Low Poly House Plant

This lesson plan is design to give you simple instructions on how to model a low poly house plant. Once you have gained the skills needed to do this, then creating any plant life will be simple.

The tools that we will be learning to use for this project will be the weld tool (crtl + w), the extrude tool (E), as well as using the stretch tool (h) and the size tool (H). This will be used to create the leaf of the plant and then we will multiply it by copying (c) the leaf many times.

The first part that you want to figure out is how big you want your plant to be. Do you want to create a large tropical plant or do you want to create a small house plant. To make this lesson easy, we will create a small house plant so that the tools can be learned.

STEP 1
Create a box that is 2” x .25” x 1’ and make the segments X= 3 and Z=5. We are doing this because it allows us to give our plant leave some depth and dimension.

Once you have created the shape of your leaf, be sure to give it a surface name by pressing the “q” button on your keyboard.

STEP 2
Now that we have our box created we want to start shaping that box into a leaf. We do that by first using the weld tool to make the front of the leaf into a point. When you do this you will be welding all eight (8) points together. Then use the move tool (t) to move that one (1) point to the top center of your box. Look below for example.
STEP 3
Our next step will be moving the points into the shape of a leaf. This is the step that will allow you to be more creative, and create any kind of plant that you want. Do create the illusion that your plant has shape we will be using the stretch tool (h) to move the points our evenly. One important step to remember when using the stretch tool to make sure that your cursor is located right in the center of where you want the item stretched out. If the cursor is located closer to one side then the other, the move will be uneven.

STEP 4
If you notice, I moved just four of the segments and not the last one. This was done so that we could use the last row to create the stem of the plant. I like to wait to create the stem after I have created the leaf because I can move the stem to match the style of my leaf. Now what we are going to do is first change to polygon mode (crtl + h). Once that
has been done, we will select the middle polygon and use the extrude tool (E) to move that one polygon out, creating a new segment for the stem.

It doesn’t matter how long you make the stem, you can (and will) resize it later. You can use the move tool after you have used the extrude tool to give your stem the length that you want. I recommend you changing back to the point mode (crtl + g) to move your stem. I created the stem two (2) inches long.

STEP 5
We want to next finish modeling the leaf by using the stretch tool and move the bottom row closer together to make it look like the bottom of a leaf.

Then you want to select the four (4) points that are on the out side of the segment that we are working on and use the move tool to nudge the points up just a little.
Congratulations you have created your first leaf. With the skills you have learned you can use this to apply to either a tree branch or to a plant. We will continue with the plant.

STEP 6
Our next step is to create a flower pot for the plant to go into. We can do this by just using the disc shape and use many of the tools that we have learned all ready. Our potted plant will be small and we will move through this really fast. Below are the dimensions of the flower pot.

STEP 7
In this step will be using the size tool (H) to move the flower pot into the shape that we want. We will use the size tool instead of the stretch tool because the size tool we move all sides equal, where the stretch tool will only move the points on one side. Be sure to give your flower pot a surface name. This will help with textures later. You may want to make the top of the flower pot a different surface name so that you can texture that with some dirt. Below is an example of what the finish flower pot will look like.

STEP 8
The next step that we will do is to move the leaf above the flower pot. This will help us to get ready to move the leaf into a shape that looks like the plant is alive and growing out of the pot. Then will move a few of the edges of the plant up, so that it gives the illusion that the plant is alive and growing.
We will then bend the stem so that it looks like it is coming out of the dirt in the pot. We will do this by using both the move tool (t) and the rotate tool (y).

You want to make sure that the stem is below the top part of the flower pot so that when you add textures the plant will look like it is growing from the ground.

**STEP 9**
We will do the same steps as above to the rest of the segments to make it look like the leaf is bending from weight.
We have completed the hardest parts of our house plant.

STEP 10
The final step in modeling our plant is to make duplicate the copies of the leaf and to move them around the flower pot. You should try to keep the stems close together because this way it will look like you have one plant growing out of one flower pot. Here is a copy of the plant with all of the leaves added.

STEP 11
The last and final step is to added textures. I will just change the color of the different textures to show what the final outcome will look like. I also added the smooth texture to both the leaves and the flower pot. This gives it a more realistic look.