

Importing Shapes Troubleshooting: Model faces the wrong direction

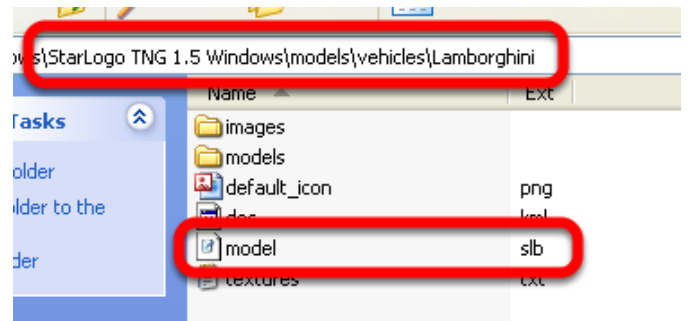
Diagnosing the problem

Sometimes, when you import a model, it faces the wrong direction when you create an agent with that shape. In this case, the car should be facing north. It's obvious that it's not facing the right direction when you program the agent to move forward 1.



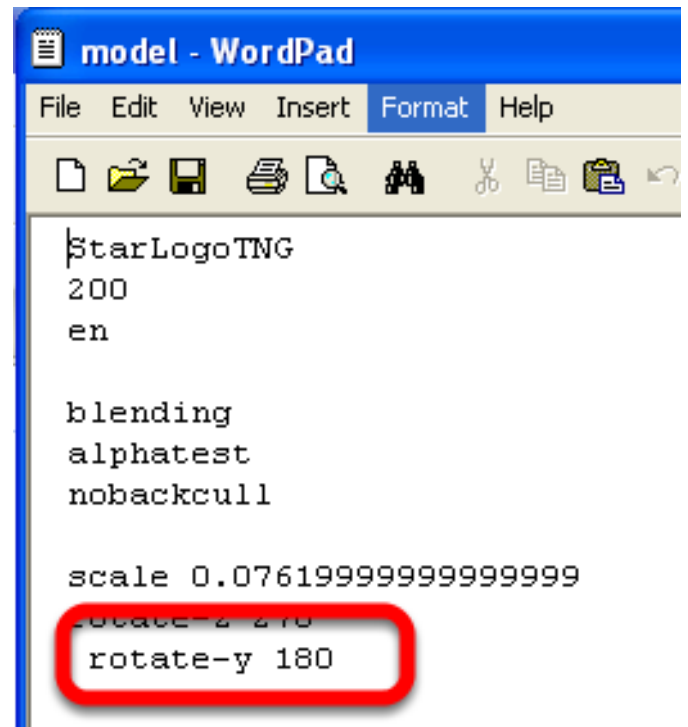
Locate model.slb file

The first step is to go to that shape's folder in the StarLogo TNG program file folder. First go to models, then to the category name, and then open the folder with the shape name. Open the model.slb file in any text editor like WordPad (Windows), NotePad (Windows) or TextEdit (Mac).



Identify rotate-y value

In model.slb, note the rotate-y value. In this example it is 180, which represents the direction that it's currently facing. Every model may have different rotate-y values and/or is facing a different direction initially.



Label direction that model is currently facing with rotate-y value

The 180 represents 180 degrees. In Cartesian geometry, degrees go higher in a clockwise direction.

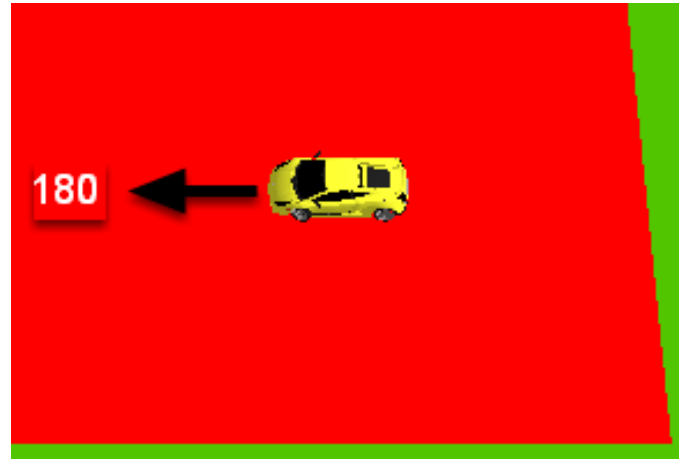


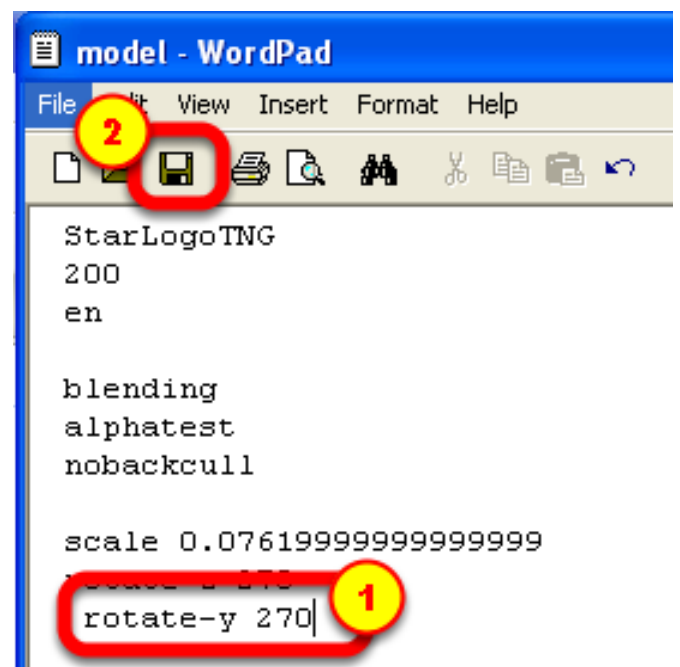
Figure out the correct y-rotation value that represents "north" in Spaceland

So in order for the car to face north, it needs to rotate 90 degrees clockwise, which is $180 + 90 = 270$ degrees.



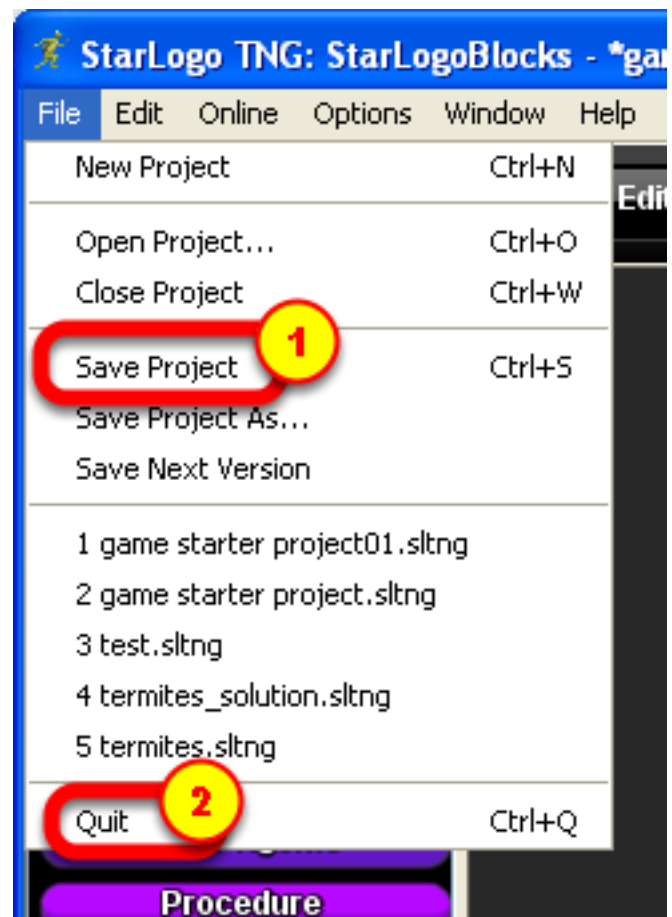
Change rotate-y value and SAVE!

1. In this example, we need to change the rotate-y value to 270 degrees. Again, the model that you're troubleshooting may have a different y-value and/or facing a different direction, so the value that you need to change may differ.
2. Save the model .slb file.



Restart StarLogo TNG

1. Go back to the StarLogo TNG software and save your project file, if needed.
2. Quit StarLogo TNG software and start it up again.



Check model direction

If you entered the correct y-value, the model should now face north. If it's not correct, try another y-value. The only possible y-values are 0, 90, 180, and 270, so you can also just use trial-and-error.

