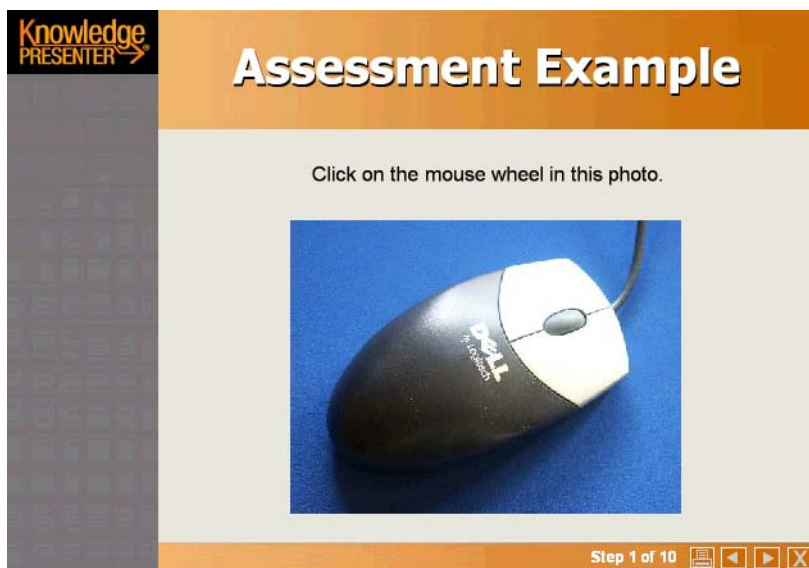




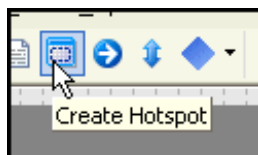
Hotspot Assessment Questions

Hotspot questions are perhaps the easiest of all to create in KnowledgePresenter, and possibly the kind you will use most often. Hotspot questions are used heavily in software simulations, and where users have to identify something from a picture, for example.

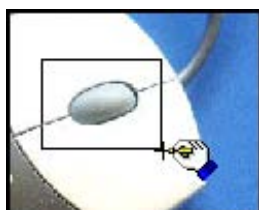
Let's take a simple example. We want the user to select, from a picture, where the mouse wheel is on a mouse. In KnowledgePresenter, we have set up a very simple step, one that contains a heading, a question, and the picture of a mouse.



The first thing we do is to create a hotspot, using the **Hotspot** tool, to appear over the mouse wheel itself. Lets call this hotspot **Hotspot 1**.

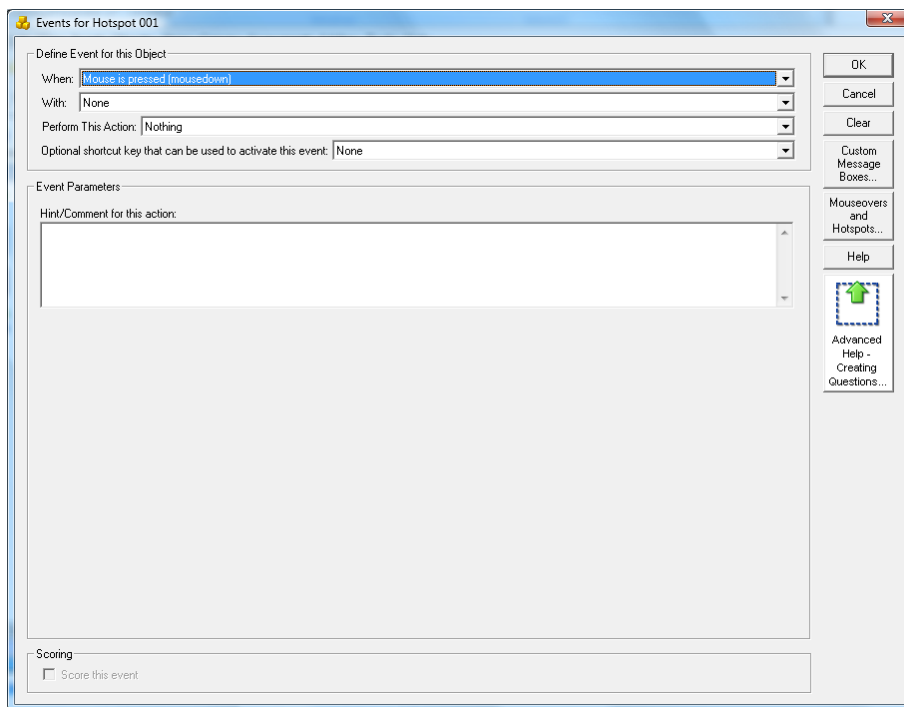


First we select the Hotspot Tool...



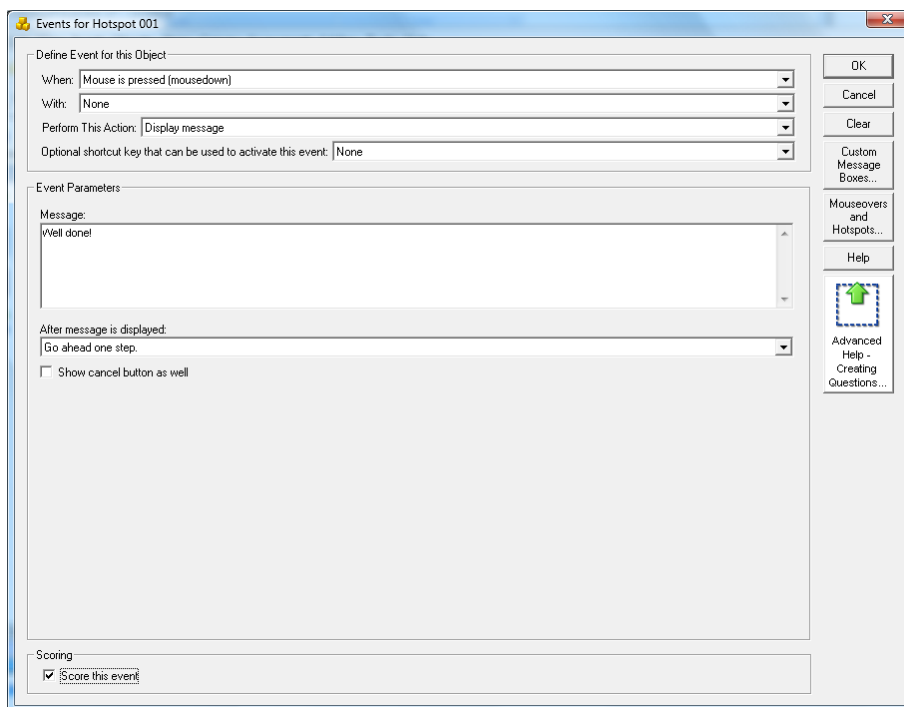
...and then draw a hotspot over the desired area.

Note that hotspots appear in KnowledgePresenter with a dotted outline – when this lesson is exported or previewed, hotspots are invisible. Once you've created a hotspot, the following screen will appear by default.



In this dialog box, we set up what we want to happen when the user clicks on this hotspot. Generally, this means we select **Mouse is pressed** from the **When** listbox, and **Go to Next Step** from the **Perform This Action** listbox. Also, because we want this event to be included in the scoring, we select the **Score this event** checkbox.

In this case, however, we are going to provide some feedback as well. So we have selected **Display Message** from the **Perform This Action** listbox. In the **Message** section, we add the message we want to appear when the user clicks on this hotspot, and from the **After message is displayed** listbox, we select what we want to happen after the message box appears – in this case, **Go ahead one step**.

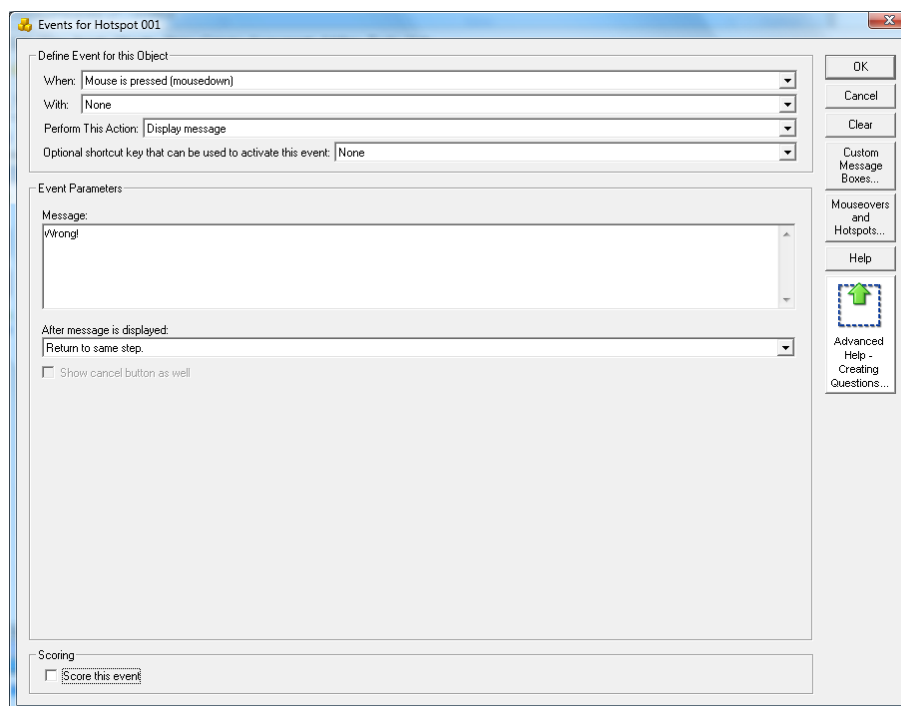


This means that when the user clicks on **Hotspot 001**, they will see a message saying *Well Done*, and when they click on **OK**, they will move to the next step automatically.

Hotspot Feedback for Incorrect Answers

You may want to add feedback should the user get the answer incorrect – i.e. they click on the wrong spot. This can be done in several ways.

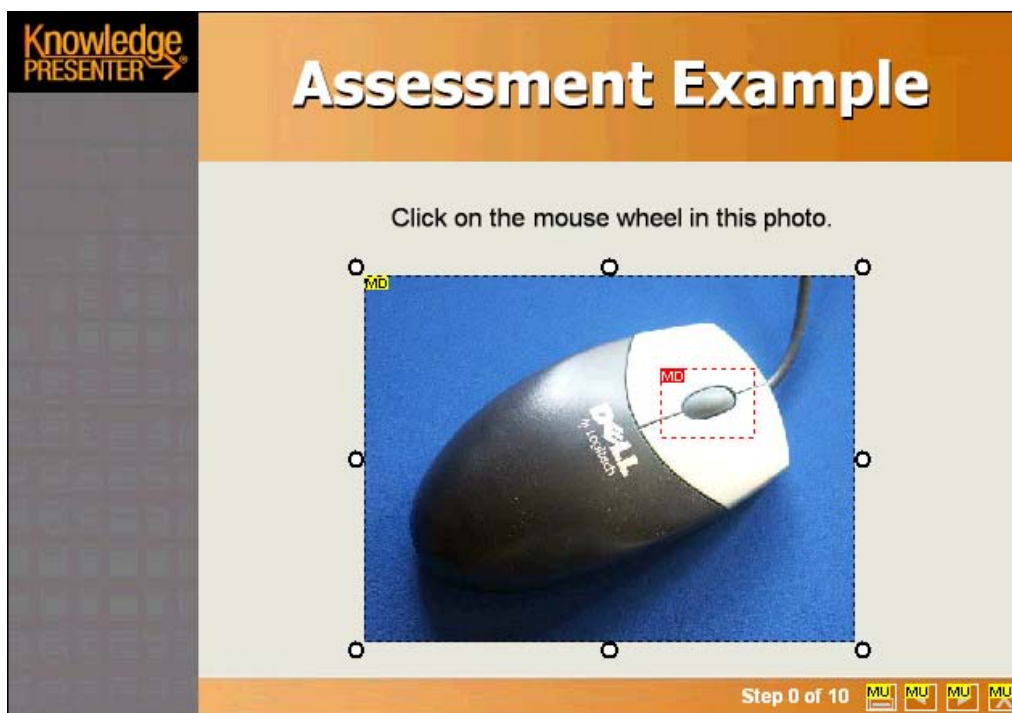
The easiest way is to create another hotspot, or several hotspots, on the same image, and give each one of these hotspots and event as well. In the example below, we've selected the image itself, which also acts as a hotspot (any object can act as a hotspot, and have events associated with it). We then select the **Event** command from the **Objects** menu.



Simple Feedback

In the above example, we created an event that means that when the user clicks on the image, we use the **Display message** action. We've created a message in the above dialog box that says '**Wrong!**'. This means that when the user clicks on the image, they will see a message telling them that they have clicked in the incorrect spot. Note that the appearance of message boxes can be customized – use the **Custom Message Boxes** button in this dialog box to select a new style. Note that we also selected **Return to same step** as the action to perform in the **After message is displayed** listbox. If we selected **Go Ahead One Step** from this listbox, then even if the user for this answer wrong, they would see this message, but go to the next step without getting a chance to select the correct answer again.

Because **Hotspot 1** we created earlier sits on top of this image, if they click on **Hotspot 1**, then the event defined for **Hotspot 1** takes precedence, and the action defined for that hotspot occurs.



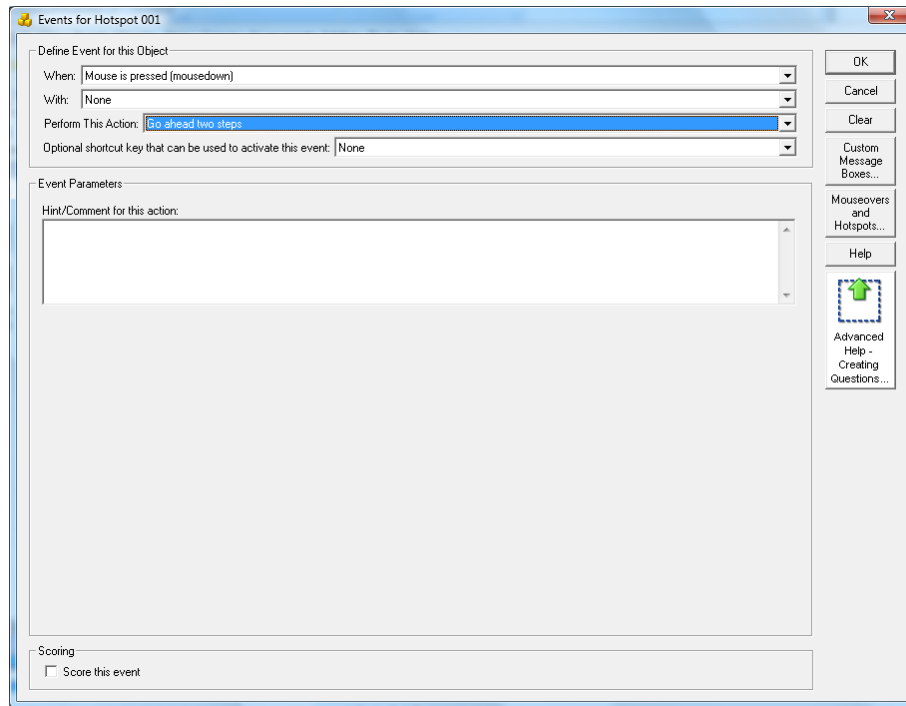
Note that in the above image, which is what you will see on the canvas, both the photo and the hotspot have the letters MD in their top left corner, indicating a mousedown event has been applied to the both. The hotspot letters appear in red and white, indicating that this is a scored event.

Other Feedback Methods

The method above is quite simple, but does limit the amount of feedback you can provide to the user. There is another way you can provide that allows you to provide detailed and specific feedback for the user.

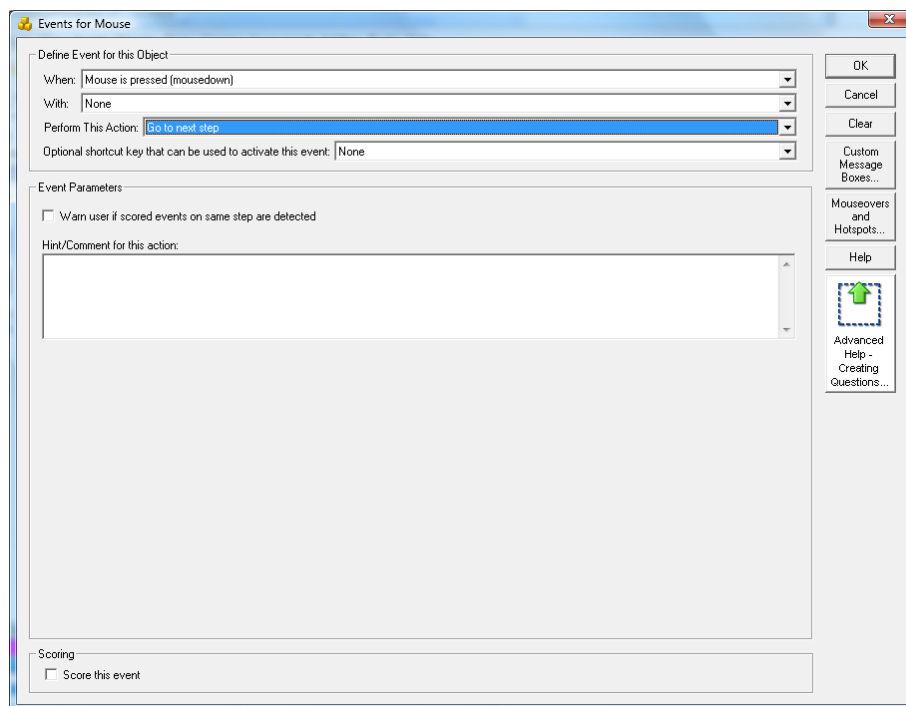
This method involves initially the same step as above – we use the main image as a hotspot (or, alternatively, create another hotspot or series of hotspots to do the same thing).

However, this time, we change the event used for **Hotspot 1** we initially created. Above, we created an event for **Hotspot 1** that meant when the user clicked on the hotspot, they saw a message, and then moved to the next step. In this case, we change this event so that it goes two steps ahead, instead of just one. Below is the **Events** dialog box as we have modified it for **Hotspot 1**.

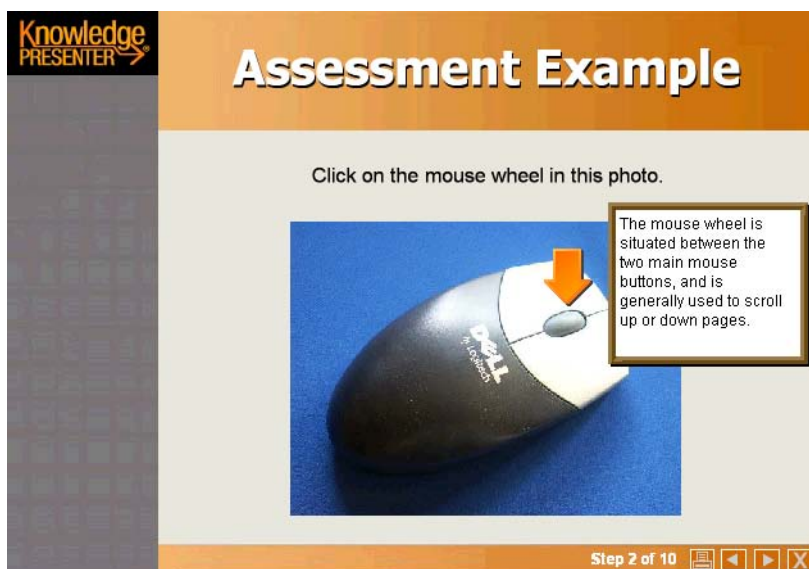


Note that we have changed **Perform This Action** so that it reads **Go ahead two steps**.

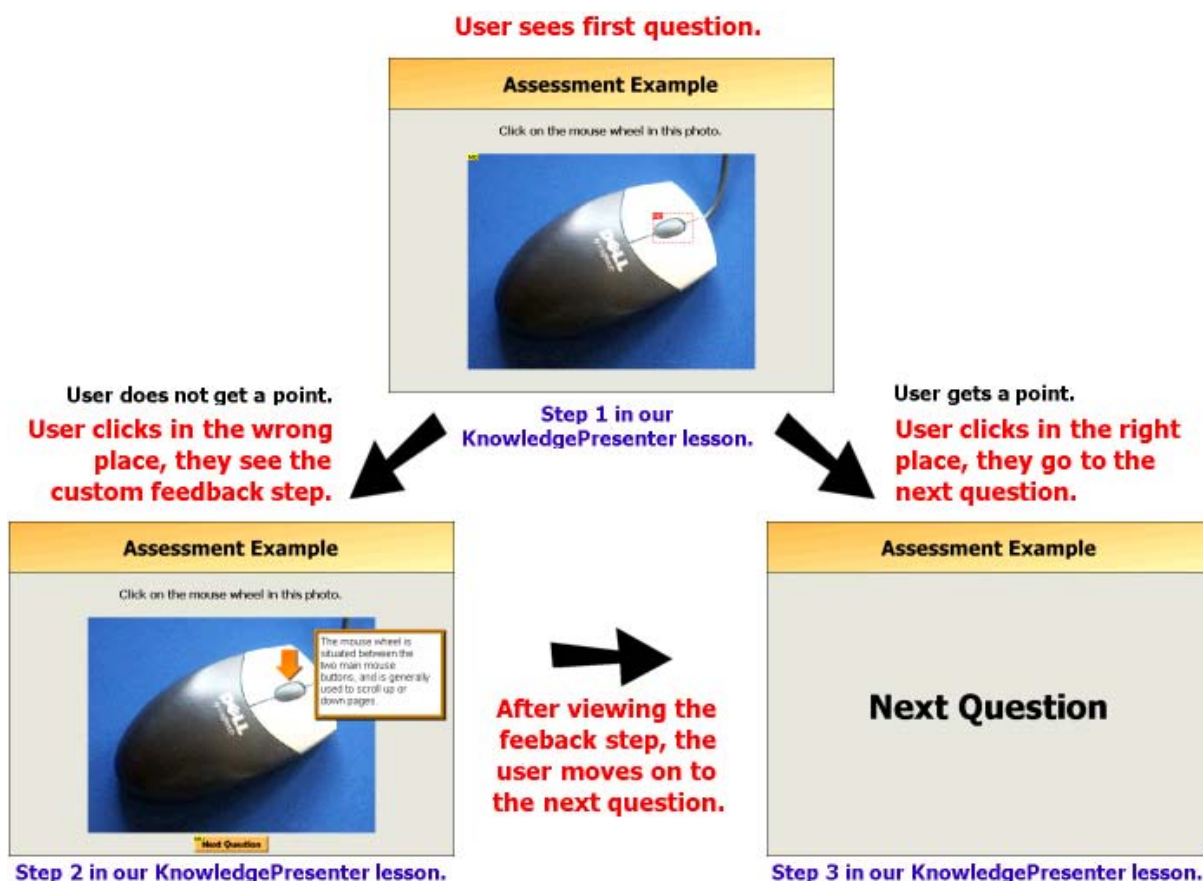
Now we will modify the event we created for the picture itself, so that if the user clicks on the image outside **Hotspot 001**, they go to the next step:



Now in our lesson, if the user clicks on the image, they go ahead one step. If they click on **Hotspot 001**, they go ahead two steps. This allows us to create a customized error screen, should the user click outside of **Hotspot 001**. Here is an example of what that screen could look like.



The above screen will only appear if the user clicks incorrectly – if they click correctly, they jump right over this screen without ever having seen it. On this step, we add a button that allows the user to move to the next step (in this case, we just created a button, and using the **Objects / Event** command, we gave this button the event that moves to the next step when the user clicks on the button.



If you need to present even more information than you can fit on one screen for the custom feedback, you could modify the event for **Hotspot 001** so that it goes ahead three steps, or even to a specific step, which gives you ample room to create even more feedback, or perhaps to allow the user simply to follow a different path.

In step 2, above, we created a button which allows the user to move to step 3. Perhaps you want to give the student another try if they got the answer incorrect – in this case, you could change the event for the button on step 2 so that it **Goes to Previous Step**, rather than **Goes to Next Step**.

Advanced Feedback

For more advanced users, you can use the **Show and Hide Groups** events to even greater effect when showing feedback. This would allow you, for example, to change the event should the user click in the wrong place in Step 1 to show a particular group of objects – which might be more detailed feedback – right on Step 1, without having to create a special step 2 to contain the custom feedback.

For more information on groups, see the online help and tutorials, and search for **Groups**.