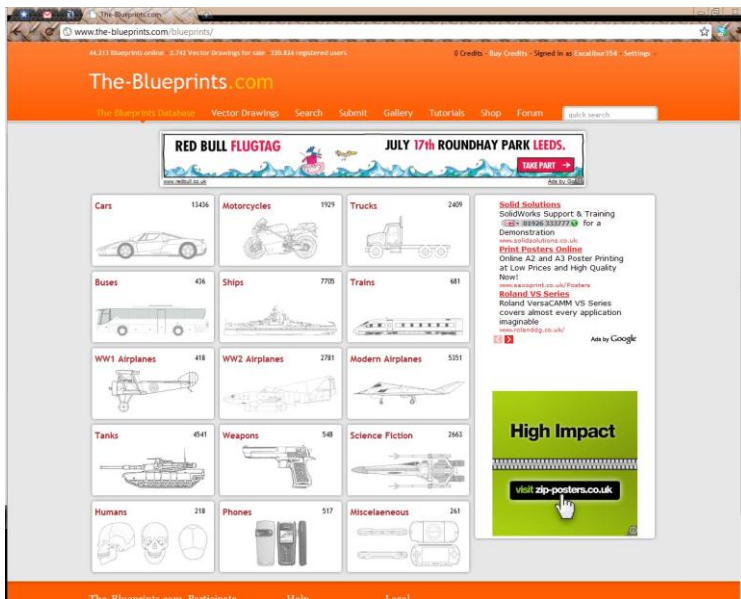


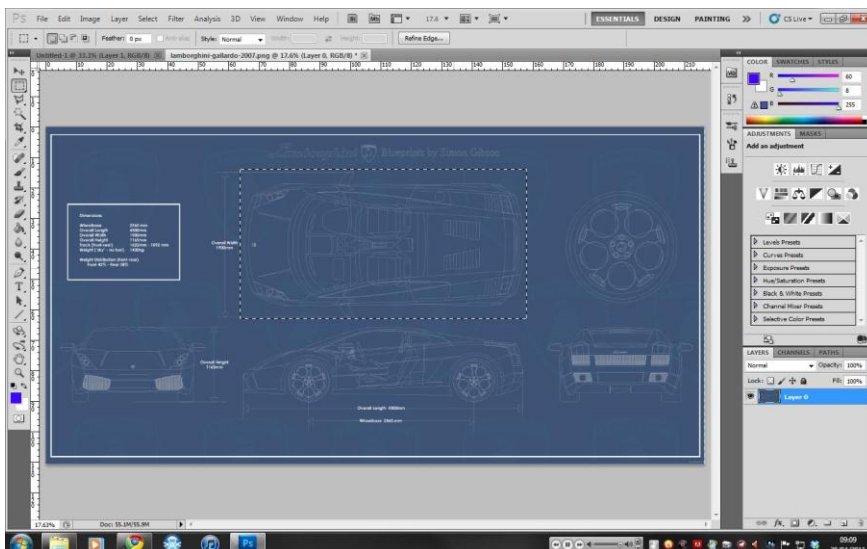
## Setting Image Planes Up in 3DS Max for Car Modelling

Firstly this tutorial is set up for absolute beginners to 3ds Max, but can be used by more proficient users as well.

First you need to get hold of some blueprints of the car that you want to model. I tend to use [www.the-blueprints.com](http://www.the-blueprints.com). If you sign up for a FREE account you can get the full resolution images that are available.

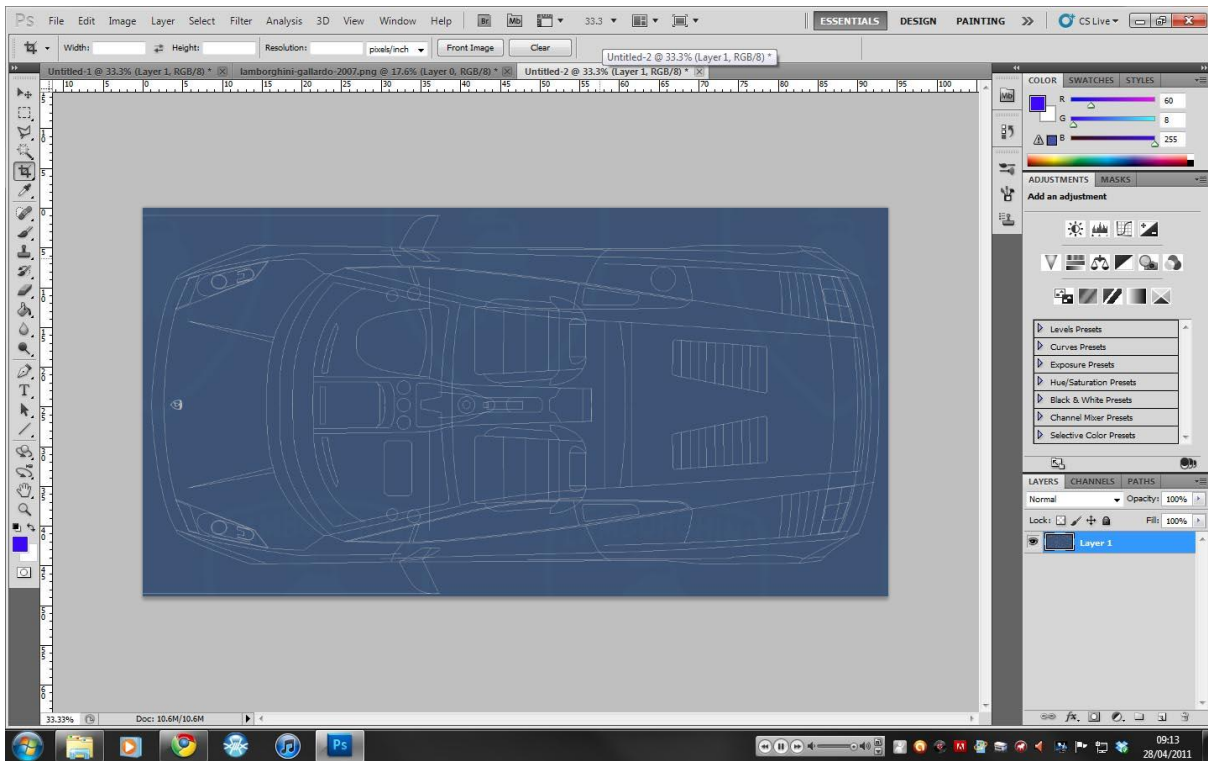


Once you have the blueprint you want you need to open Photoshop (or equivalent imaging program). Then press Ctrl+O to bring up the open window, and then find your blueprint and open the file. Your window should look similar to the one below.

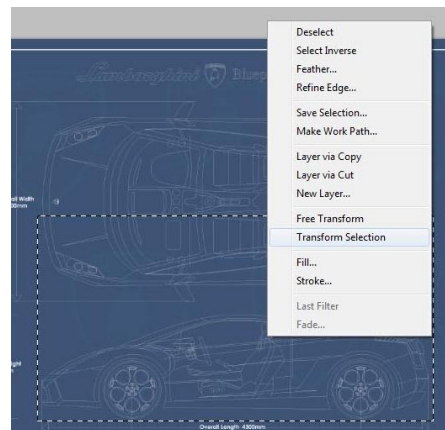


Next using the marquee tool (shortcut M) create a selection box around the top view of your chosen car. (See above image)

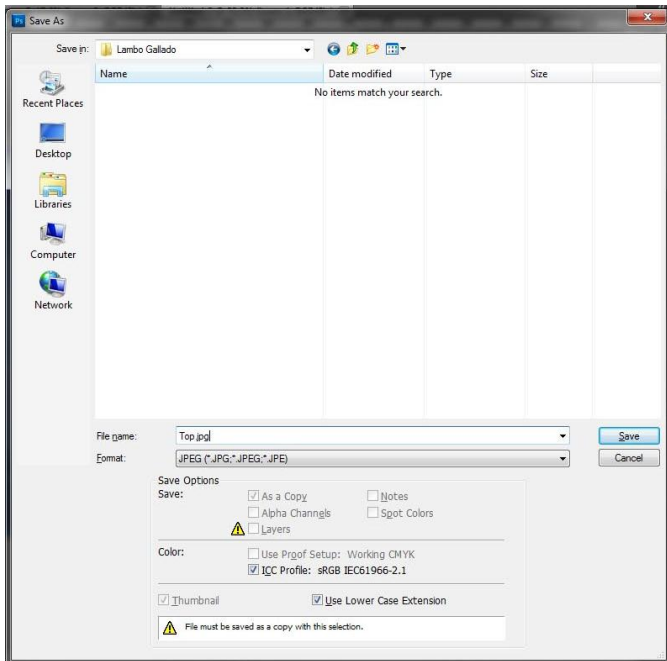
Once select press Ctrl+C to copy the selection then Ctrl+N to open a new document (A window will pop up all you have to do is click OK). Now paste the selection into this new document. So you should have something similar to the image below.



Now you have done this we will move onto the next view, which is going to be the side view. To do this simply move the existing selection box to the bottom of the wheels, and then right click (RMB) and choose the option “Transform Selection Tool”. Now move the top of the box down so that it is just above the top of the car then press enter to confirm the change. Copy the selection and paste it to the same document as the top view you did earlier. Using this method, do the same for the Front and Rear views also.

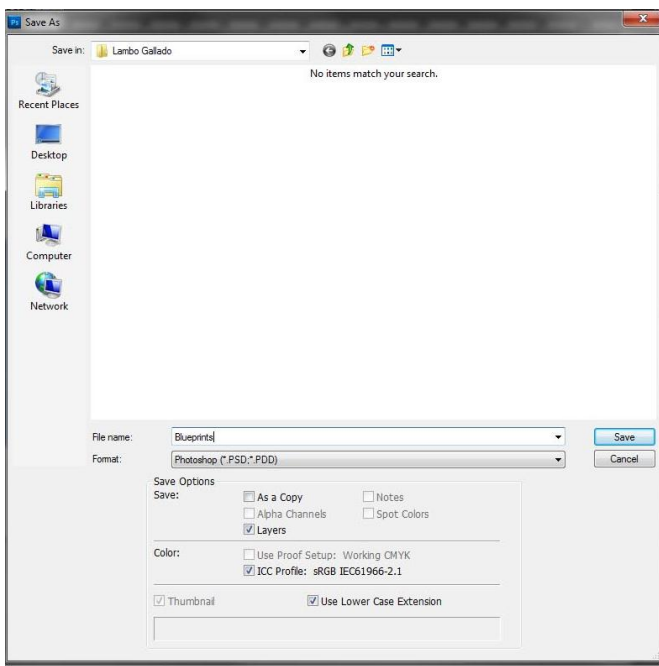


Now that you have all four views in a single document as individual layers we are going to save them as Individual JPG files. To do this hide the side, front and rear views so that all you can see is the top view. Press Ctrl+Shift+S to open the save document. BEFORE YOU SAVE make sure you change the file type to JPEG and call it something like “Top” or “Top View”.



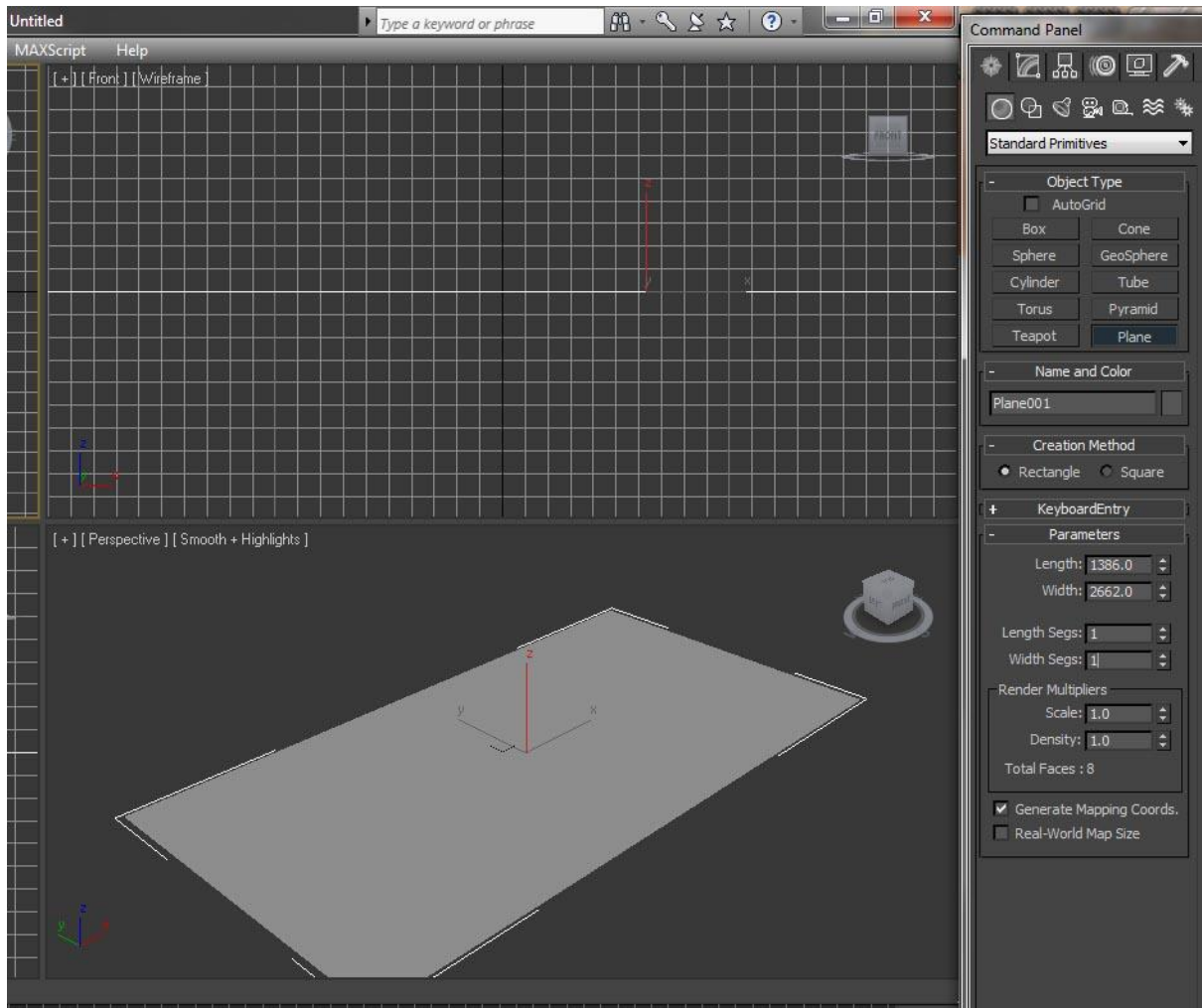
Do this for all four views making sure that you can only see one image at a time.

After you have saved them as individual image you should save them as a PSD (Photoshop’s native file type) file as well. Press Ctrl+S and call it “Blueprints” or similar.

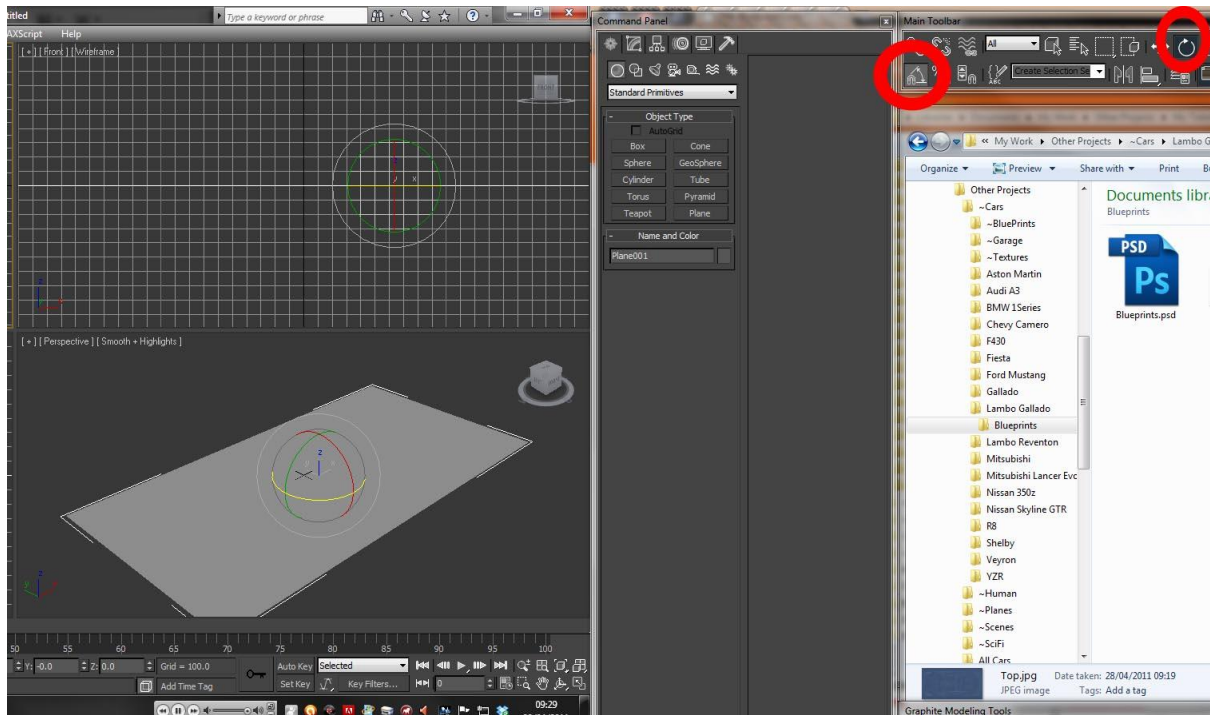


Now open 3Ds Max.

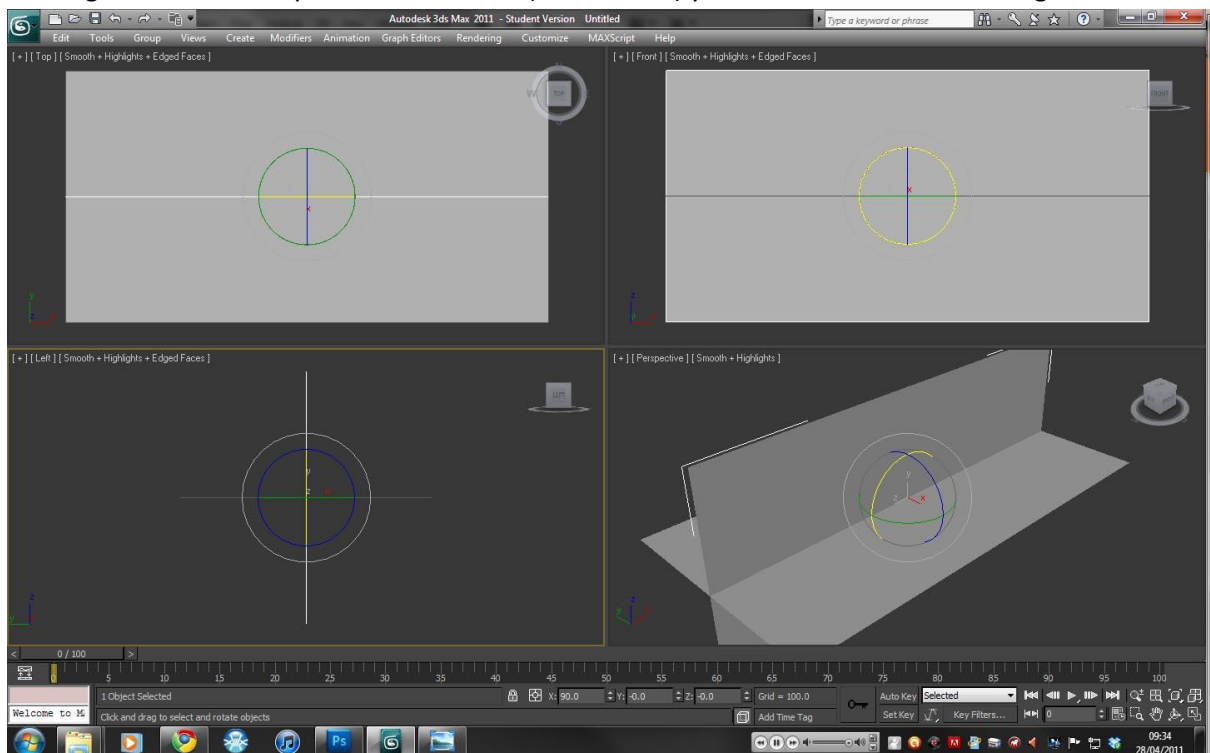
We will start by creating the planes. In the top viewport create a plane of any size. In the modify panel change the size of the plane to match the size (In pixels) of the top view fo the car. My image size is 2662x1386. (Note: in 3ds Max the length value is the second number you would see in the explorer window. In my case length is 1386 and my width value is 2662)



Now you have your first plane we need to create 3 more. There is more than one way of doing this but I find this way to be the quickest. Press the snap rotation button (Circled in the image below) then press the “select and rotate” button (Shortcut E).

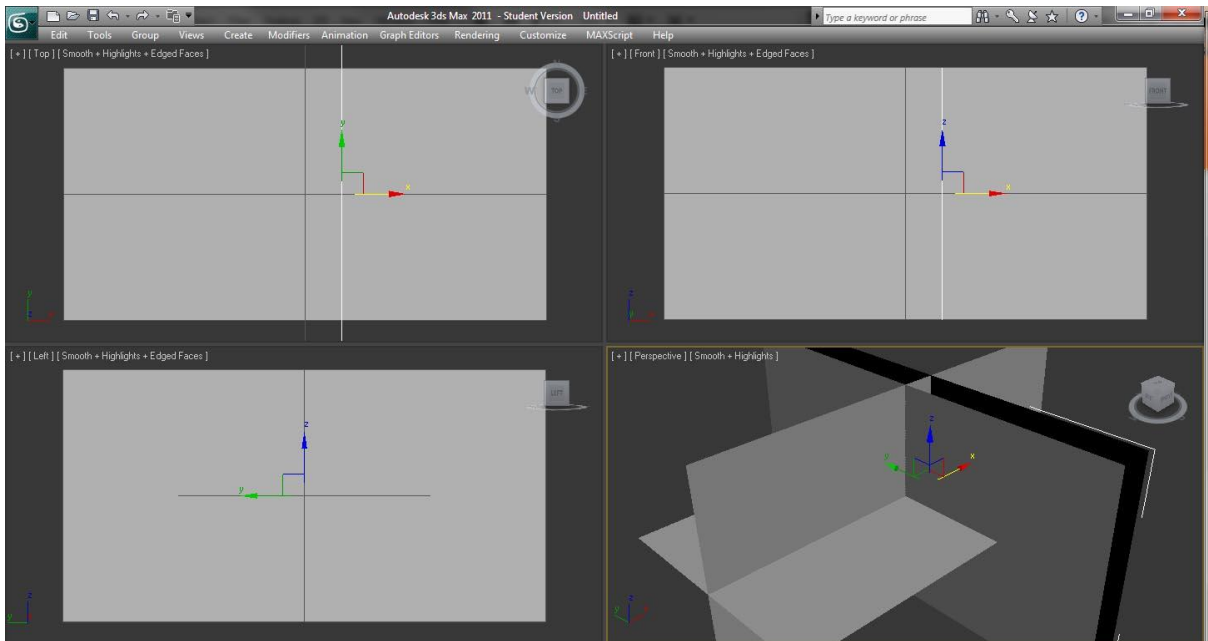


Holding Shift rotate the plane on the X-axis (the red one) you will need to rotate 90 degrees.

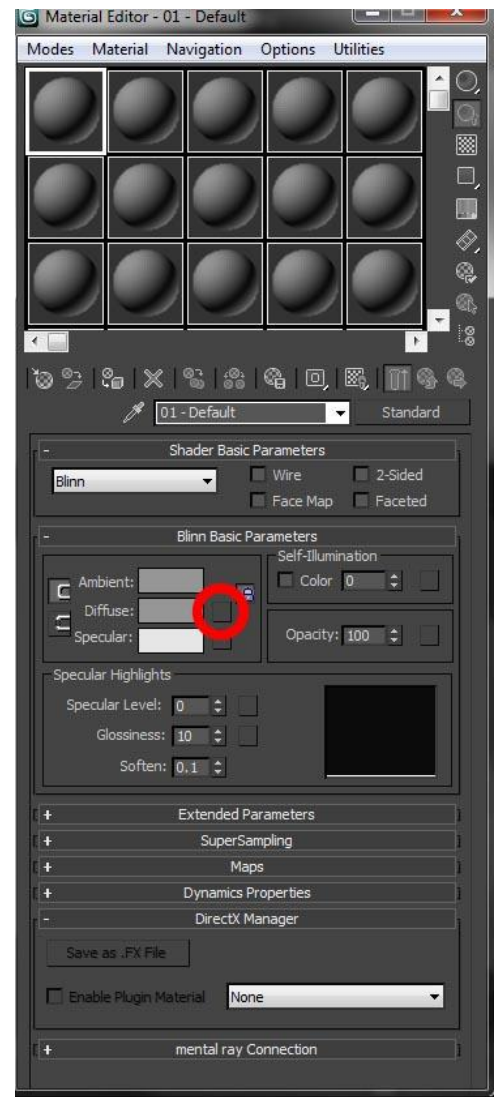
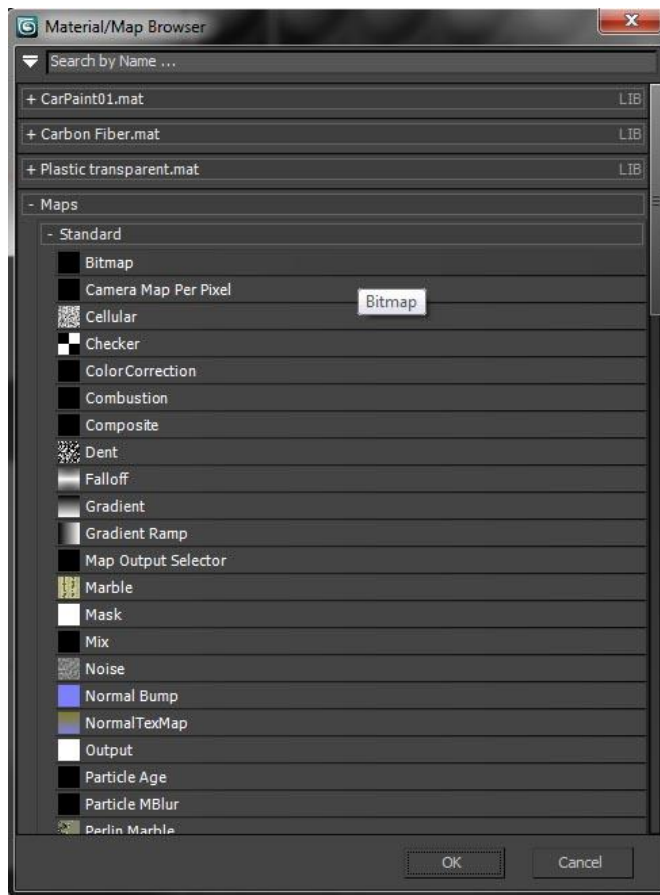


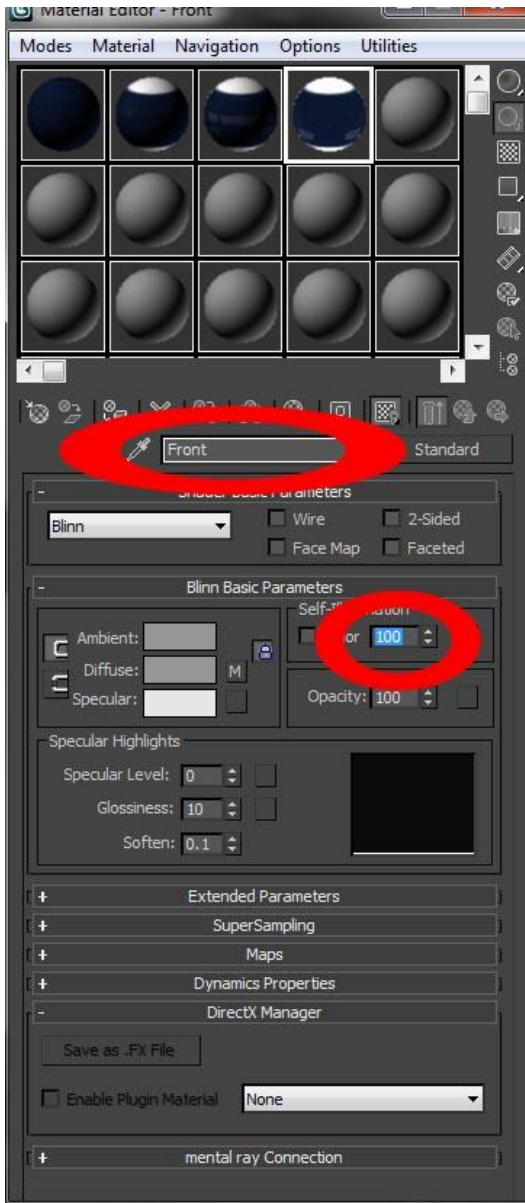


Continue to do this until you have 4 planes that look similar to the image below.



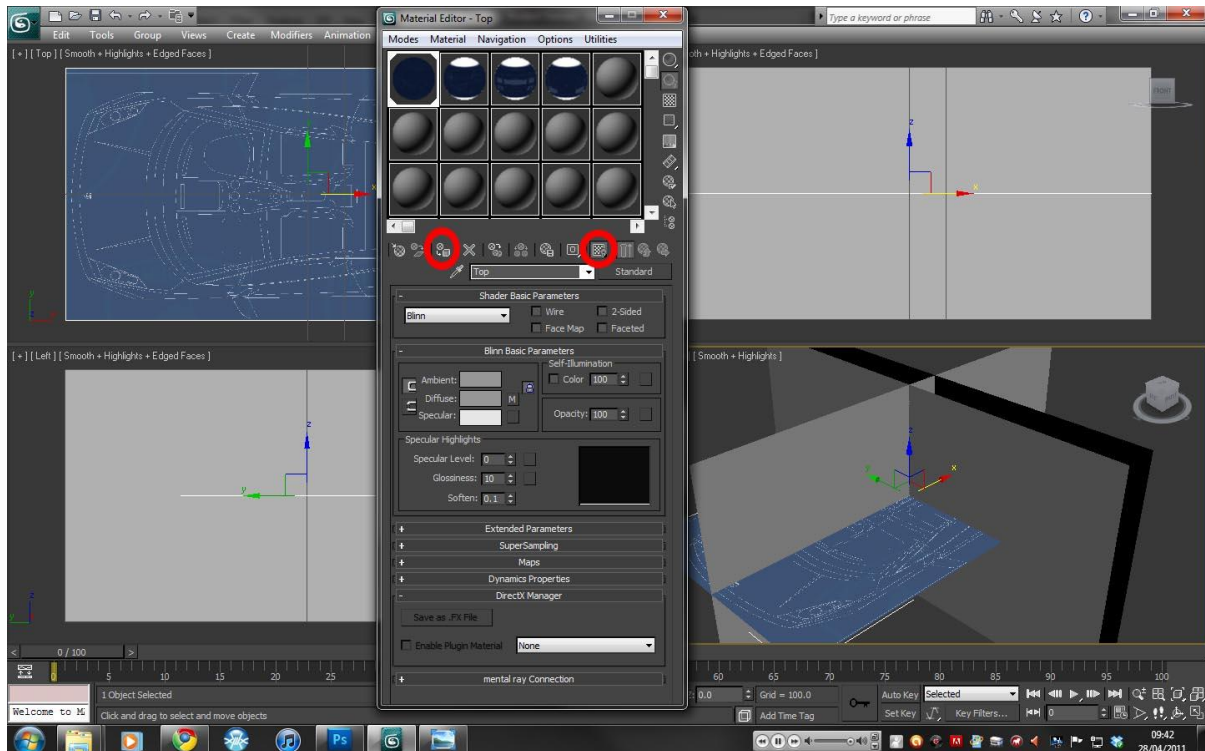
Now we have the 4 planes set up, we want to add the blueprints to them. Open the Materials window (Shortcut M). Click the small box next to diffuse (right) this will open a new window (below). Double click on "Bitmap" to take you to an "Open file" window. Navigate through your file and find your blueprints then double click on one of them.



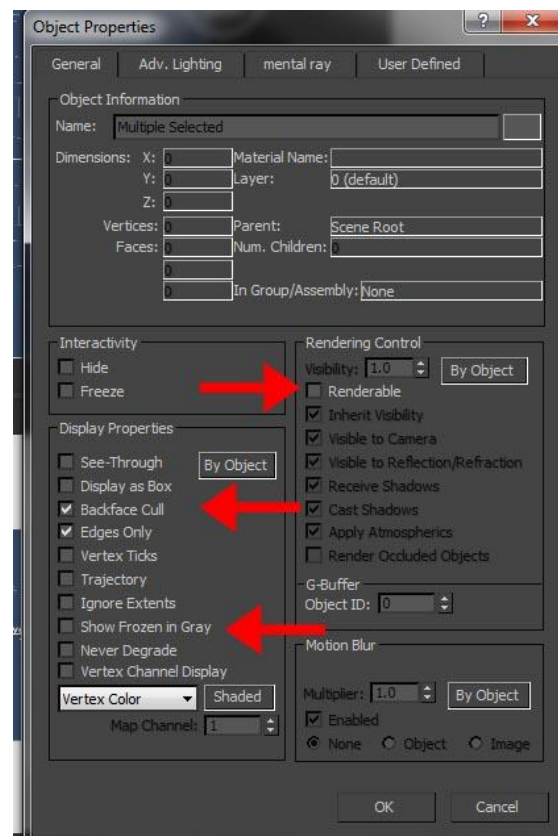
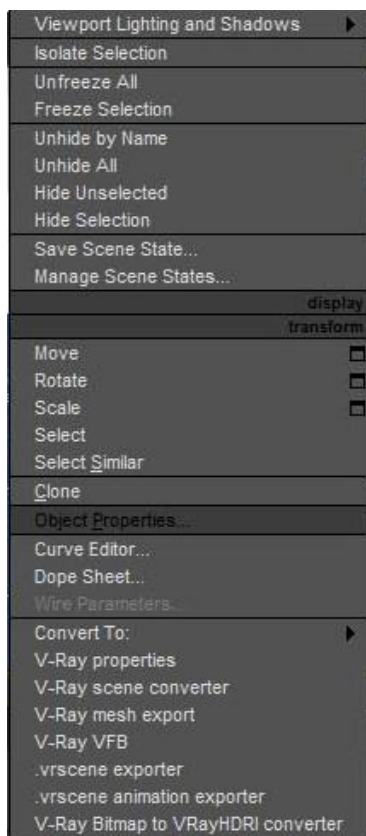


Now you have your blueprints in 3ds Max change the name of the material (for the front image call the material "Front" or "Front\_View" and change the Self-Illumination to 100 (see left). Repeat this for each of the views.

Once you have all four images in 3ds Max make sure the “Visible in Viewport” (Right: Right Circle) is clicked on. Choose the plane you want to add the image to (In my example I used the top view) and click “Add Material to Selected”. Your screen should look similar to the one below.

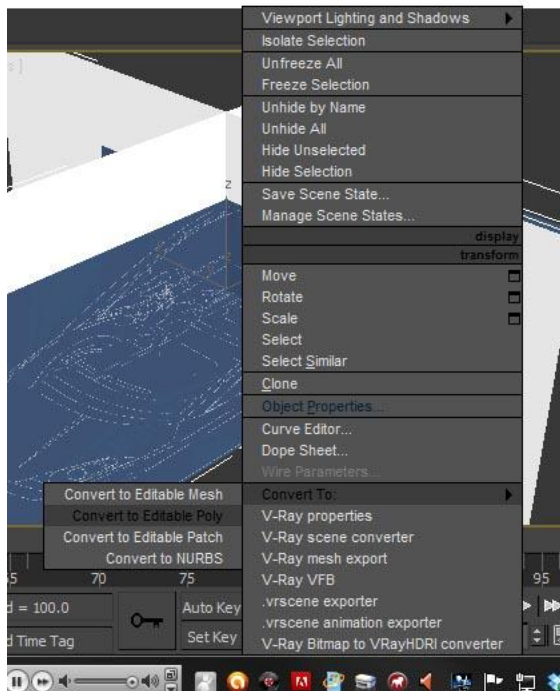


Do this for all four planes. Once this is done you need to select all four planes and right click, then choose “Object Properties” to open a new window. Then uncheck “Show Frozen in Gray” and “Renderable”. Next check “Backface Cull” (this will make the back of the planes invisible)

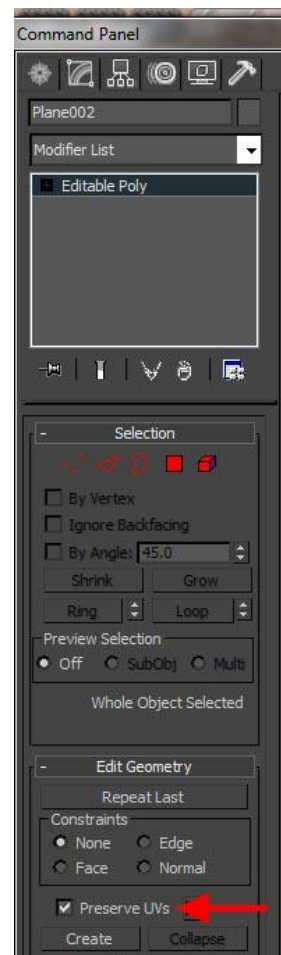




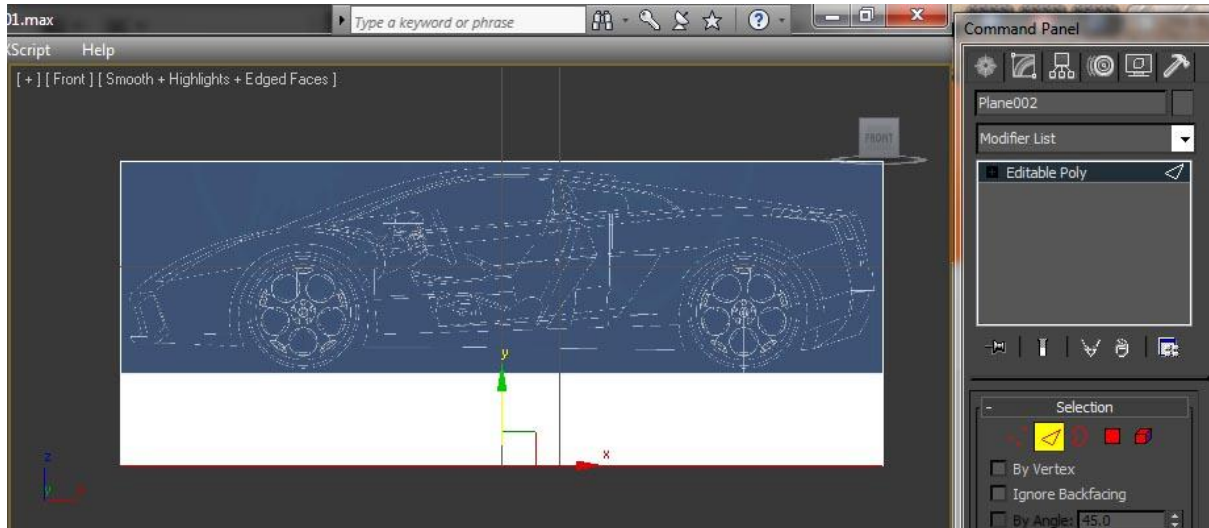
Now convert all four planes to editable poly.



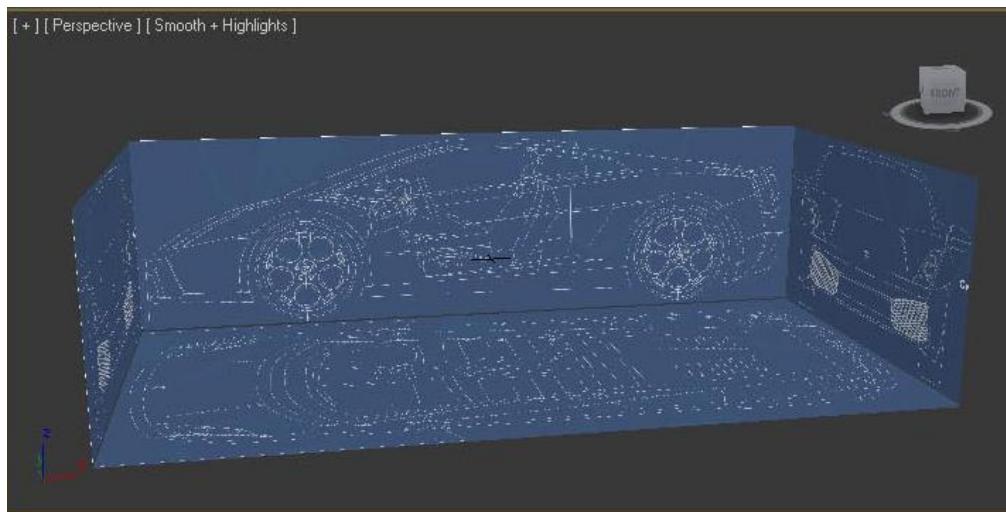
Once you have done this select one plane (front, side or rear) and check the “Preserve UVs” box (right). This will allow you to move edges of the plane without affecting the image.



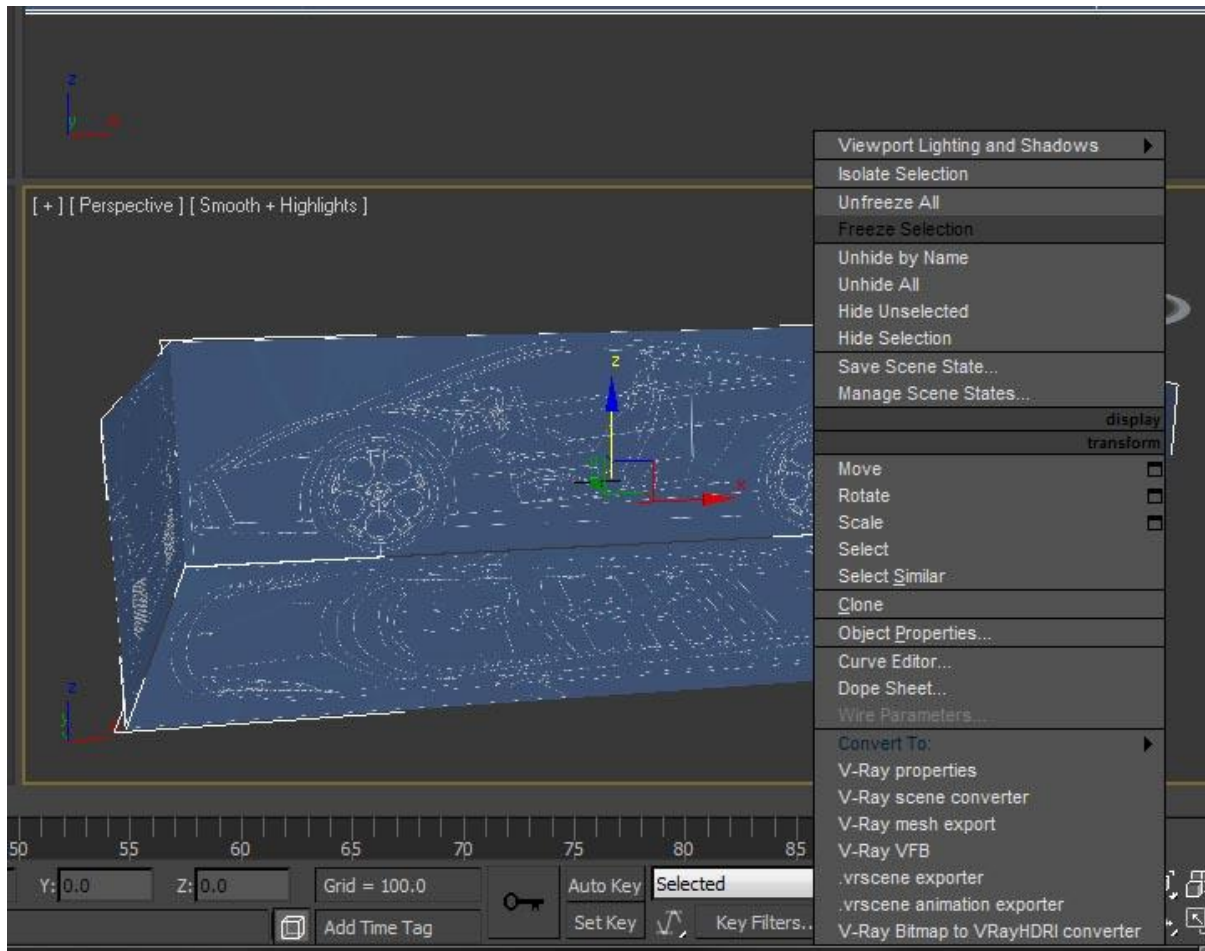
Now go to sub-object mode and select Edge (box with a picture of a triangle). On the side view of the car select the top (or bottom) edge and move it down (or up) until no white remains. Be careful not to cut off the top of the car. Then repeat the process for the other views, getting rid of any white parts.



Once your planes have no white borders it's time to move them into position. Using the "Select and Move" tool move the side view back to the edge of the top view. The front and back views should go to either end of the top view. (Note: Front view should be positioned at the rear end of the car and the rear view at the front end). Now move the top view down to the bottom of the side view (See below).



Now select all planes, right click and select “Freeze Selection”.



Now save the file and start modelling your car.

Hope this helped. Send me a message to let me know what you think.

Luke