


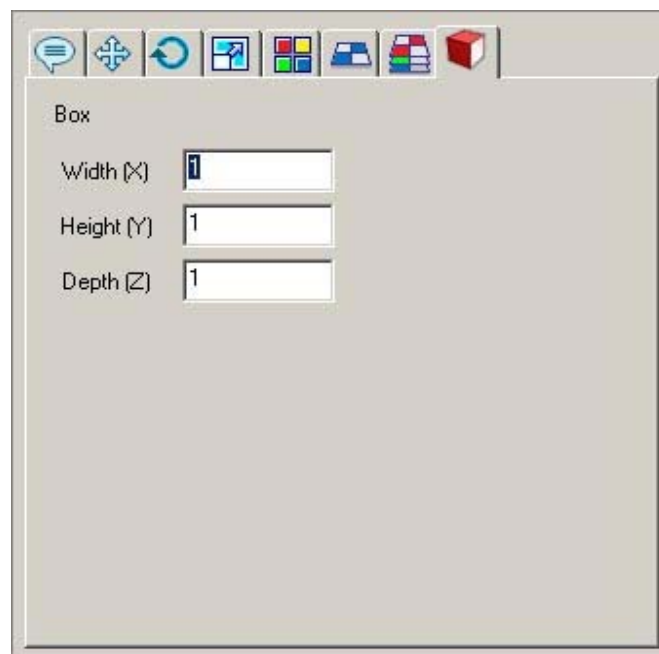


## Άσκηση 3

This page starts out simple, but then goes on to some of the more complex and wonderful aspects of Flux Studio.

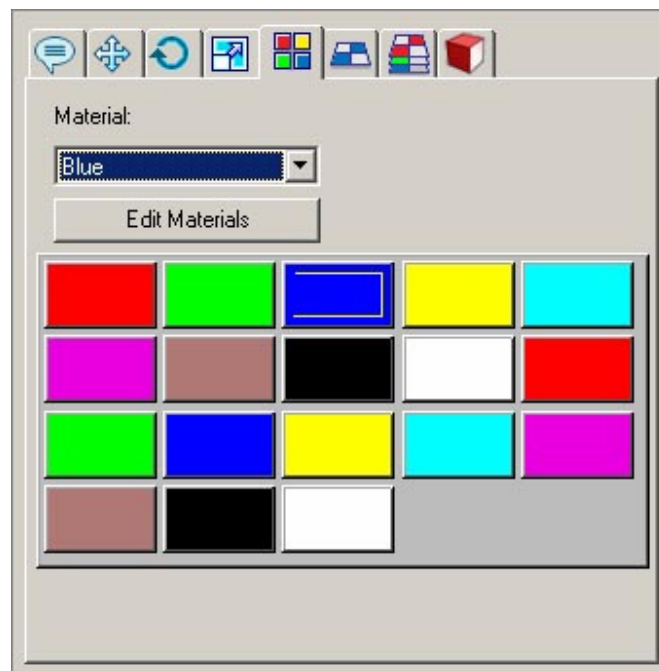
1. Fire up Flux Studio.
2. I usually like to change the layout of the screens I am looking at so I can view what I am creating from three sides and a perspective view. Click on the view buttons, select the one labeled 4 standard views (the 4 boxes) 
3. Then I like to turn on a scale or grid, so that I know the size of the object I am working with. So hit the box labeled "show global grid" (box full of dots)  The grid will appear in the "active window". This is the last window in Vizx that you have clicked on, it is the one with a blue border at the top. I usually turn the grid on in the Front View window.
4. Ok, now click on the Create Box icon  and then click on the Front View window to deposit the box in the center of it. [If you want to turn off those green arrows that indicate the axis of your object, hit the View pulldown menu, then select Render Options, then un-check the Show Axis box and hit OK.]
5. Now we have a red box. If we double click on the box a properties window appears.



The box is one meter, by one meter, by one meter. If you change any of these values you will see that you can make a rectangle out of the cube. When the Translation property page is selected, the selected node will move along with the cursor as you drag it across the screen. Even if the property sheet is not showing, you can translate the selected node by dragging the cursor if you are in translate mode. There are four

ways that you can set translate mode; select the translate tab in the property sheet, select the translate toggle in the tool bar, select the translate option in the Edit menu, or select the translate option in the right mouse button popup menu. The cursor will change to remind you which mode you are in. The tool bar and menus will also show the current drag mode. The Rotation property page allows you to rotate the selected node. While in rotation mode, if you drag the cursor in the vertical direction, the node will rotate about the horizontal. If you drag in the horizontal direction, the node will rotate about the vertical axis. Diagonal dragging will result in something in between. If you press the CNTL key while rotating, the node will do a 2D rotation in the screen. More exactly, it will rotate about an axis normal to the current view. The Scale property page allows you to scale the selected node. You can do a Uniform scale, or a Nonuniform scale. Either way, you can modify the scale factor by dragging the cursor. In nonuniform mode, the axis that is scaled is the axis that is most closely aligned with the motion of the cursor. Only one axis is scaled per dragging operation

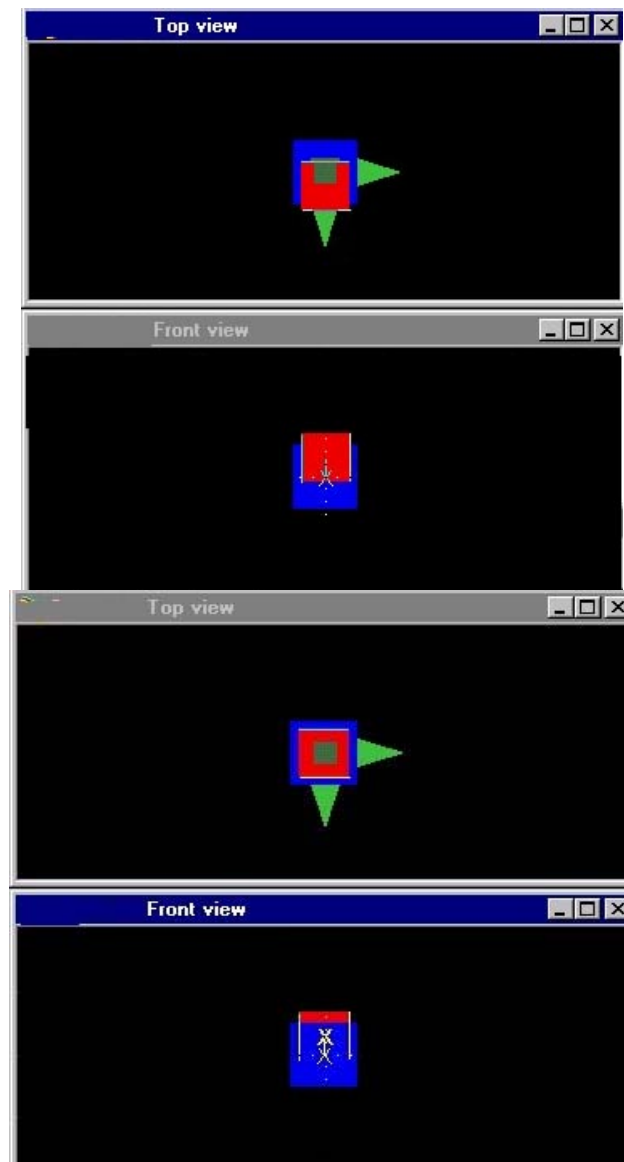
1. If you click on the Materials tab, you will see that you can change the color of the box. Please select the color Blue.





Now we have a blue box that is 1x1x1 meters. Let's add another box to the scene, click on the box icon, then click in the Front View where you want to place the second box. For this lesson place it about one half way up the blue box. Double click on the new red box, and change the height, width, and depth to .75 (three quarters of a meter). Observe what happens in the other view windows. If you look in the Top View window you will see that the red box is centered in the blue box. I would like you to move the red box forward some. You can do that in two different ways. You can hit the Trans tab on the properties window, or you can hit the Translate Icon



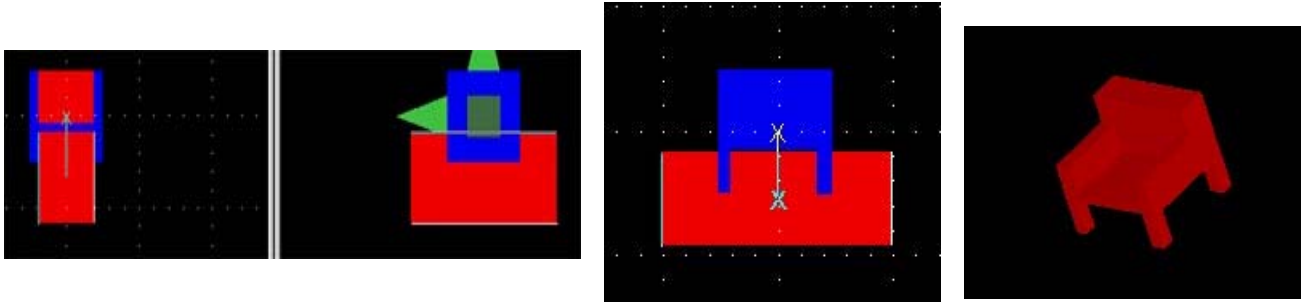
(the double headed arrow)



3. Ok, now here is the magic, you can use one box as a cutting tool on the other box. We are going to cut the red box area out of the blue box.

4. To do this you need to hit the Boolean Extraction icon.  It is the first one you see here. You will see a Boolean Operations window appear, admire it, and change the lower option to "Create one node, use node one appearance", hit OK. Now notice what you have in the viewing windows. To get a better look at what you have made hit the Dynamic Rotate icon.  It is the first one pictured here. After you click the icon, you can then click and drag in the front view window to rotate the box around. Take a minute to admire your work. Lovely huh?

5. Well what good is that you might ask yourself? First of all you learned how to make an object, change it's colors and sculpt it some. Secondly, you learned the function of a bunch of buttons that you didn't understand earlier. Thirdly, if you use this same remove a box from the object trick a couple more times you will have a simple chair.



6. OK, a red chair, how boring... Let's upholster it. Double click on the Chair. In the properties box that comes up, select Texture, hit the File Folder and find a nice pattern. If you use the scale option, you can put the pattern on the chair multiple times.

