



XExpression Template with an Expanding Box for Lower Third

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There are two typical styles for a lower third name plate. In one case, the template style is created with a defined box around the text and the auto squeeze function is used to shrink the font size so that the text does not go beyond the bounds of the box.

The second style is to create a smaller box around the text that grows when the font gets beyond the size of the box. This prevents the text from being made smaller, which can lead to unreadable content.

This application note will walk through how to create both types of lower third name plates.

XExpression Template Set Up

The first set is to create a standard XExpression scene. XExpression is an extremely powerful character generator and there are many more things that can be done with the program, not to mention different options for creating a lower third template. Having said that, the steps below will create a very simple lower third template that will be used to show how to set up the two main styles for the name plate.

- 1) Draw a quad on the screen by going to the Object Layer on the right side of the interface and choosing Quad from the list of Primitives
 - a. This places a Quad in the center of the screen with yellow and blue checker board (note that there is no actual color associated with this quad... the checker board is placed on the quad so they you can visualize it but nothing would be seen if this template were to be used)
 - i. To give the Quad a color go to the Material Manager slide out on the right and add a new material and define a color. Double click the newly created material to apply it to the Quad
 - b. For purposes of this application note give it a Width of 600 and Height of 150 (in the Options section of the Object Inspector at the bottom of the screen). Give it an X position of 400 and a Y position of 130 in the Transform tab in the same area. This just sets the size and position of the box.
- 2) Add a text field by clicking Text in the Object Library under the Base Objects list. This places a blank text box in the upper left corner of the canvas.
 - a. Tip: Type "Name" to put content into the text field so that it can be easily identified. You don't have to click on anything as the cursor is automatically placed at the start of the text box.
 - b. Give this an X position of 120 and a Y position of 145 to place it inside the Quad that we just created.
- 3) Add a text field by clicking Text in the Object Library under the Base Objects list. This places a blank text box in the upper left corner of the canvas.
 - a. Tip: Type "Title" to put content into the text field so that it can be easily identified. You don't have to click on anything as the cursor is automatically placed at the start of the text box.
 - b. Give this an X position of 120 and a Y position of 75 to place it inside the Quad that we just created.

This has now created a simple lower third template that can be used to show the name and title of a representative.

XExpression Auto Squeeze

For the first template style we will have the text squeeze when it gets to the end of the Quad. This one is quite easy.

- 1) Go to the Name text field and select the Tabs & Options tab in the Object Inspector area. In the center is an option called Auto Squeeze. Ensure the check mark beside enable is there and give the Max Width a value of 560.
 - a. Note that the Width used will need to change based on the width of the Quad.
- 2) Go to the Title text field and select the Tabs & Options tab in the Object Inspector area. In the center is an option called Auto Squeeze. Ensure the check mark beside enable is there and give the Max Width a value of 560.

To test you can select any of the text fields and start typing. When the text box gets to a width of 560 the font will automatically start squeezing together so that it does not go beyond the set bounds.

XExpression Expanding Box

The second template style has logic that makes the Quad grow in width based on the font. If there was only one text field this would be simple, but as there are two different text fields it requires implementing Visual Logic to the template.

- 1) In the Main Viewport there is a button called "Edit Visual Logic" which will pop up the Visual Logic Editor when pressed.
- 2) Expand the Scene Objects on the left hand side and the Name and Title items, as well as the Bound Box item in each one. Click on the Width option to add them to the VLogic1 view in the center of the pop up
- 3) On the right hand side expand the Math item and click on Max Value to add it to the VLogic1 view
- 4) Click on the yellow circle on the right side of the BoundingBox.Width for the Name and Title and connect them to the green circles on the left side of the Max Value item.
 - a. Note: There is only one input on the Max Value box until you connect the first item and then it will continually add another input option.
- 5) On the right hand side expand the Math item and click on Offset to add it to the VLogic1 view
- 6) Connect the yellow circle labeled as Out on the Max Value item to the green circle labeled Base in the Offset item
 - a. Click on the Offset item in the VLogic1 view and in the bottom center of the pop up will be the properties of the item. Change the Offset value to 100
- 7) On the left hand side expand the Quad in the Scene Objects. Near the bottom of the list is an item called Width. Click on that to add it to the VLogic1 view.
 - a. Note: Choose the Width from the base level of the Quad, not an item called Width from inside one of the expandable items
- 8) Connect the yellow circle from the right of the Offset item to the green circle input on the Quad (Width) item
- 9) Close the Visual Logic Editor by pressing the X in the top righthand corner.
- 10) In the Main viewport, right click on the Quad to get options. Hover over the Pivot item, go over to the X Axis and choose Min from the list.

If you start typing longer text in the Main Viewport you will **not** notice that the Quad is expanding. You will see it expanding in the Scene on the left hand side. If you put the Scene into the Sequencer and start typing longer text you will see the Quad extend in the Preview.

As mentioned at the start of this application note, XExpression is very powerful and can make your lower third look a lot more impressive than this quick example. This was written to show how the two different typical templates are created, but they can be greatly improved to make them even more graphically appealing.

