Creating Button Icons - Exercise
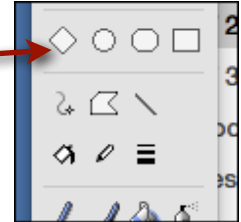
Objective: Use the LiveCode graphics and image creation tools to create high-quality, 3-D effect button icons.

We're going to create next/previous arrow images, 4 states for each button: normal (up) state; down state; hover state; and disabled state.

I. Create the Arrow Graphic

    1. On a blank card, create a triangle graphic object.
        • Choose regular polygon graphic tool.
        • Set the polygon sides to 3 in the property inspector.
        • Draw the triangle in the size and shape desired.

    2. Choose the Edit tool on the tools palette.

    3. Name the triangle something like "NextArrow".

    4. Set the opaque property to true in the property inspector.

    5. Go to the Colors & Patterns pane of the property inspector. Choose the desired fill and text/border colors.

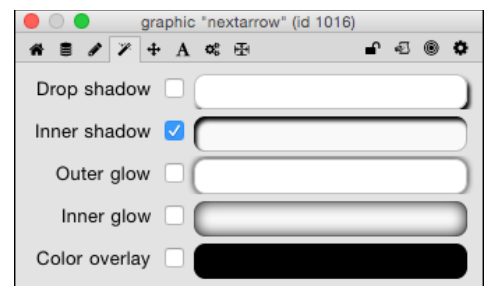II. **Use graphic effects to create the icons "states".**

We will create the illusion of 3-D by setting the Inner Glow and Inner Shadow effects. Imagine a light source coming from the upper left, a conventional way of creating a 3-D effect.

Go to the Graphic Effects pane of the property inspector.

A. CREATE THE "UP" STATE:

    1. Check "Inner Glow" effect. Use these settings:
        • Color: light gray, about 200,200,200
        • Blend mode: Normal
        • Opacity : 191
        • Filter: Gaussian
        • Spread: 0
        • Size: 12
        • Source: Edge

2. Check the "Inner Shadow" effect. Use these settings:
  • Color: black
  • Blend mode: Normal
  • Opacity : 191
  • Filter: Box (3 Passes)
  • Spread: 0
  • Size: 5
  • Distance: 5
  • Angle: 240

3. Make an image from this graphic.
Open the message box and type the following command:

```
import snapshot from graphic "NextArrow" with effects
```

A new image should appear in the center of the card. Rename it something like "NextIcon-up".

B. CREATE THE "HOVER" STATE:

1. Check the "Outer Glow" effect. Use these settings:
  • Color: Use a bright, constrastive color. I used a yellow-orange, 255,198,9
  • Spread: 58
  • Size: 6
  • Keep the other settings at their defaults.

2. Make an image from this graphic.
  Open the message box and type the following command:
```
import snapshot from graphic "NextArrow" with effects
```
  A new image should appear in the center of the card. Rename it something like "NextIcon-hover".

C. CREATE THE "DOWN" STATE:

1. This is as simple as adjusting the inner shadow to create the illusion that the inside of the graphic is lower than the outside of the graphic. Do this by changing the "Inner Shadow" settings as follows:

  • Distance: 7
  • Angle: 60

2. Make an image from this graphic.
  Open the message box and type the following command:
```
import snapshot from graphic "NextArrow" with effects
```
  A new image should appear in the center of the card. Rename it something like "NextIcon-down".

CREATE THE "DISABLED" STATE. Recall that usually disabled controls appear "grayed out". Do the following:

1. Uncheck all of the other effects, including Inner Glow, Outer Glow, and Inner shadow.

2. Check the Color Overlay effect, and set the color to a light gray, something like 210,210,210. (You could achieve the same outcome by simply turning off all graphics effects and setting the fill and border colors to 210,210,210.)

3. Make an image from this graphic.
   Open the message box and type the following command:
   ```
   import snapshot from graphic "NextArrow" with effects
   ```
   A new image should appear in the center of the card. Rename it something like "NextIcon-disabled".

III. Now Create the Previous Arrow button icons.

Flip the graphic around so it is pointing to the left. You can do this by opening the graphic's property inspector and changing the rotation setting to 180.

Now use a process similar to what you did for the Next button icon set to create the Previous button icon set. Bear in mind that, because of the different orientation of the triangle graphic, you'll probably have to tweek some of the graphics effects settings to get the exact look you want.

IV. Assign the Images as Icons to your Buttons.

LiveCode makes it simple to use custom icons for buttons, simply by using images in your stack. Follow these steps to do this.

1. Create a **transparent** button. (Use the Style popup in the Basic panel of the property inspector.) Give the button a name "prev".
2. Choose the Icons & Border panel in the inspector.
3. Next to the icon field, click the wand tool.
4. Select an image from those displayed.
5. Note how the button's appearance has changed.
6. Click the wand again to change the icon.
7. Choose This Stack from the popup list at the top. This shows all the images you previously created. Choose one. Note that any image that is in the stack can also be used as a button icon.
8. Return to the Icons and Border panel for your transparent button.
9. Assign the various icon types—Normal, Hilite, Disabled, Hover—to the appropriate button states, using the left-facing arrow set you created earlier.
10. Test the button to see the various states in action: normal icon, down or hilited icon, disabled icon, hover icon.

11. Copy your button and name the copied button "next".
12. Assign the icons to the Next button, this time using the right-facing arrows.
13. You only want the images showing in the buttons as icons. Therefore, select and hide all of the arrow images you created. (Uncheck the "visible" checkbox in the property inspector for all the created images.)