

Tutorial: House with a Garage

This tutorial is intended to familiarize you with the software by creating a simple model of a house with a garage (see Figure 1). It is not part of the test, so you can take as much time as you need to get used to the interface concepts of the software. If a statement is phrased ambiguously or if you have problems with subtask, you can ask for help at any time.

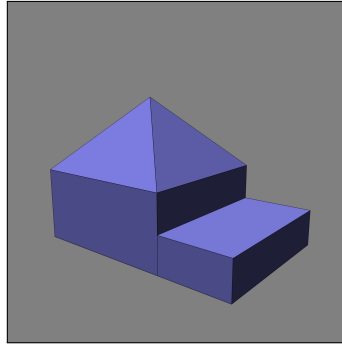


Figure 1: *Final result of the tutorial.*

Create the Basic House

The basic network, available at system start, is shown in Figure 2. Select the existing edge and insert a new internode of the type “Extrude” by clicking the upper button.

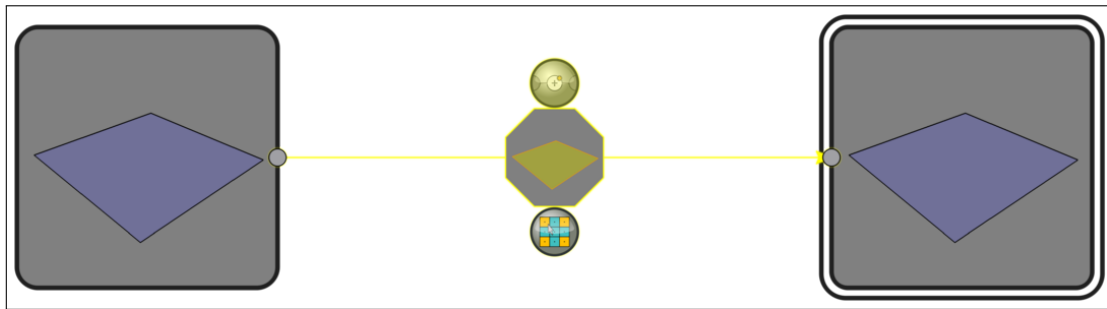
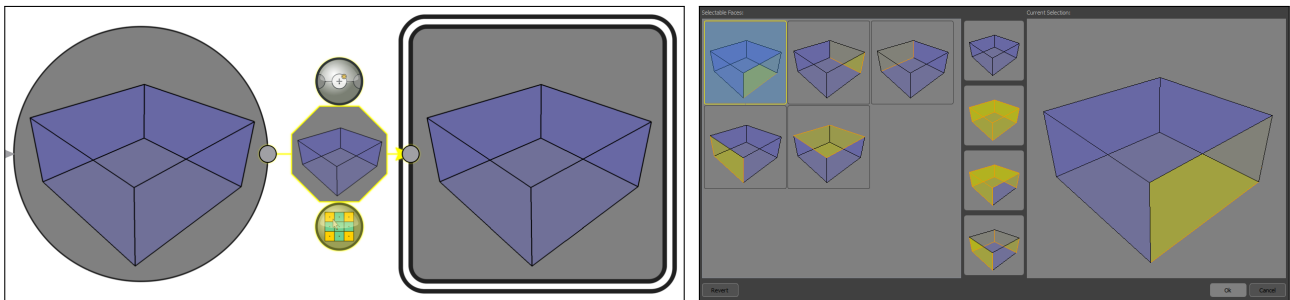


Figure 2: *Insert a new internode in the initial network.*

Along with the internode also a new edge between the extrude and the output node is inserted. Now select this new edge and open the selection dialog by clicking the lower button (see Figure 3a).

On the left side of the selection editor you can see all selectable faces, which are provided by the extrude operator. On the right side a combined preview of all currently selected faces is displayed. In the middle column a set of common quick selectors is provided.

Now select the right face on the front face (see Figure 3b). This wall will be the attachment point of the garage.



(a) *Open selection dialog.*

(b) *Select the desired faces.*

Figure 3: *Edit the selection of the newly produced faces.*

Attaching the Garage

Now insert a new internode of type “Subdivide” on the edge between the extrude and the output node. Reposition the nodes as necessary to obtain a well arranged layout of the graph. By default, a face is subdivided into 3×3 new faces. Set the number of subdivision, such that there is no subdivision along the face and only one subdivision in height by editing the corresponding parameters in the variation view. The variation view is opened by clicking the upper right button of an operator node (see Figure 4). If you are content with your settings you can apply the changes, otherwise you can always discard your modifications and start over again.

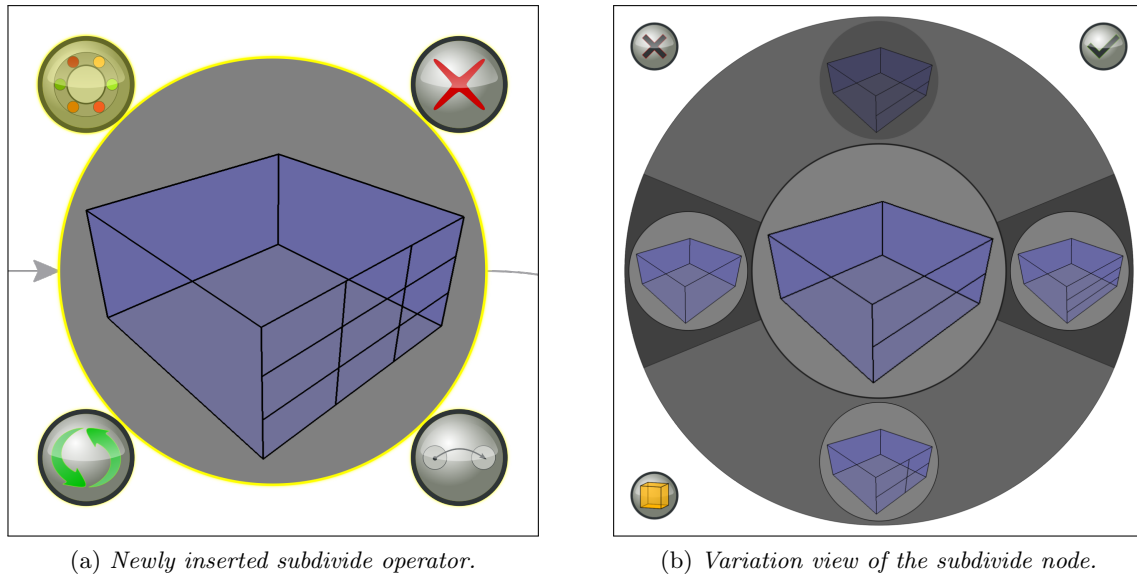


Figure 4: Edit the parameters of the subdivide node with the variation view.

Select the outgoing edge and select the lower of the two produced faces. If you finished the selection process, insert another internode of type “Extrude” on the same edge. The attachment of the garage is now finished and in a last step a roof needs to be placed on the house.

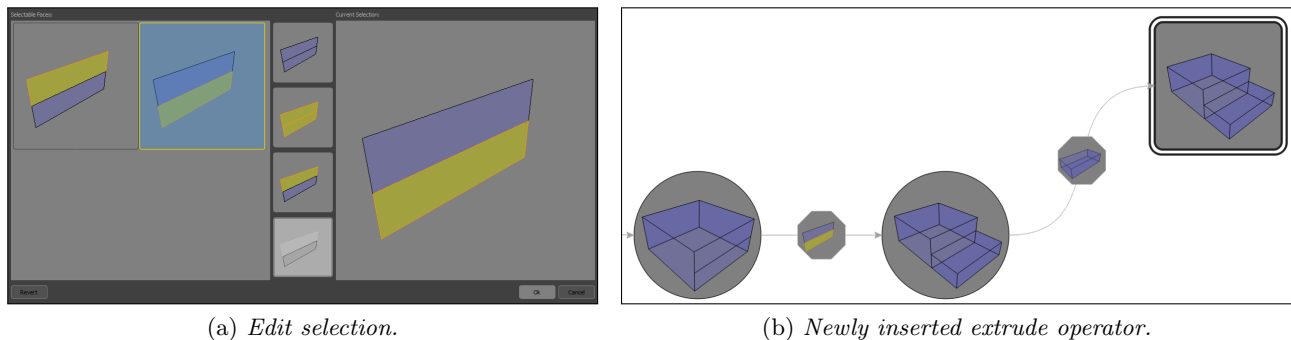


Figure 5: Edit the selection for the attachment and create the garage.

Finalizing the roof

To construct a roof on top of the house please navigate to the first extrude node, which produces the basic house. Perform a double click on the empty background to open the “Insert Node” menu and create a node of type “Pyramid”. An operator node can only perform its operation if it has an incoming edge with a selection, i.e. it receives input. Therefore, connect the extrude node (house) with the recently inserted pyramid node (roof). You can create a connection by clicking on the lower right button of the first node and then click again on the target node (see Figure 6b).

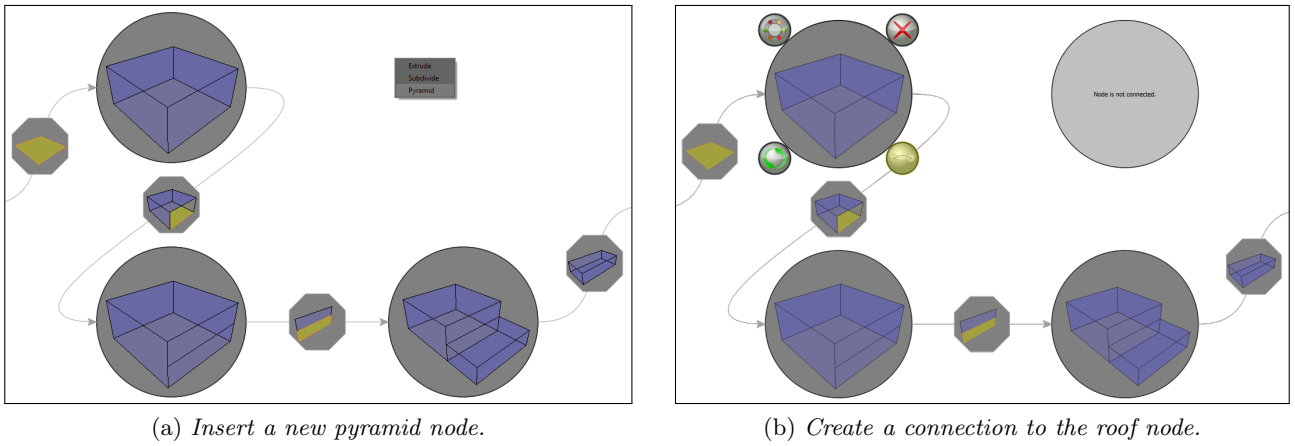


Figure 6: Prepare the construction of the roof.

After the connection is established, select the top face of the house node with the selection dialog (see Figure 7a). Now the pyramid node creates the roof, but it does not show up in the output since there is no connection yet. Finally, connect the roof node with the output node to finalize the model (see Figure 7b).

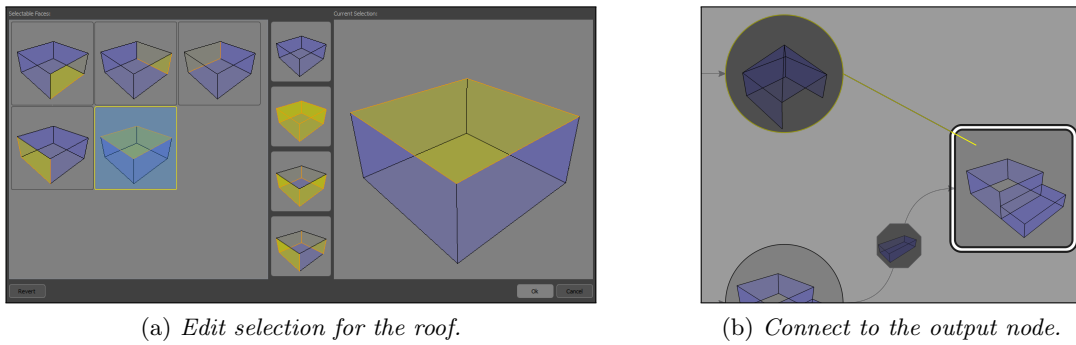


Figure 7: Select the face for the roof and forward the produced geometry.

Final Result

The geometry network created by you should similar to Figure 8.

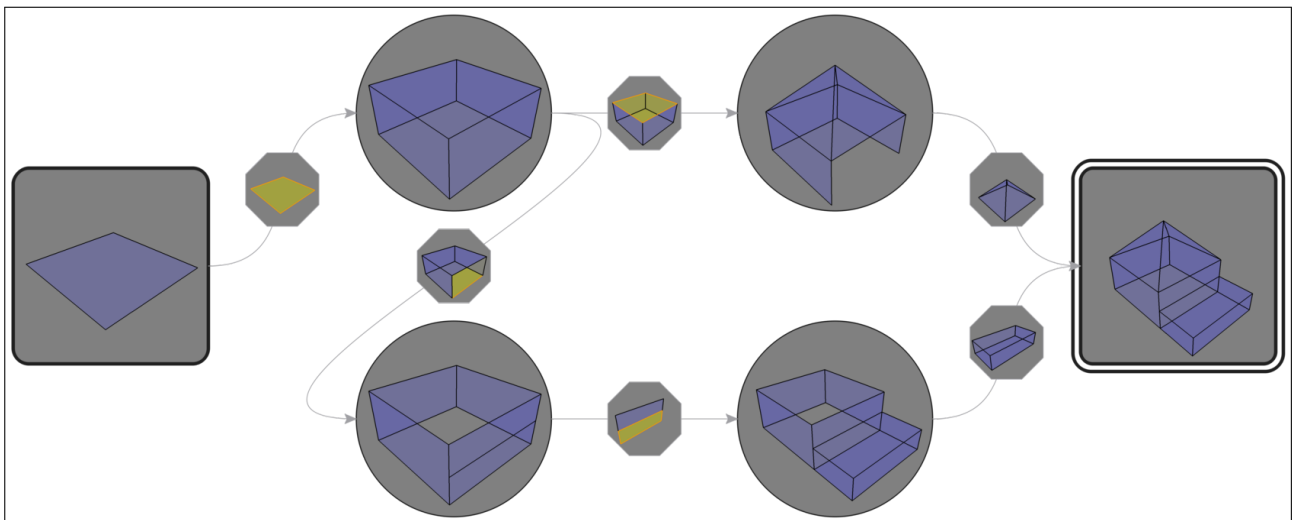


Figure 8: Full view of the geometry graph.

Congratulations, you have successfully completed the tutorial.