TI-Nspire™ Handheld Script

Dynamically changing objects using Conditional Attributes (Tutorial B12)

http://www.atomiclearning.com/k12/en/movie/92862/play_window?type=Tutorial&sid=2410

[00:00:00.00]
Conditional Attributes allow you to create interactive
objects. For example, you can make text appear and disappear.

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Conditional Attributes can also allow you to dynamically
hide, show, or change the color of graph or geometry objects

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based on user input, variable values, or calculated expressions.
Common uses include clicking a slider to reveal steps in

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sequence or dynamically changing the color of a point based
on its position on the screen. In this example, I'll change

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the line color around a circle I've created and the fill
color inside it based on the value of the variable, a, which

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is controlled by a slider. I'll use the touchpad to roll
over the circle, and the click to select it. Now I'll press

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ctrl-menu to pull up the options for the circle, and choose
Conditions. Before I start entering anything in here, I'll

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roll over the Colors button and click to select it. This
chart shows which colors correspond with each number, so

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if I want the line around my circle to be a medium blue
color, I want the value of the expression I enter to be

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2. In this case, I want the fill to be green and the stroke
around it to be medium blue, and then I want to move the

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slider and have it change to a light blue stroke and a
maroon fill. That means I want the line values to be 2

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then 3, and the fill values to be 4 then 5. I'll click
to select OK and move back to my Conditional Attributes

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dialog box. I'll press the Tab key until I get to the top
field called Show When. Here, I'll enter my variable, a.

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Now I'll press tab again and move down to the Line Color
field. Remember that I want the value that comes out of

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this expression to be 2 on the first setting, and 3 on
the second. The low setting is when a=1, so I have to add

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1 to it to get to 2, and the high setting is when a=2, which
means I also want to add 1, so I'll type a+1 here. Now

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when a=1, the value will be 2 for the line color, which
was that medium blue. When a=2, the value for the line

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color will be 3, which is that light blue. I'll press tab
to get down to Fill Color, and enter my second expression

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here. I want the low value fill color to be green, which
was the value of 4, so when a=1, I need to add 3 to it.

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I'll type a+3 here. Now when a=1, my fill color value will
be 4, that green color. When a=2, my fill color value will

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be 5, which will be that maroon color. Finally, I'll roll
over and click OK. Now I can roll over the slider, and

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click and hold it to grab it. When I set the slider so
that a=1, my circle has a medium blue stroke and green

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fill;when I move it so that a=2, it has a light blue stroke
and maroon fill.

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