example uses:

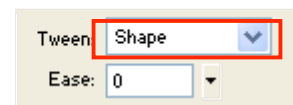
Size: 250 x 250 pixels
Background: white

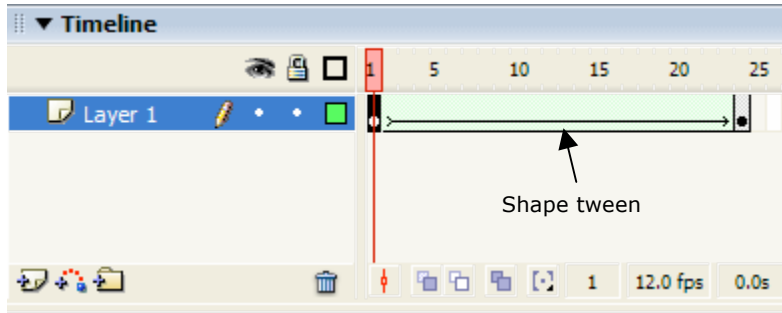
2. Select the **oval** tool.  In the Properties panel, choose a fill color and set the stroke color to none. 
3. Draw a circle on the stage.
4. In the **Timeline**, insert a blank keyframe at 24 (**Insert > Timeline > Blank Keyframe**).



Note: Using the default **12 fps**, a movie with 24 frames will last two seconds.

5. Select the **rectangle** tool.  In the Properties panel, choose a fill color and set the stroke color to none. 
6. At frame 24, draw a square. Place the square on top of the circle.
7. Select the first frame of the animation. In the **Properties** panel, select **Shape** from the **Tween** drop-down menu.





Flash adds green shading to the layer indicating that a shape tween has been created.

8. To view the animation, select **Control > Play**. Add more frames (**Insert > Timeline > Frame**) and adjust the timing, if necessary.



Notes

Motion tween animation

Motion tween animation gives the appearance of objects in motion. These tweens can only be used with symbols or grouped objects.







Using a drawn object

In the following example, we will create a ball rolling across the stage.

1. With Flash open, create a new document (**File > New > Flash Document**). Set the stage background color and the dimensions. This example uses:

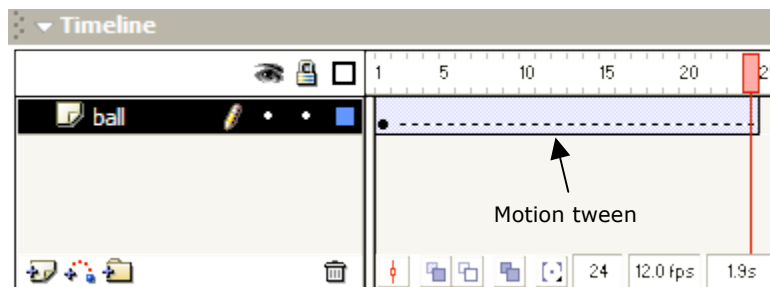
Size: 468 x 60 pixels

Background: white

2. Select the **oval** tool.  Choose a fill color and set the stroke color to none.  Draw a ball on the stage. Select the rectangle tool.  Choose a different fill color and set the stroke color to none.  Add a small square to the ball.
3. Select the ball and the small square. Choose **Modify > Convert to Symbol** to convert the ball into a symbol.
4. In the **Name** field type *ball* and choose **graphic** for **Behavior**.
5. Move the ball symbol to the left of the stage.
6. In the **Timeline**, insert a frame at 24. (**Insert > Timeline > Frame**)
7. Choose **Insert > Timeline > Create Motion Tween**. Flash adds blue shading to the ball layer indicating that a motion tween has been created.



Example ball



8. Make sure the last frame is selected. Move the ball towards the right of the stage.
9. Select the first frame of the animation. In the **Properties** panel, select **Motion** from the **Tween** drop-down menu.
10. To view the animation, select **Control > Play**. Add more frames (**Insert > Timeline > Frame**) and adjust the timing, if necessary.



Using a bitmap image

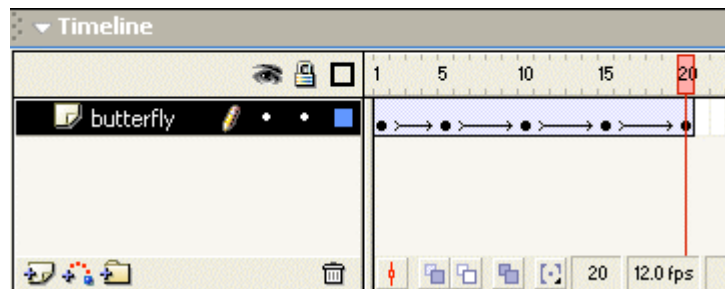
In this example, we will use motion tween to move a butterfly image around the stage.

1. With Flash open, create a new document (**File > New > Flash Document**). Set the stage background color and the dimensions. This example uses:

Size: 600 x 400 pixels

Background: white

2. Choose **File > Import > Import to Stage** to locate the image you want to use. This example uses a file titled butterfly.gif, but any image will work.
3. Place the butterfly in the upper left corner of the stage.
4. In the **Timeline**, insert a frame at 20 (**Insert > Timeline > Frame**).
5. Make sure frame 20 is selected. Choose **Insert > Timeline > Create Motion Tween**.
6. Select frame 20 and move the butterfly to the middle.
7. Select frame 5 and move the butterfly to the bottom left. Repeat at 10 and 15, moving the butterfly to a different corner each time.



Timeline after motion tween and frames have been added

11. To view the animation, select **Control > Play**. Add more frames (**Insert > Frame**) and adjust the timing, if necessary.



Notes


Using a motion guide

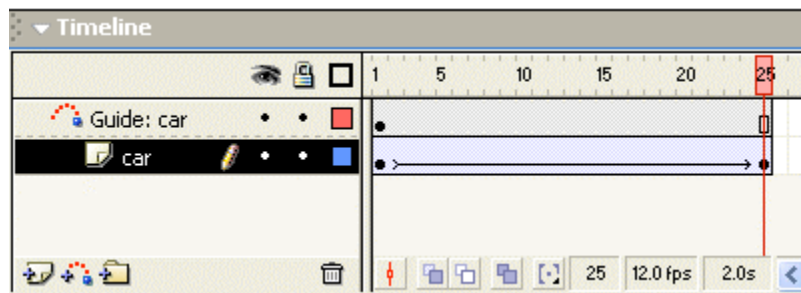
Using a guide layer and motion tween, we will create a path for a car image to travel.

1. With Flash open, create a new document (**File > New > Flash Document**). Set the stage background color and the dimensions. This example uses:

Size: 500 x 200 pixels

Background: white

2. Choose **File > Import > Import to Stage** to locate the image you want to use. This example uses a file titled car.gif, but any image will work. Label the layer *car*.
3. Place the car image in the upper left corner.
4. In the **Timeline**, insert a frame at 25 (**Insert > Timeline > Frame**).
5. Make sure the frame 25 is selected. Choose **Insert > Timeline > Create Motion Tween**.
6. Select frame 25. Move the car to the upper right corner.
7. In the **Timeline**, choose the **Add Motion Guide**  button.



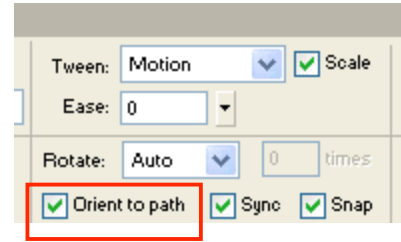
Timeline with guide layer and animation added.

6. Select frame 1 in the *Guide* layer.
7. Choose the **pencil** tool and draw a wavy line from the car on the left to the right of the stage.



Car with guide drawn on the Stage

8. Choose frame 1 of the *car* layer.
9. In the **Properties** panel check the Orient to Path checkbox.
10. To view the animation, select **Control > Play**. Add more frames (**Insert > Timeline > Frame**) and adjust the timing, if necessary.



Publish your animation

For your Flash animation to be incorporated into a web page, you **MUST** publish it. The **Publish** command will create all the files you need. By default, a swf file and an html file are created. Upload both files to your web server.



Note: Visitors to your site will need to install the **Flash Player** to view the movie.

1. Save your animation (**File > Save**).
2. Choose **File > Publish** to publish the animation for the web. Flash will create an .html file and a Flash movie file .swf in the location where you saved the original Flash file.



Notes



Using Dreamweaver

If you use Dreamweaver to create your web pages, the following steps will help you include the Flash file.

1. Follow the steps for publishing an animation.
2. Launch the Dreamweaver application.
3. In Dreamweaver, open an existing web page or create a new one (**File > New > HTML**).
4. Choose **Insert > Media > Flash**
5. Navigate to the location of the saved Flash movie (look for the file extension .swf). Select the file and choose **OK**.

Resources

This class explained the very basics of Flash animation. Flash has many more features. Here are some resources to help you learn more.

Flash in Action

www.homestarrunner.com

Macromedia Showcase

www.macromedia.com/showcase

Macromedia

www.macromedia.com/support/flash

Flash Tutorials

www.w3schools.com/flash/default.asp



Notes
