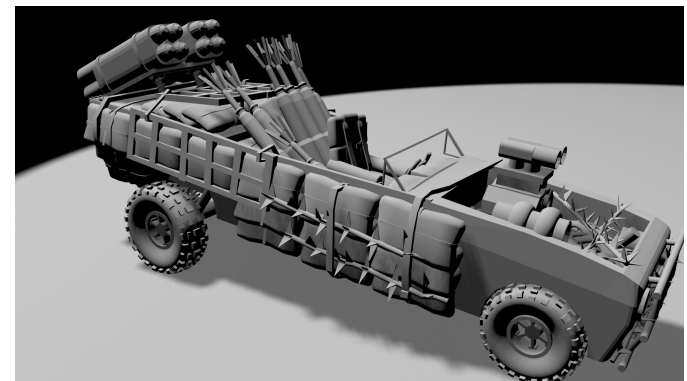
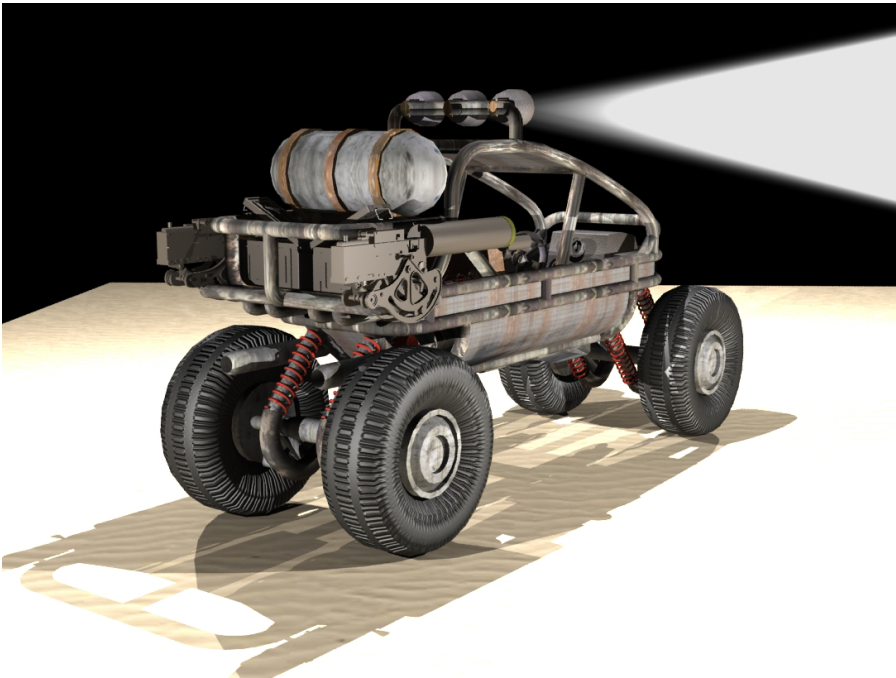


Past Winners of the Mad Max Assault Vehicle Contest

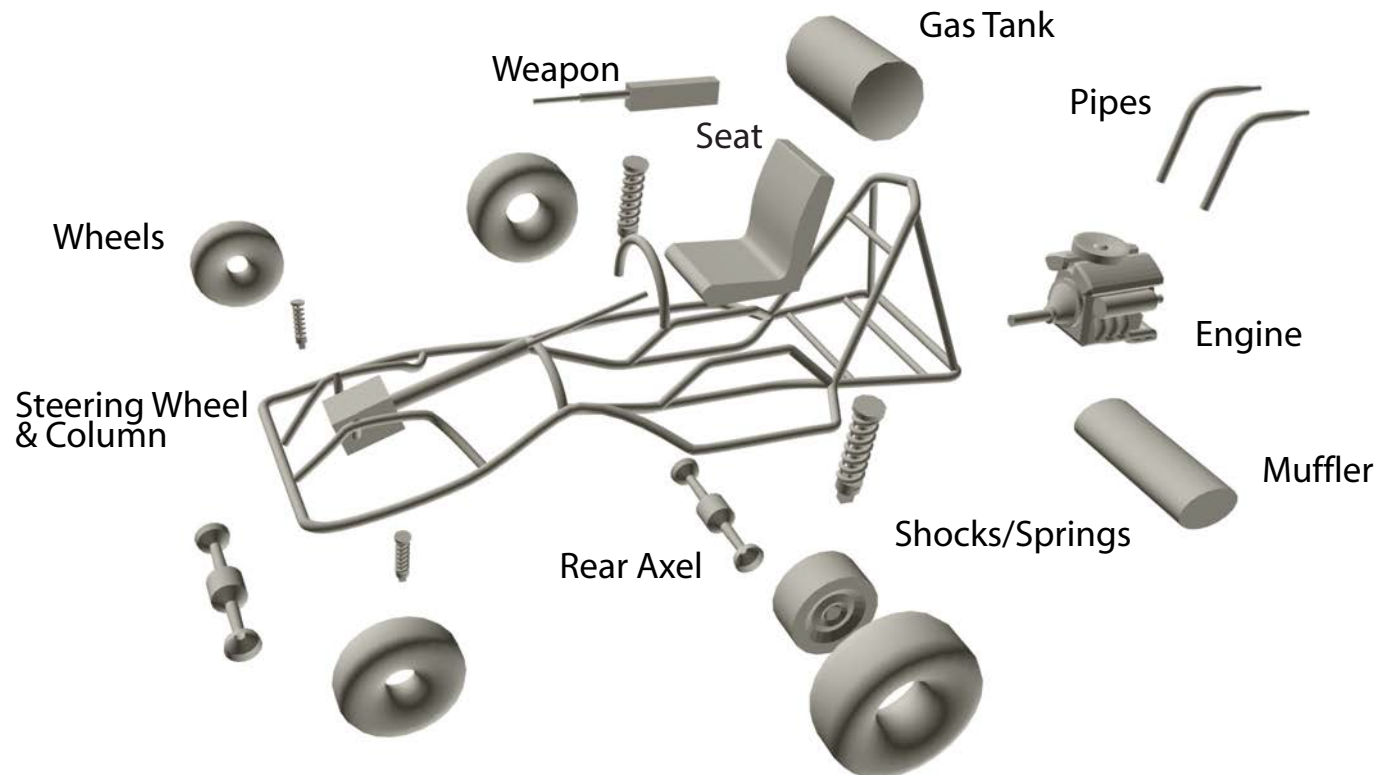


Games need to run fast so the models (meshes) in the games need to use as few polygons as possible. The more polygons on a model, the longer it takes for the game engine to process, hence the slower the game play.

The Dune Buggy model has a limit of 20,000 polygons. To keep a running polygon count open *Views - Viewport Configuration - Statistics - Show Statistics in Active View*

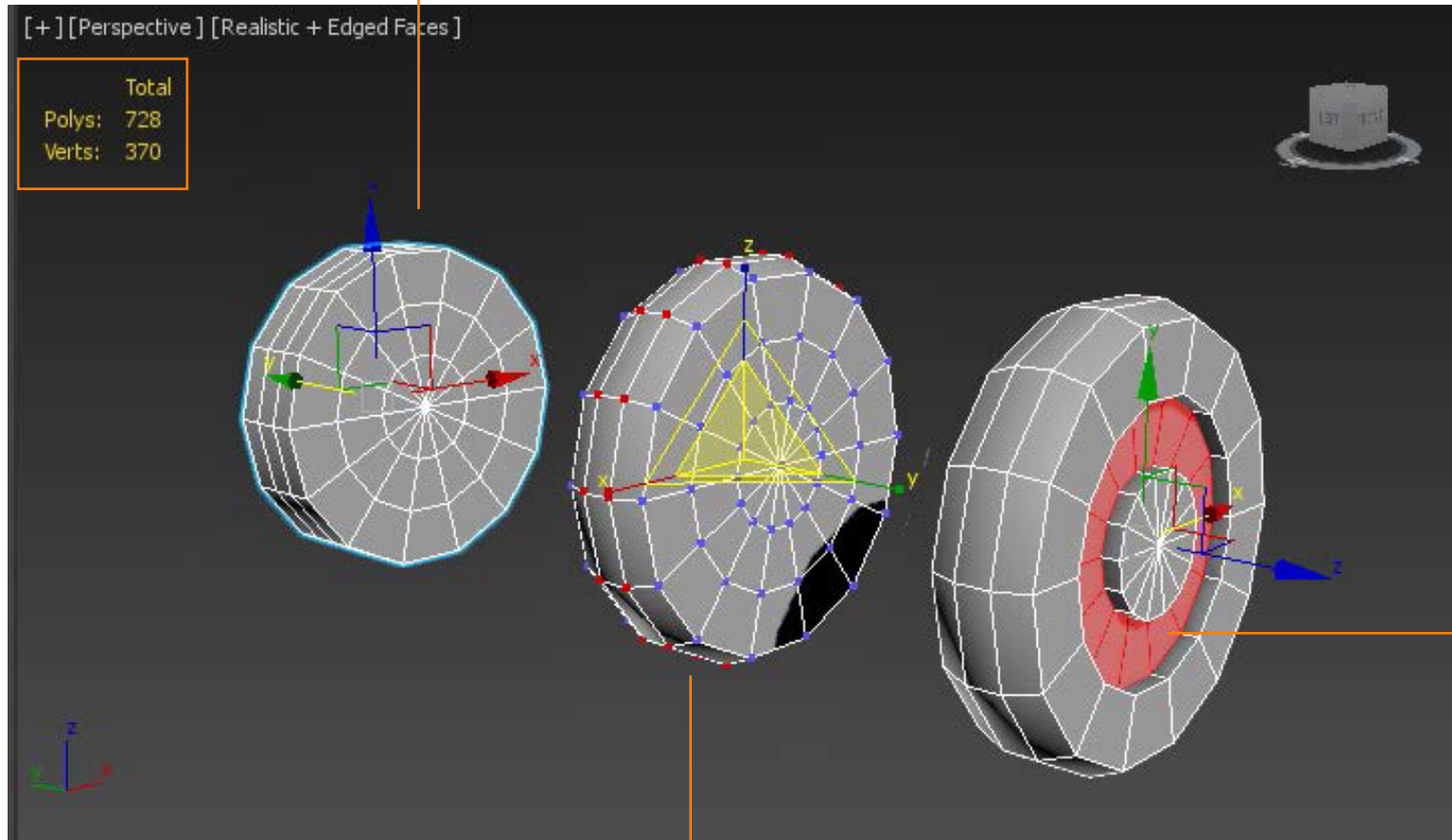
Furthermore, all polygons should be 4 sided (A few 3 sided are allowed). This makes modeling a bit more tricky.

1. A check list of parts of essential parts of a dune buggy is:



NOTE!! - Unreal is very fussy. You must size your vehicle to Unreal's rules. Set 3D Max to CENTIMETER'S in the Units Setup. It all begins with the invention of the wheel! This sequence shows the modeling of a wheel and tire.

1. Begin by making a cylinder in the "Left Viewport". Set the cylinder to: Radius - 60
Height - 40
Height Cap - 3
Cap Segments - 3
Sides - 14



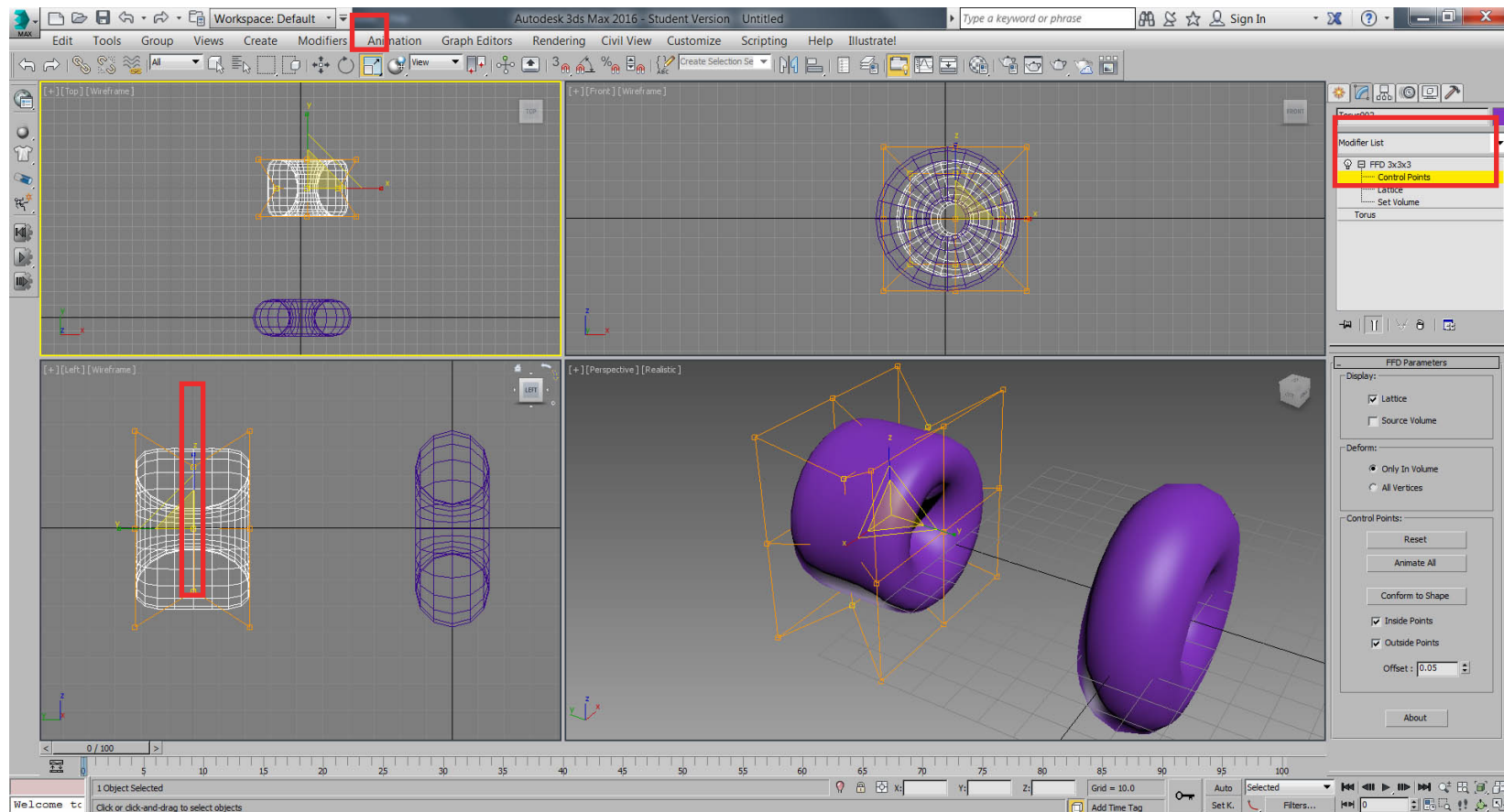
2. Convert the cylinder into an "Editable Mesh".

3. Select the two rows of vertices (see illustration) and expand them with the "Scale" tool. This rounds the tire.

4. Select the inner ring of polygons and extrude them to create the wheel.

Here's an other way you might make a tire

1. Begin by creating a primitive "Torus"
2. Then add a 3x3x3 FFD modifier.
3. Open the modifier and select "Control Points"
4. Use the "Scale" tool to squeeze the center rows of the control points and flatten the torus into a tire shape

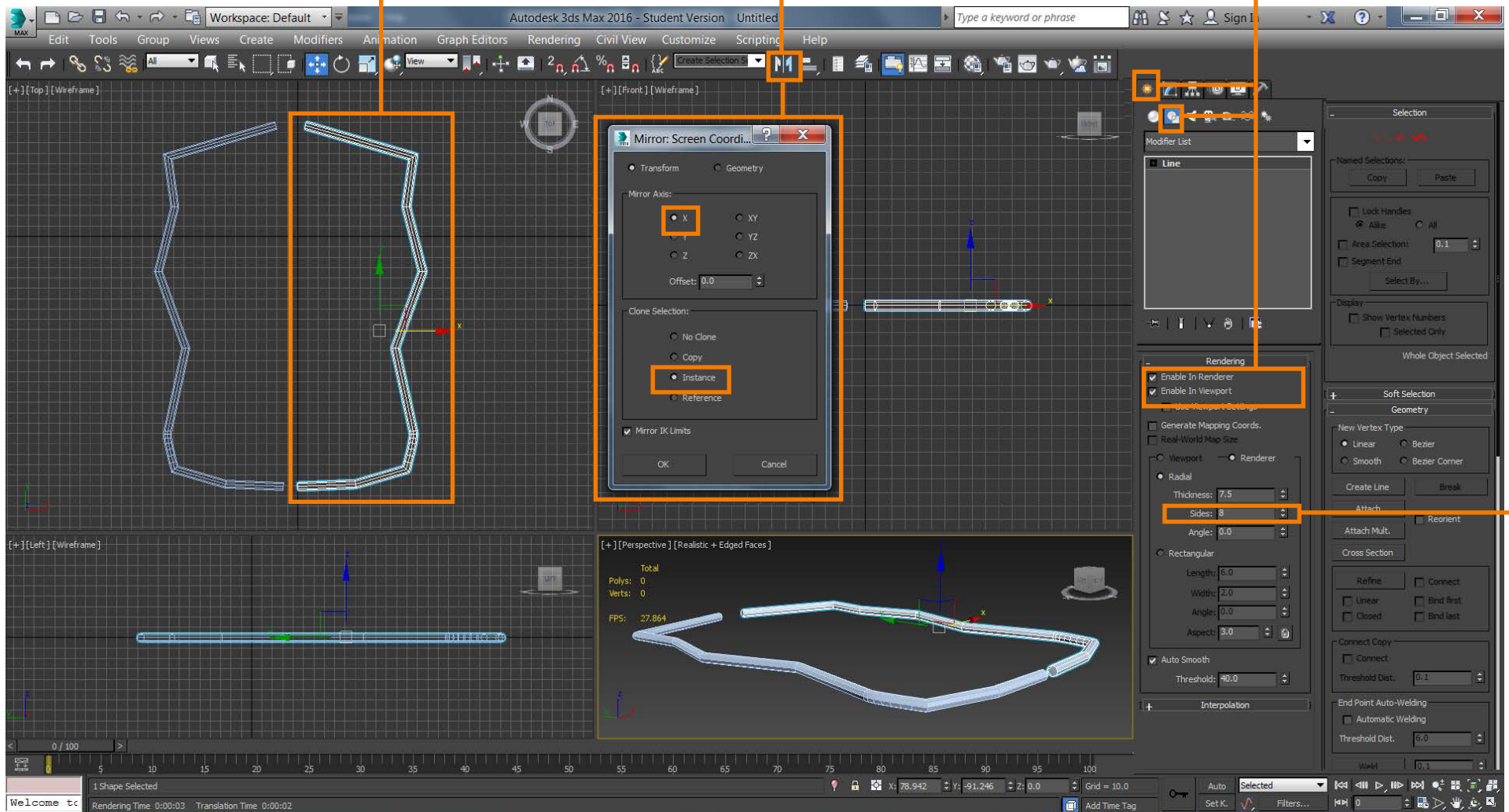


Next you will develop the frame onto which all other parts will be placed. Frames are made using the "Line" tool. You need only make one side of the frame. The opposite side is made by "Cloning" an "Instance".

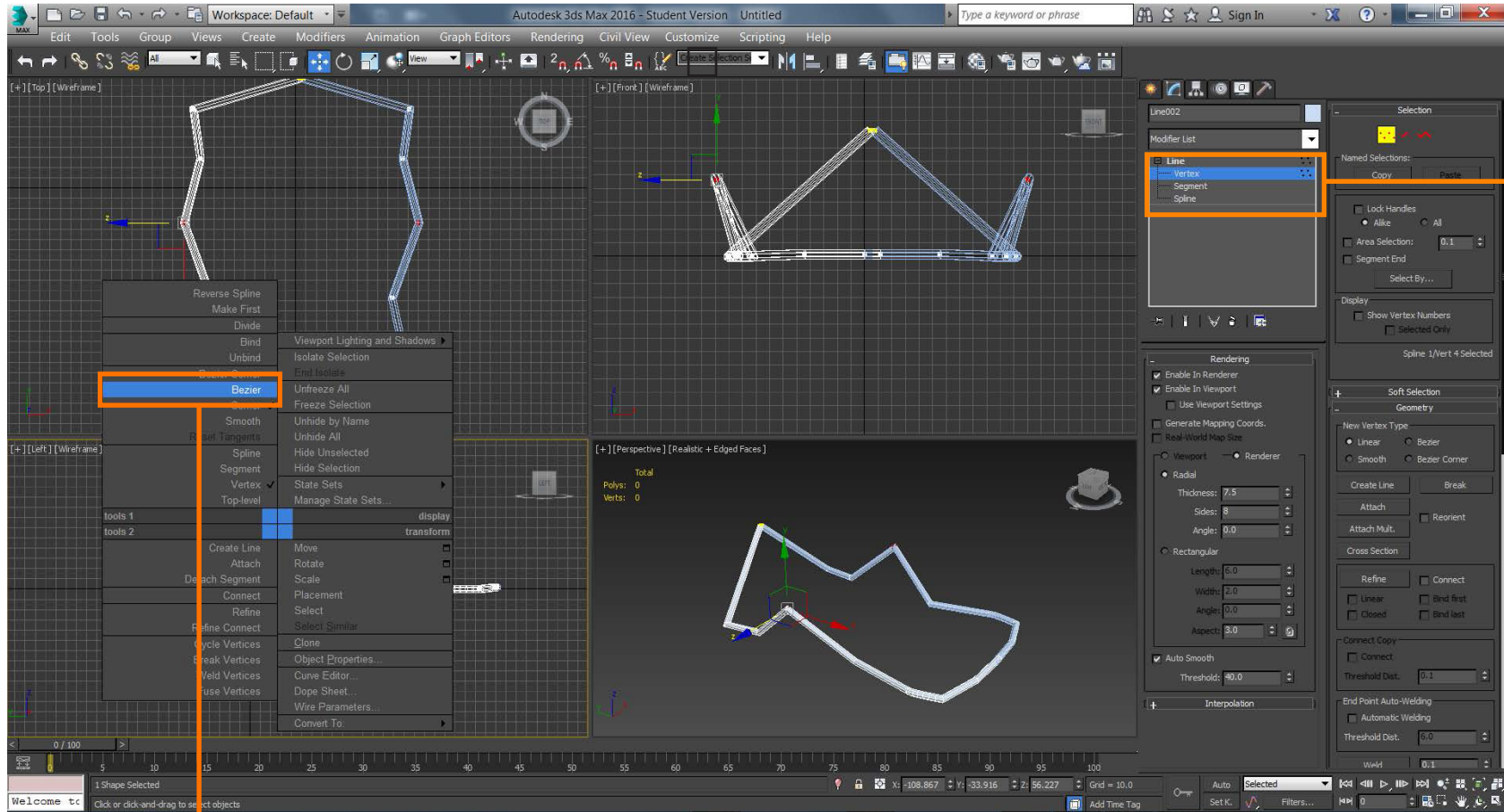
6. Reduce the sides to "8".

5. In the "Top" Viewport - Draw one side of the frame. (Turn these on)

7. Use the reflect tool to clone the other side.

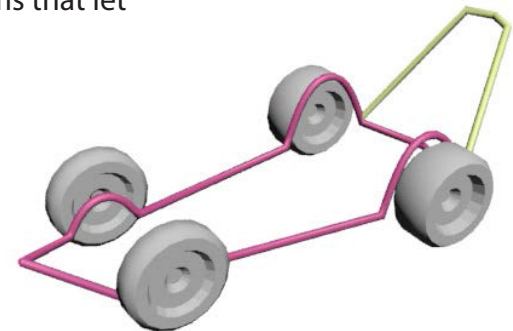


Shape the frame using the Sub Object Level



1. Right click on a vertex and choose "Bezier" This gives you control arms that let you shape the frame.

Fill-in the rest of your buggy with more lines to make a stable and believable structure. Be creative. Make your buggy look different.



More parts for your vehicle can be found on the Create Panel/Sub-Panel "Extended Primitives" and "Dynamic Objects".

