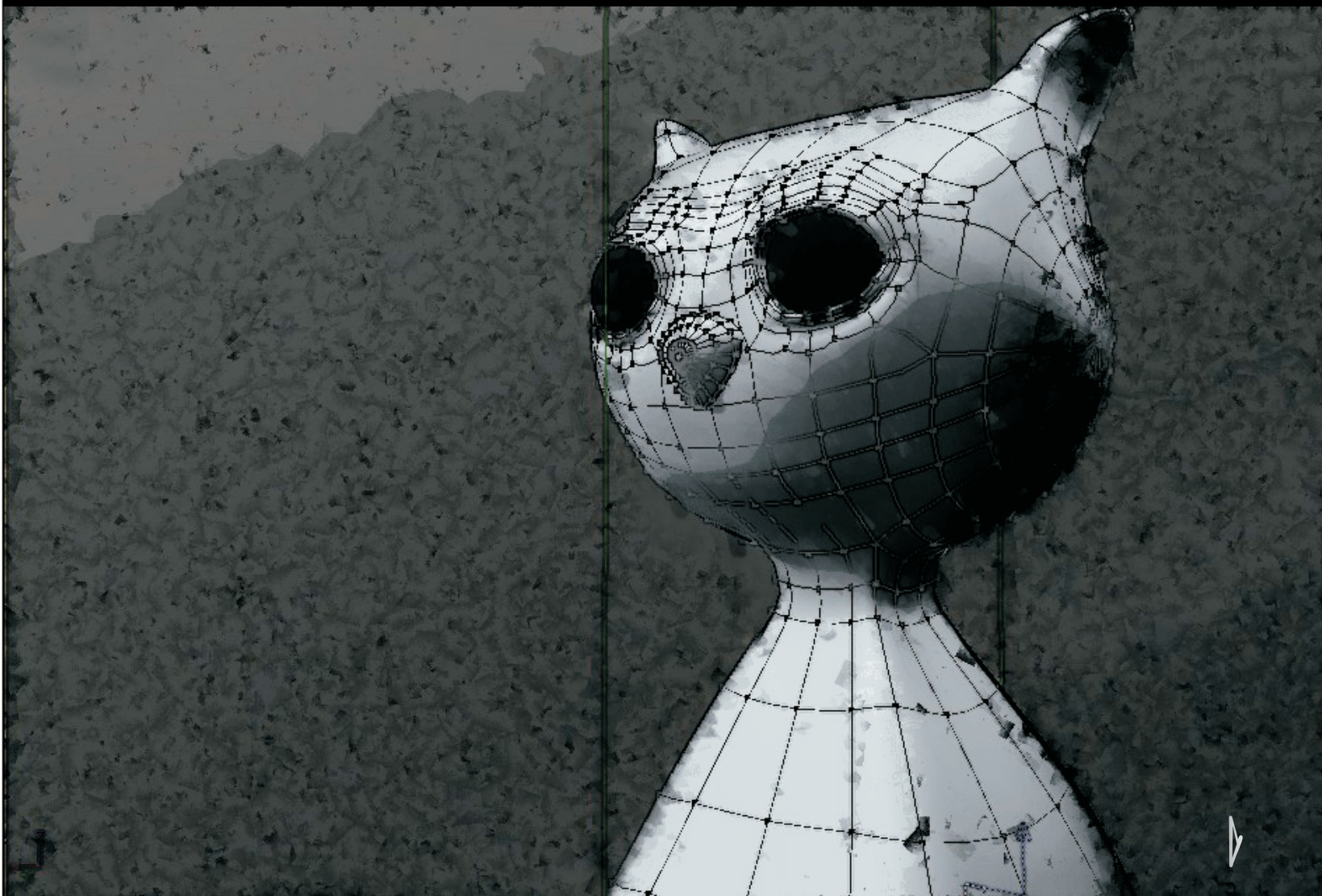


MODEL KATIS CHARACTER USING CARRARA 7 Pro SOFTWARE

by
Danas_Anis
©



2009

Hello!

I'd like to welcome you to this tutorial about my character's Katis modeling in Carrara 3D software for 3D modeling and animation.

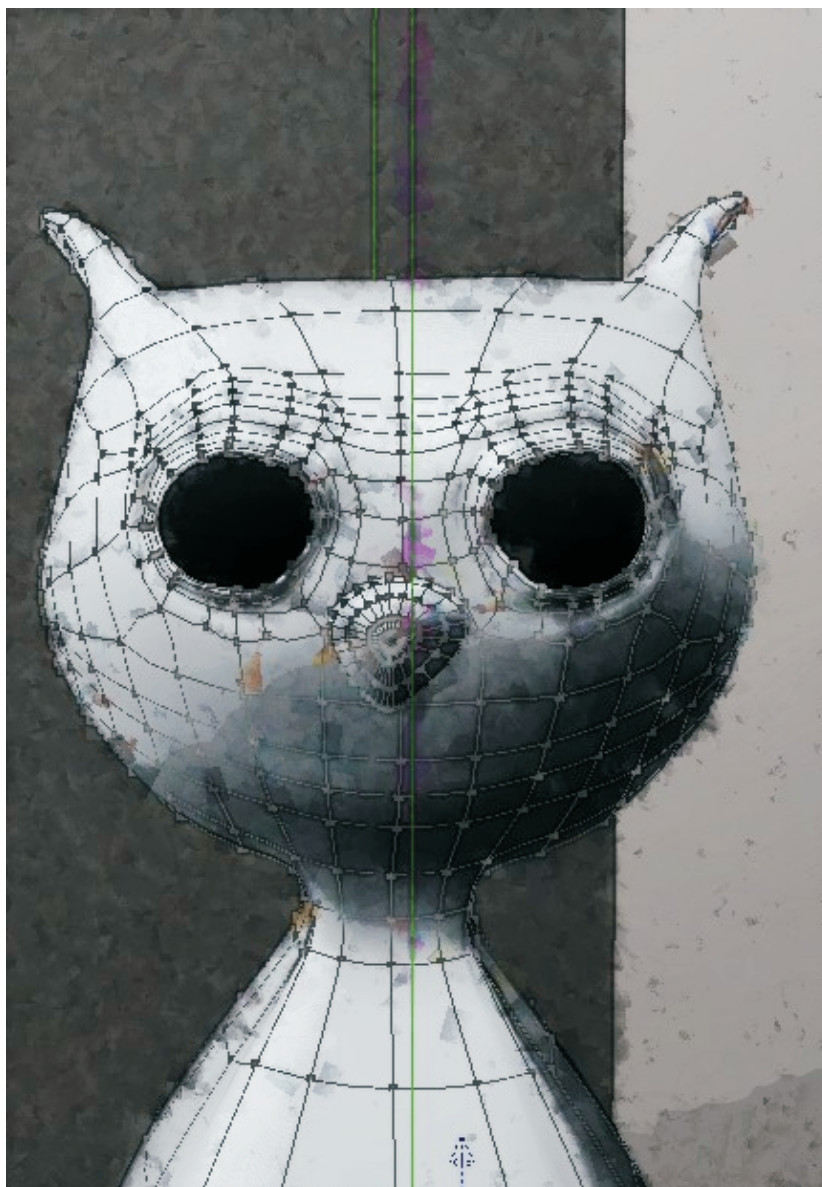
I am Danas_Anis or Jetbird_D2 and I will try to introduce you to a nice Carrara 3D interface for simple modeling via creation of my little cat character- Katis!

Do not expect anything special or extremely complicated. I am a beginner myself therefore I am good for those who are starting their journey in the wonderful and easy to use application with the beautiful name; Carrara.

Before we start we must know that Carrara is fun software and makes things in a way that is... fun. So never forget —3D is fun. Never let it get painful, see everything through the prism of great fun.

That is the face of Carrara: easy as easy, friendly as your best friend, makes fun and fast workflow that allows you to make amazing things in no time compared to other software packages.

So relax and enjoy this simple road to elaborate achievements that you will create. I must also warn you that this tutorial is Windows specific but if you know the keyboard layout differences between PC Windows and Mac OS X, you shouldn't find any trouble ;).

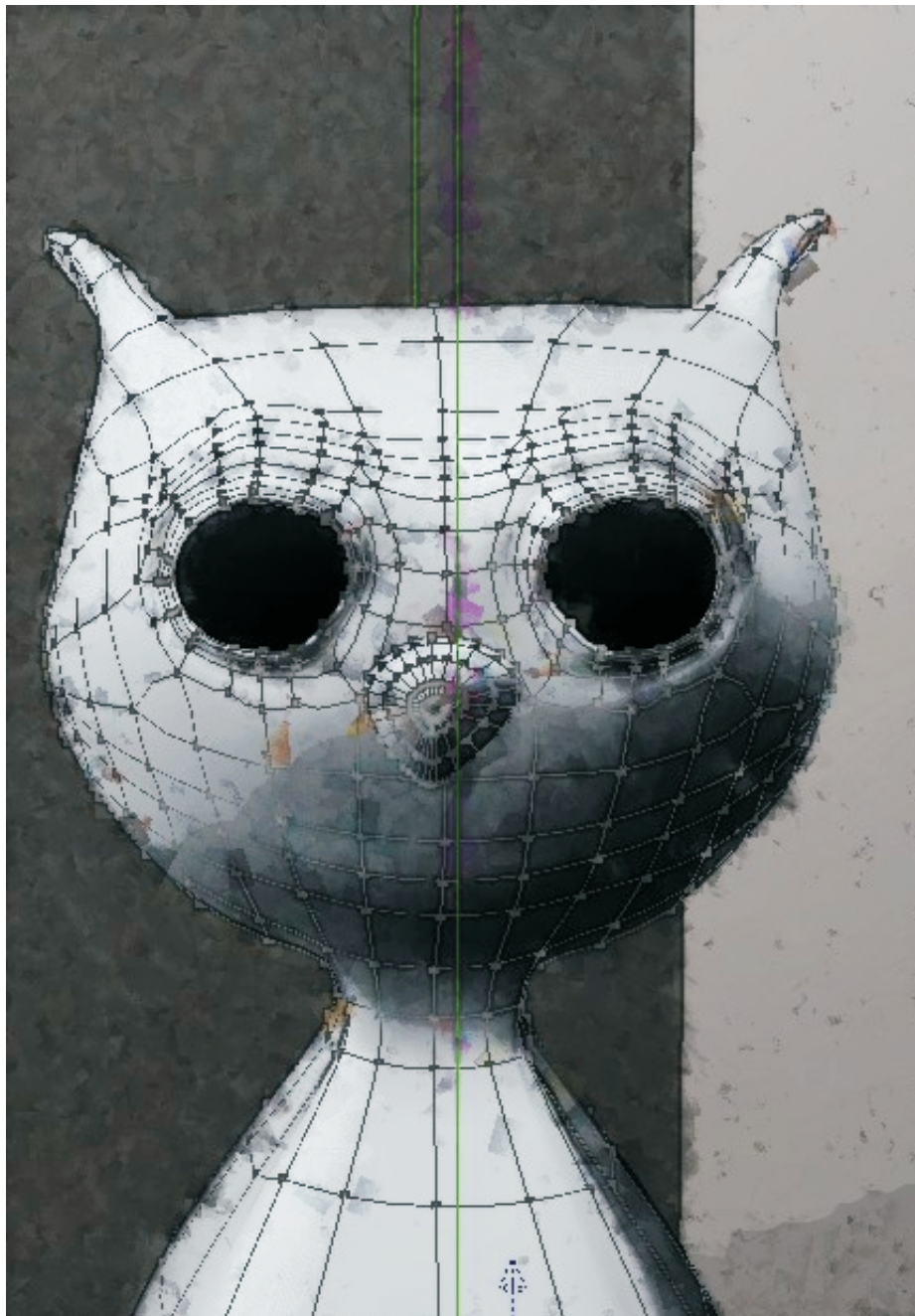


User license

This is a free tutorial and cannot be redistributed or sold. It comes as a free add-on to the professional Danas_Anis tutorials that can be found on the Dreamlight Club. <http://www.dream-lounge.com/dreamlight/dlc.htm>

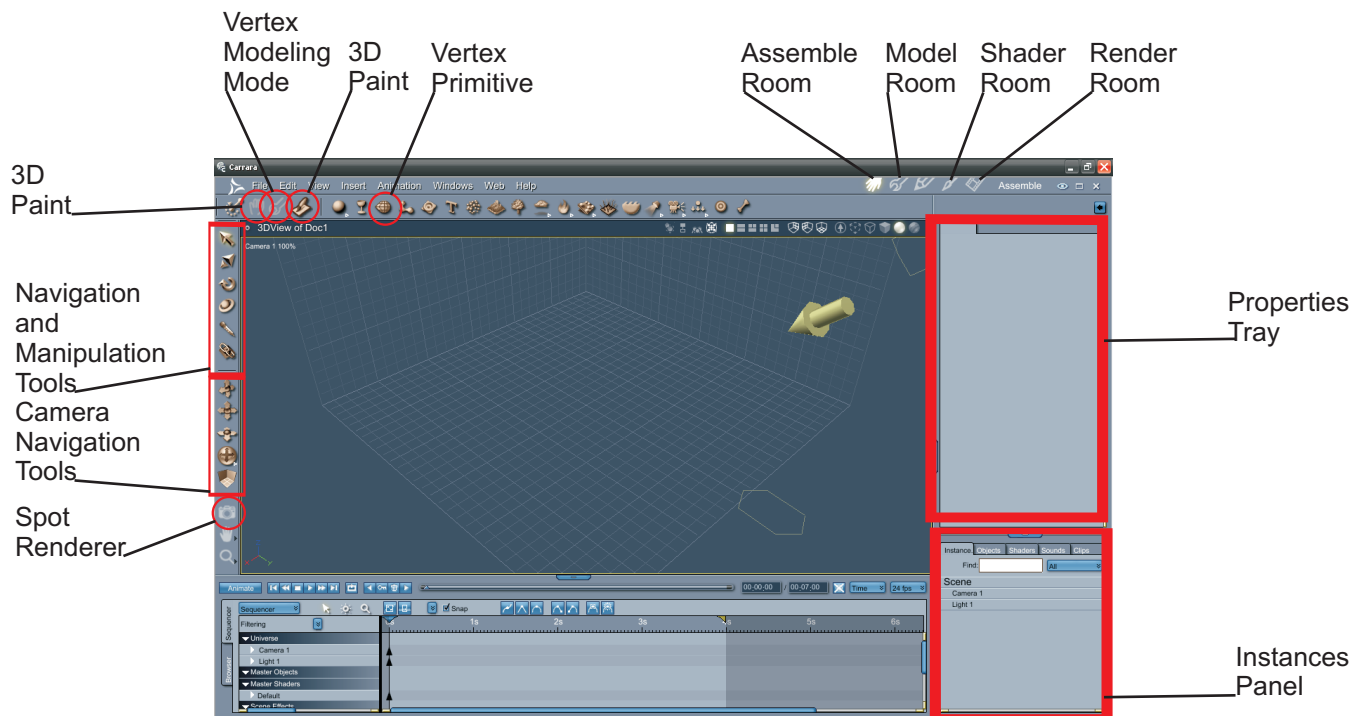
You can use Katis character for personal art creation, but it is prohibited to use it for any commercial use. You are allowed to use it as a reference figure.

Please do not hesitate to share your image and knowledge you received by reading this tutorials on Carrara WIPs.



Shall we begin?

First of all we should take a look at the Carrara 3D software's interface we will use for modeling. Currently I am using Carrara 7pro, but do not worry, this tutorial is suitable for both Carrara 6 and Carrara 7. The main difference for us is that Carrara 7 opens the door to modeling in Assemble Room, new UV mapping tools for better texture map creation and 3D Paint Tool, that allows us to create texture maps directly in Carrara 7pro on the object itself with no need to use external image editing software.



Carrara 7pro Assemble Room

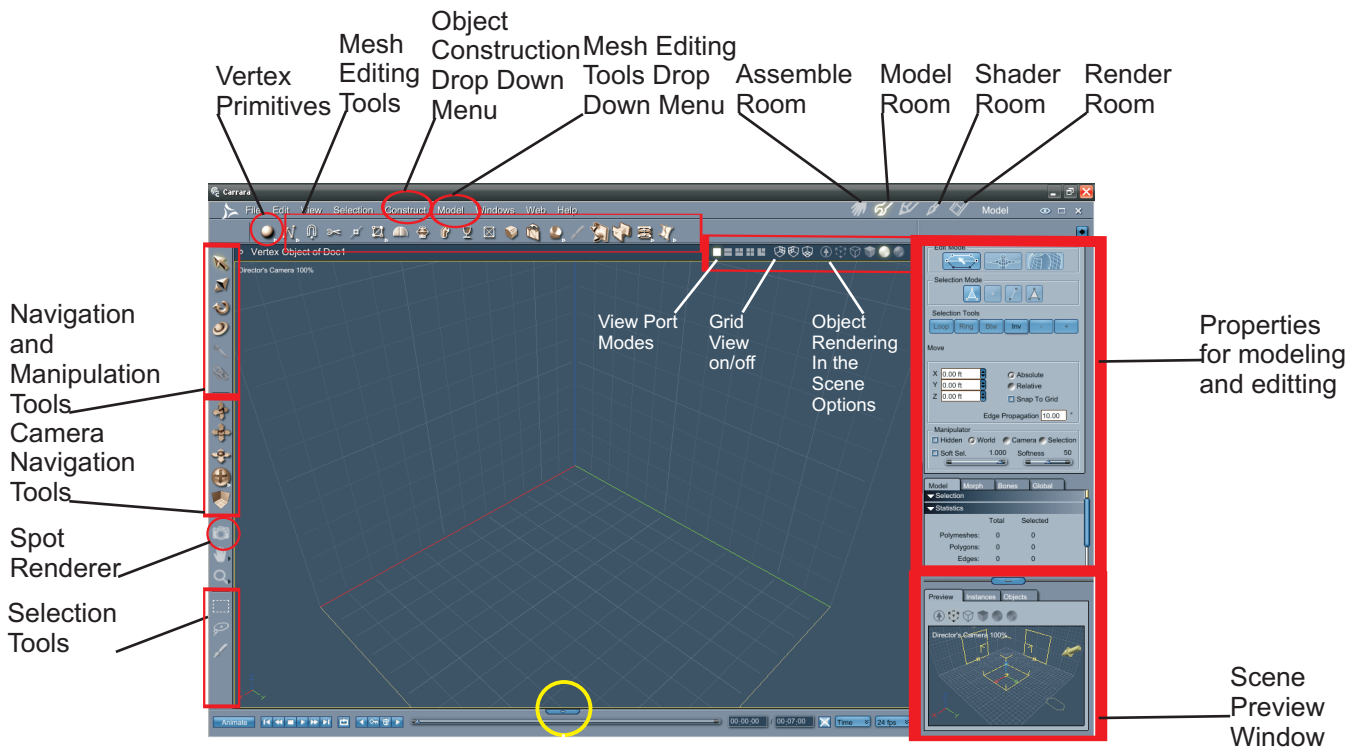
Step 1 - Getting ready

As we can see, we don't need to use a whole Carrara 3D interface. I must also warn you that this will be box modeling technique which now is becoming to be an old school thing. Yet it is still loved by many great artists and professional modelers.

To begin we should drag and drop Vertex Primitive to the Instances Panel or directly to the scene. But I would strongly recommend putting it to the Instances Panel in the listed Scene object. Then we will be sure to have our primitive on the zero coordinates, right in the middle of the scene.

Step 2 - Modeling

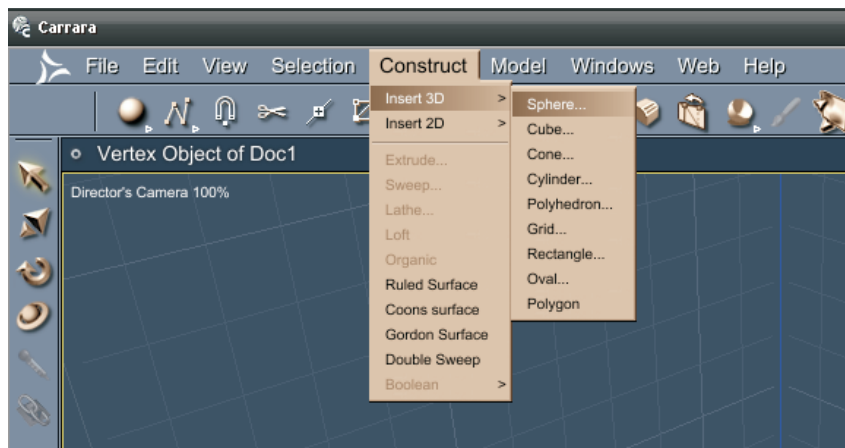
After inserting Vertex Primitive we were automatically brought to Model Room. And this is the place where we will stay for a while. We can also return to Assemble Room and enter the Vertex Modeling Mode there, but why bother to go there, when we don't even have any scene objects? Now we should look around in the Model Room.



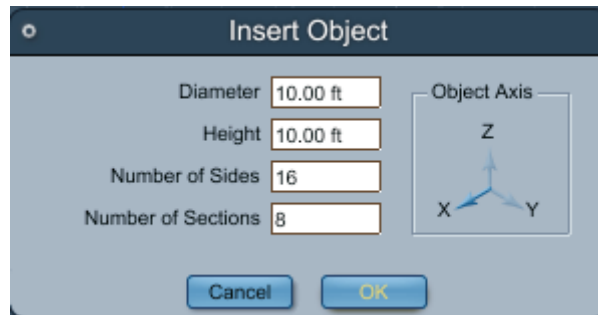
This time we will not make animation or browse for content objects, therefore Time Line and Browser are not needed so we can minimize it.

Carrara 7pro Model Room

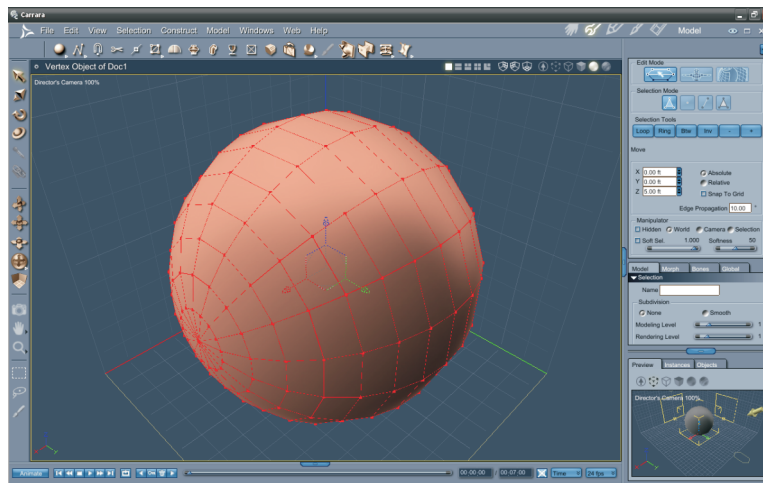
When we are confident with Model Room now, we can begin our construction of character! To do this, we should go to the Construct drop down menus, Insert 3D, Sphere. We can also just drop down the Sphere primitive using the Sphere primitive icon which is located with the Mesh Editing Tools. But the reason why I suggest to go to the Construct drop down menus is that it places a sphere in the right position when inserting the sphere and you can modify its settings before it is created. This also gives better controls.



A dialog box will appear. Here we can adjust the Sphere to fit our needs. Change the parameters before the sphere was created and save some time by giving it the desired numbers of Sides and Sections, We can also choose the axis by which it will be placed. For now I am not changing any parameters because it suits my needs.

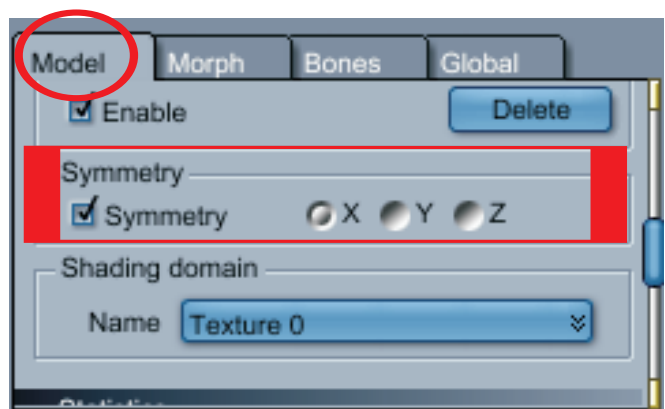
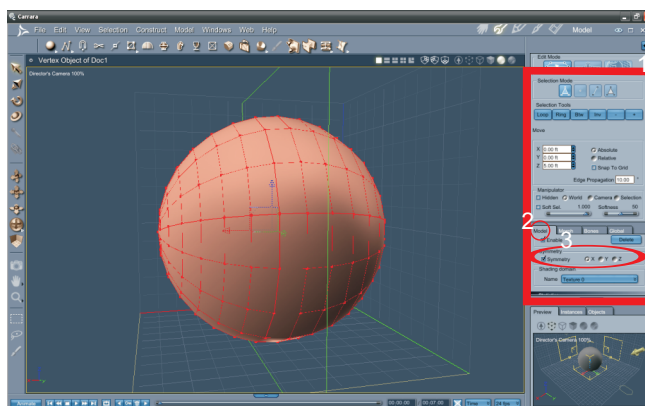


Press OK and congratulations! We have our desired sphere right in the place!

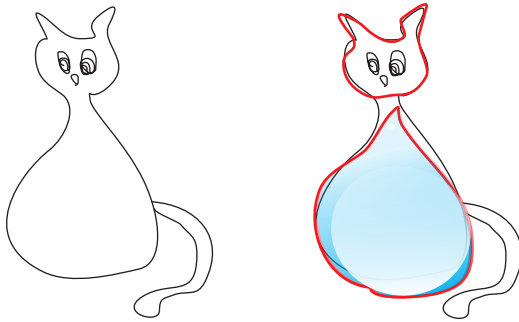


We will begin to model. But before that, I strongly recommend turning on Symmetry Modeling, then we will have to work just with one side of the mesh and other side will be modeled interactively by the Symmetry Modeling Tool.

To turn on the Symmetry Modeling Tool we go to the Modeling Properties Tray > Model > scroll down until we see Symmetry and hit the tick. X axis is good for us so we leave it at X. The green indicator will appear that symmetry is active on the object.

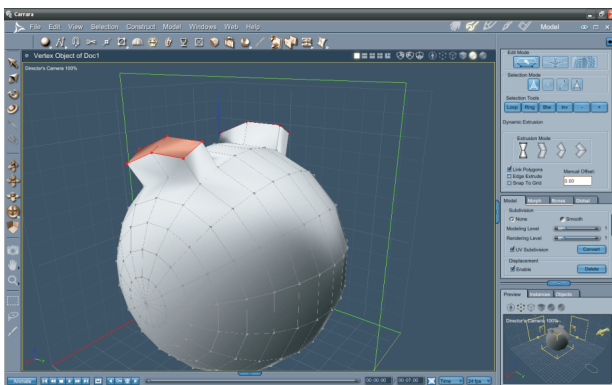
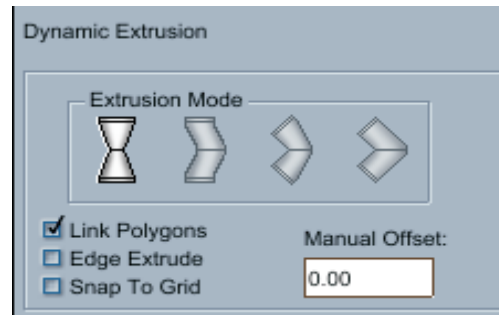
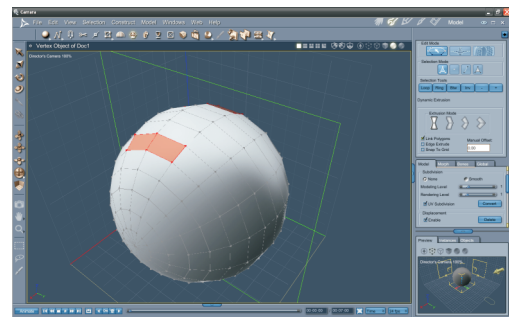


Although to begin modeling from a Sphere Primitive isn't the best choice, sometimes people have to do quick decisions for a quick solution. It is always better to construct your characters by making polygons after polygons one by one for better precision and cleaner mesh. But if we have to do it fast we should always think about our model's basic and primitive shape. Therefore, it is always good to draw a sketch. Then look at it and see the basic shapes. In this case, our character's mane attribute is round forms that make a rain drop shapes. They can be easily made using sphere primitives. But we will use one sphere.

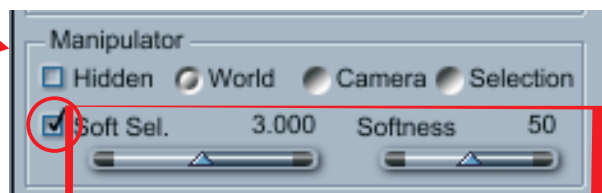
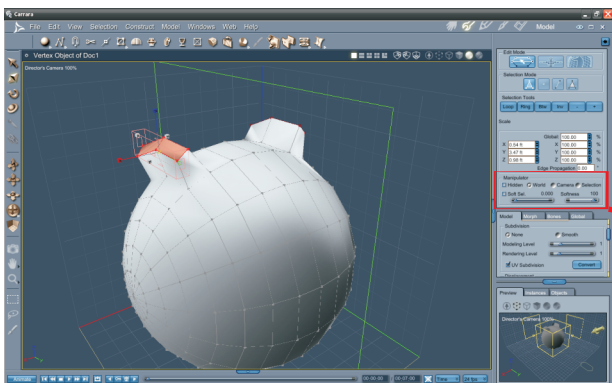


With the Dynamic Extrusion and Soft Selection tools we can make Head and body. One way to make Characters is to build a whole basis and then add details. But if you know your Character well, sometimes even beginning with details can help to do it better. I begin by selecting two polygons and Extruding them. This will be the ear. I am working on one side, and the other one is made by Symmetry Tool.

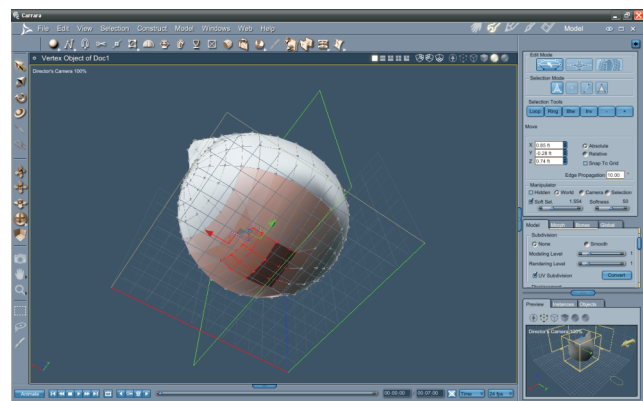
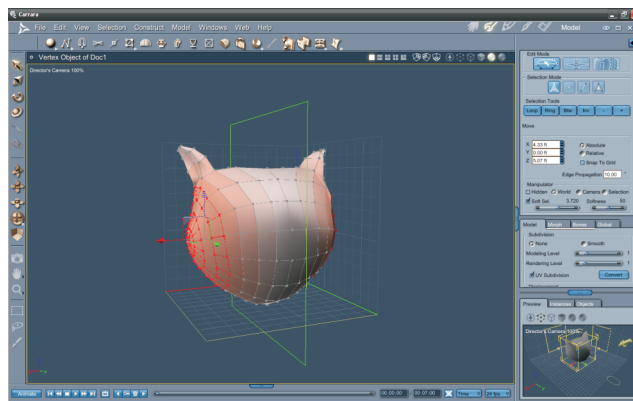
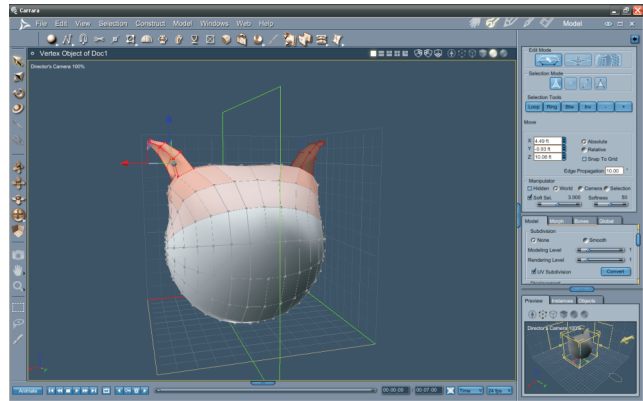
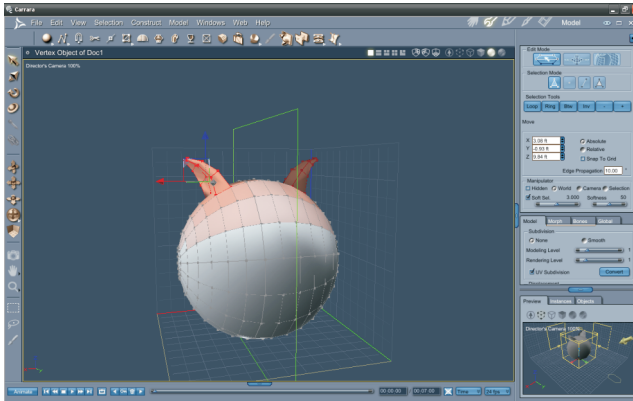
To extrude, it is the best to use short cuts. Dynamic Extrusion shortcut is the "H" button. To make Dynamic Extrusion extrude a selected group of polygons instead of extruding them as individuals, we must check the tick to link the polygons. To extrude with no scaling, we should press H + Ctrl or select the different Extrusion Mode. How many times we extrude depends on how big or long we want the ear to be. If needed, you can change the ear bending by rotating (R) the selected and extruded polygons, you can rescale them using the Scale Tool (S) or move using the Translate Tool (T).



I did the extrusion three times. Now it is time to modify the years and head to be closer to my vision. Finally we will use the Soft Selection Tool. It is really amazing and fun to use and allow to reach organic results. Soft Selection can be found in the Manipulator options. Modify the sensitivity and softness by your needs, the more red polygons turn to be, the more effected they will be, white polygons will not be touched.



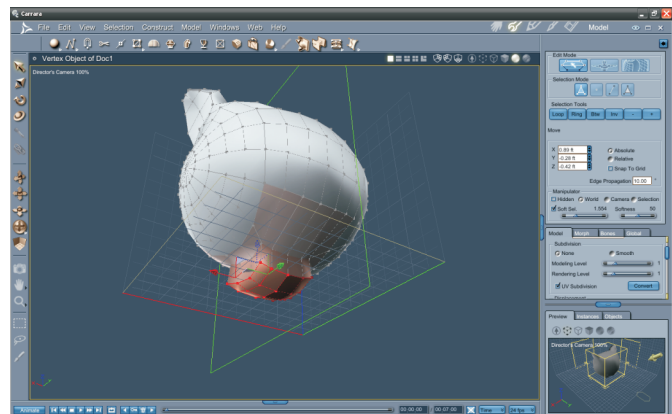
Play a bit with Soft Selection and the sensitivity of it and adjust the ears. Cheese on fire! But they are too close to each other and looks like it is a growing rabbit's ear! And we are making a cute kitty! Do not panic! Everything is OK. What we will do to solve this problem is that we select a bigger range of an ear, adjust the sensitivity of Soft Selection and move it to a side. Because of Soft Selection we attract more vertices and the upper heads turns wider and we received organic modification. Now it is more like a cat. Now we know that just a little detail position may cause our character to be a cat or a rabbit, or an elephant. Main details matter!



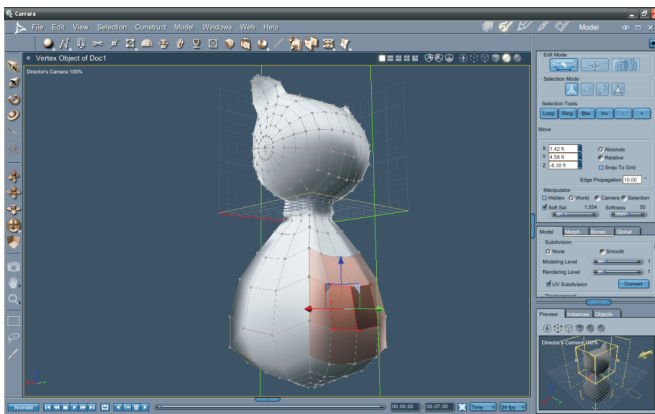
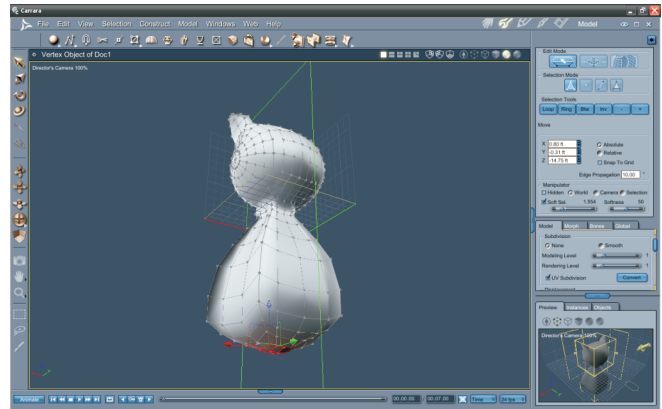
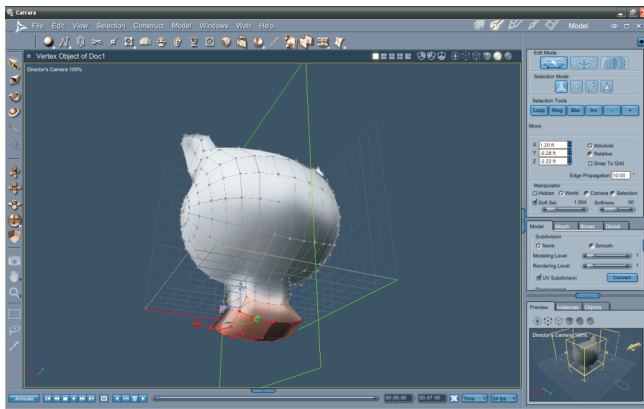
But that is not the end. Still lots of work to do. The head still lacks some wideness, therefore I select the side of head and translate it to be a bit wider. And that's it with the head for now. We will return to it after we sort out things with the body. My next step is the construction of neck and body.

We should rotate our view so we could see the bottom of the head so we could select the needed polygons for the neck extrusion as in the example above.

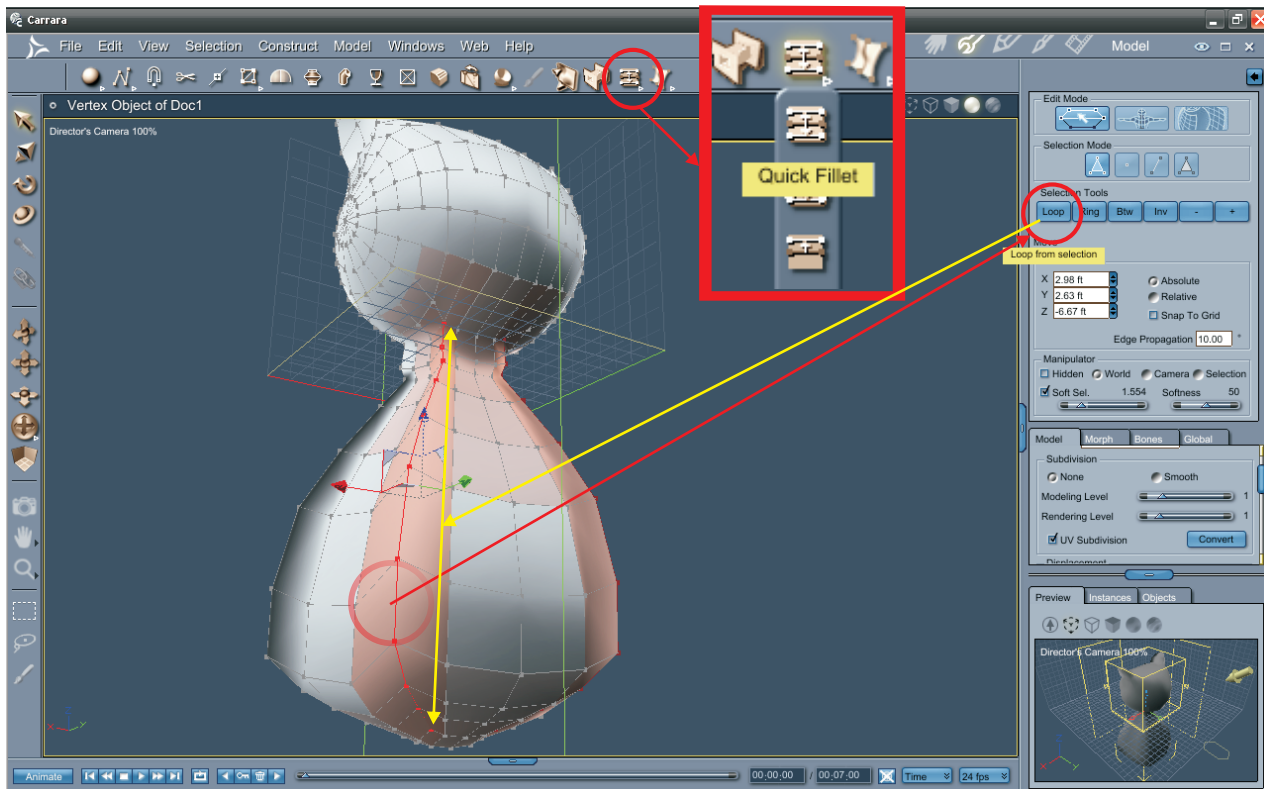
Please hit the H button and extrude. Be careful and use the scaling option that comes with the extrusion moment or you will have to do the scaling later, but why waste your time by doing two different actions and two steps, when you can do two different actions in one step? Remember that we are working in Symmetry Mode so we have to work just on a half of figure. It would be better if you wouldn't select polygons that are beyond the green marker to prevent some strange things that might happen.

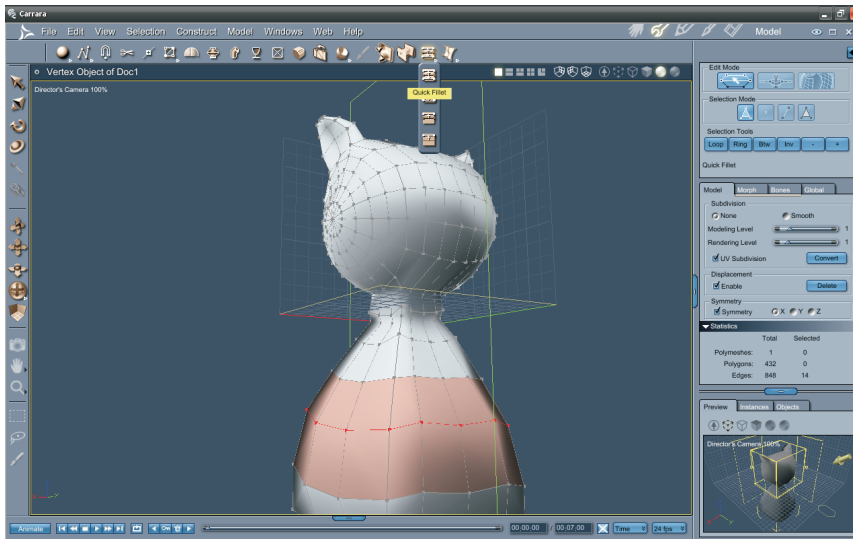


We will repeat the extrusion many times, because we will extrude until our model will receive its basic body shape like in the examples below.

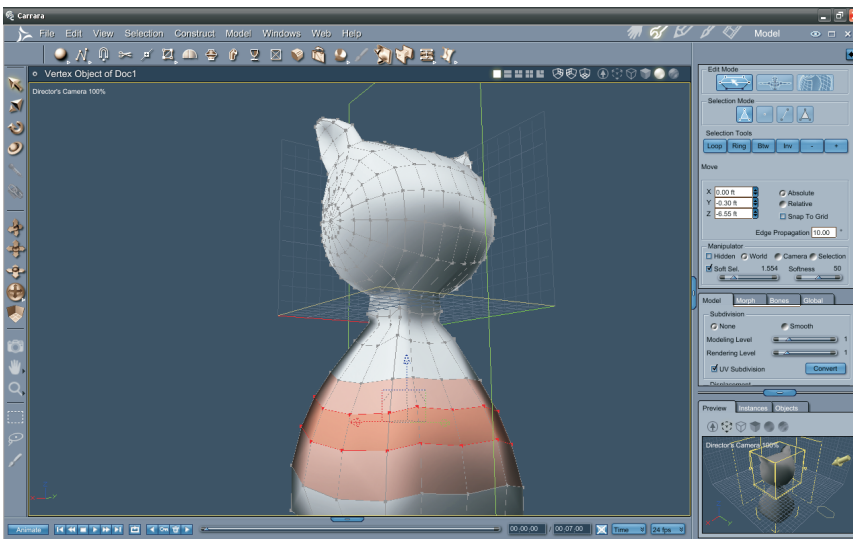


Please modify the polygons to make gentle form. But do not smooth yet. We can see that our shape has some sharp corners. We will fix that by selecting one line and looping the selection, so we will not have to paint selection by one line. To eliminate the sharp corners we will use Quick Fillet Tool. Do the fillet around the selection. And move the vertexes to make rounder shape.

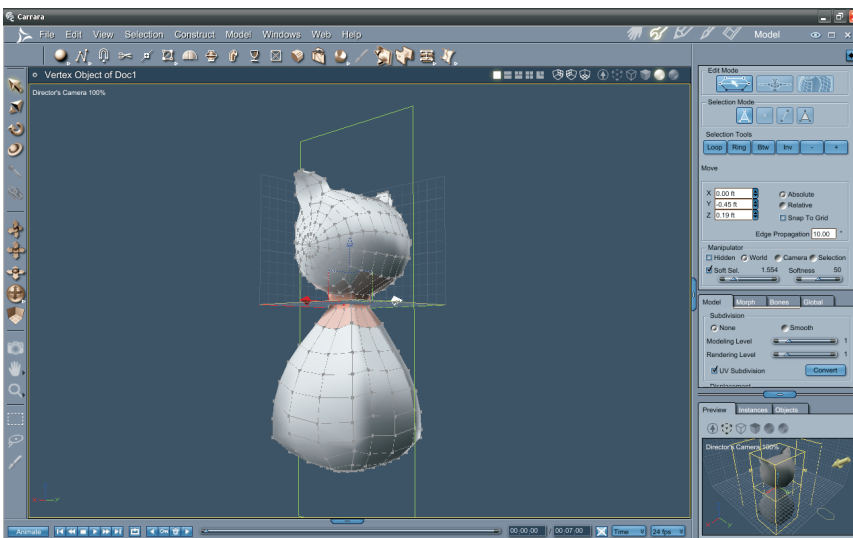




Now select other vertexes using Line Selection and Loop selection like in the example alongside.

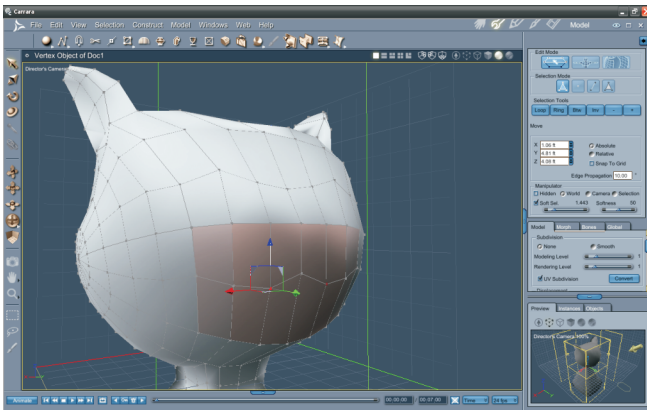


Do the Quick Fillet until the satisfying result of the shape roundness. Repeat this if needed with other selections.

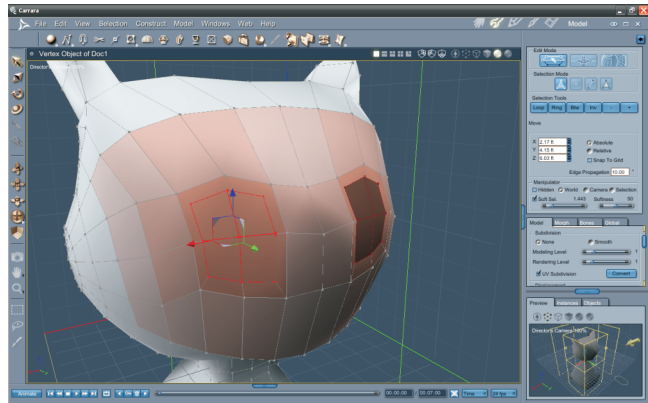


Adjust the neck to be more elegant and not too wide.

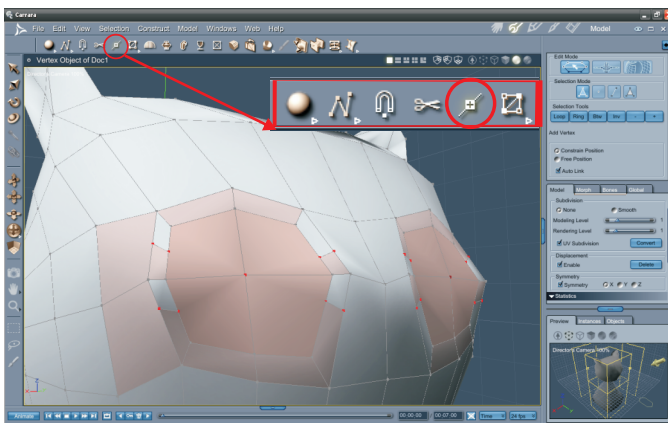
But we shouldn't forget that we have cat's head to be finished:



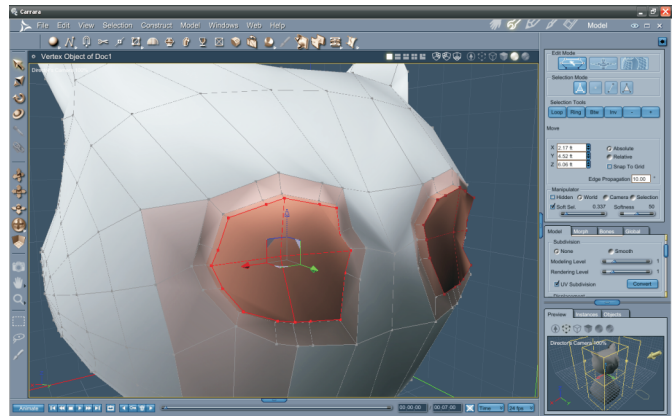
Modify the head vertexes so we would have something like sunglasses frame like in the image above.



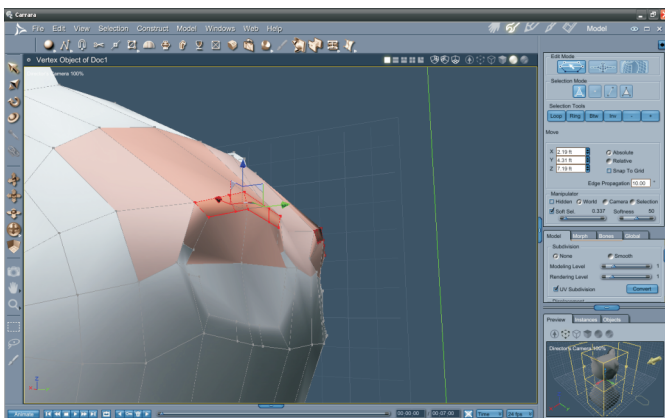
Select four (4) polygons so they would make a square and extrude to make a little dent like in the image above.



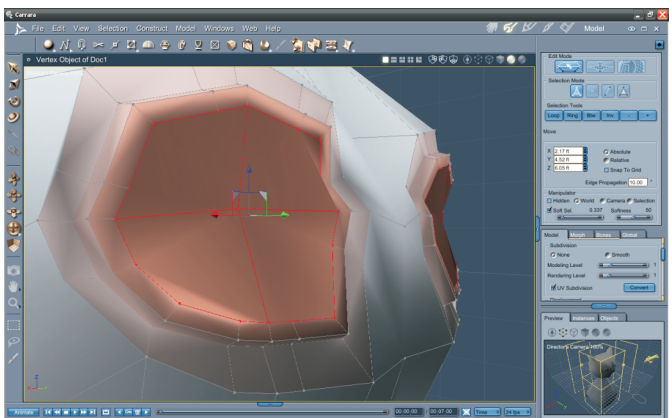
Add vertexes using Add Tool (V) like in the image above.

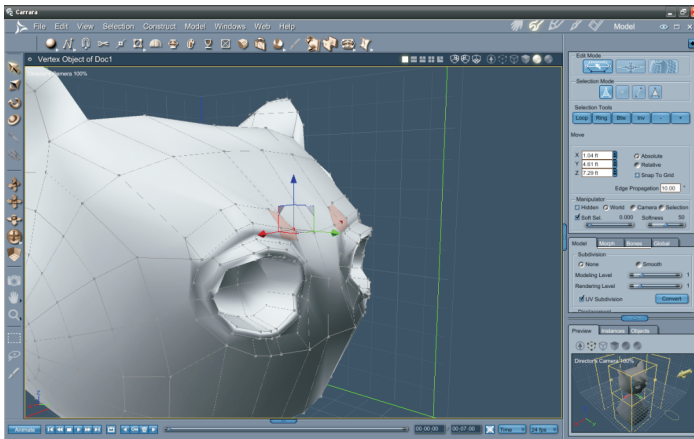


This time select four inside polygons and extrude out a bit like in the image above.

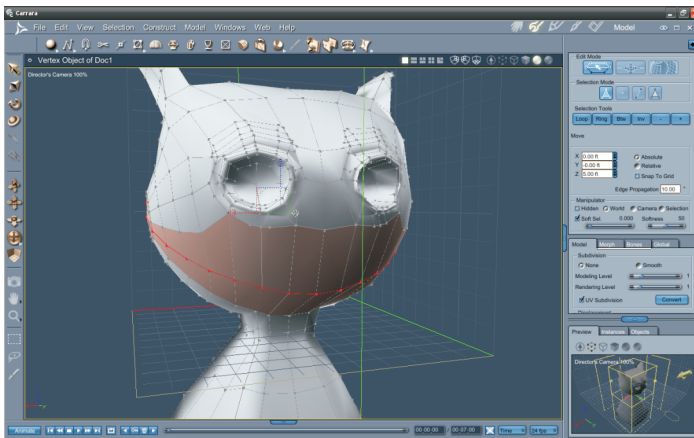


Adjust vertexes to make smoother eye-sockets.

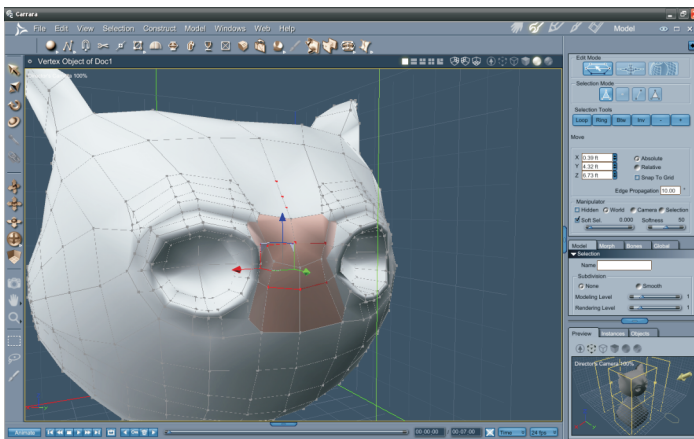




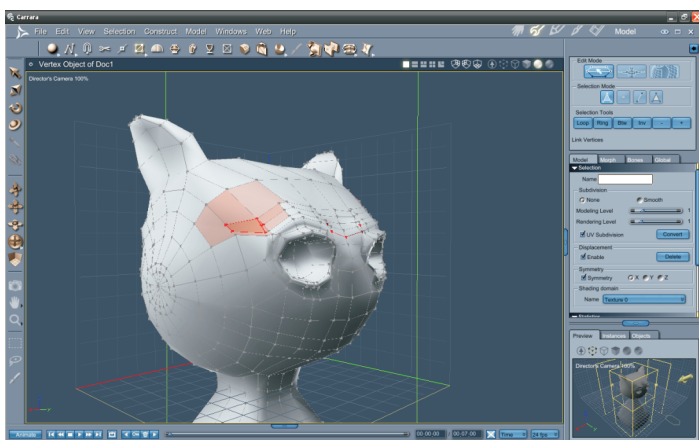
Extrude to make deeper eye-sockets. It is a bit messy, therefore we must do some cleaning and vertex positioning. Add eye brow zone by using the Fillet Tools or Add vertexes with Add Tool (v)



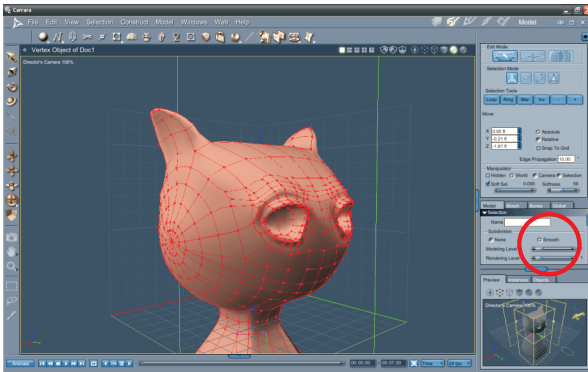
Add more polygons to the face by using the Loop Selection and Fillet Tools.



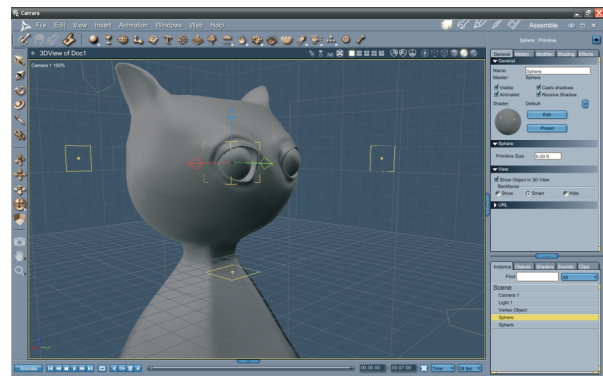
Fix the disordered polygons and try to make Quad polygons and avoid any N-Gons or triangles. Quad polygons are better to control and better for morph target creation.



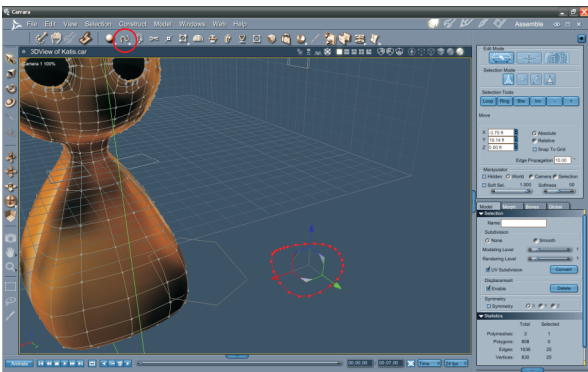
Add more polygons to the forehead in case you want to create Morph Targets. This will help to make better expressions.



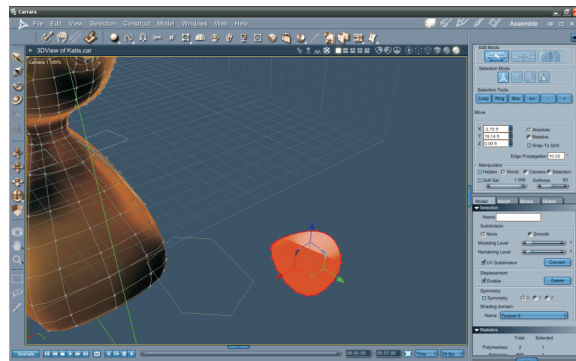
Now please select all polygons of figure and smooth it.



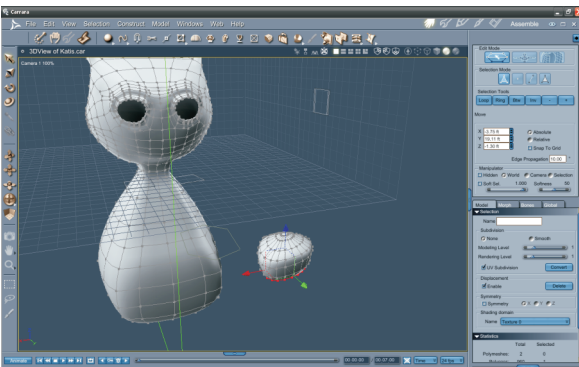
Lets go back to the Assemble Room and put some eyes to the figure by inserting Sphere Primitives.



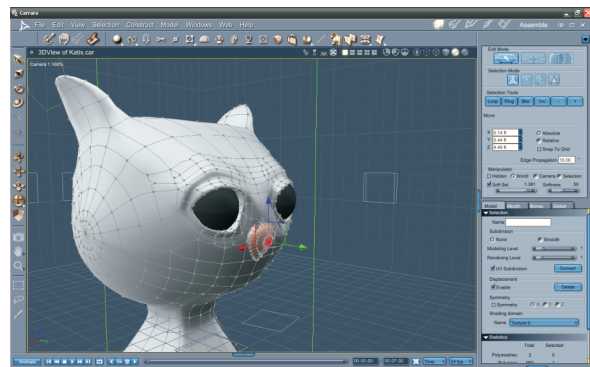
I viewed this figure with a texture, but I noticed, that the nose is missing. To fix this I turn on the Vertex Modeling Mode and draw a line object. To draw a line hit the icon with a line which can be found right after the insert Sphere Primitive icon. Hit Closer to the small arrow so the drop down menu appears. Select to draw Interpolated Curve.



Please finish the line drawing when you have desired form and press Enter, be sure to have closed curve. Then press Ctrl + F, this will fill the shape and it will have polygon.

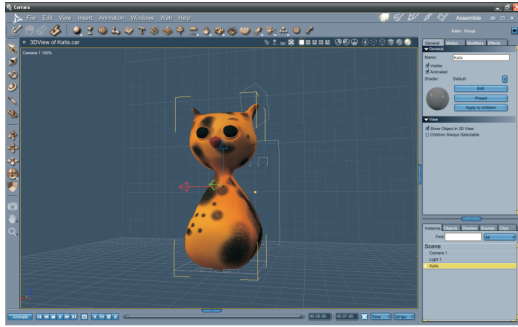


Now extrude it to have the 3D shape. Extrude to satisfy your desired form.

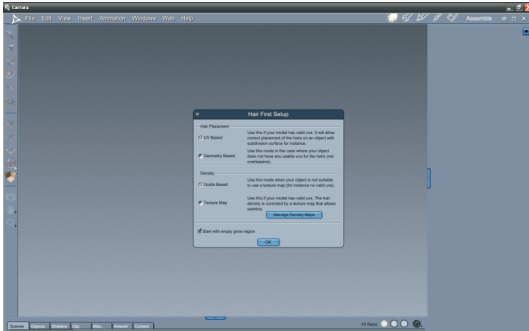


Select all polygons of the nose and place it to the face. We didn't create it as a separate object because it will serve as if we will be creating morph targets. To make sure Carrara to find it well, weld it with the body. Go to car > Model > Weld (You must have both objects selected).

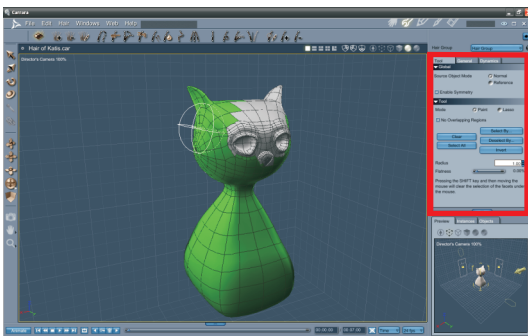
Step 3 - Finishing



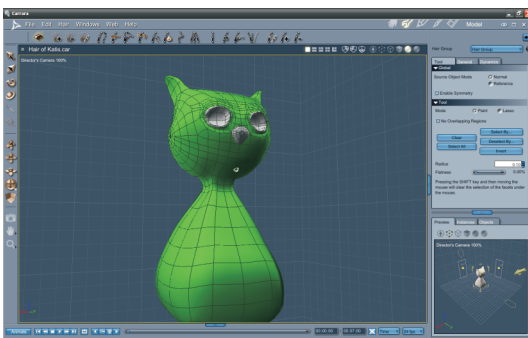
To finish our figure for this time, add some textures for it. But what kind of cat it would be if it didn't have fur? So add some hair to it using Hair Primitive. Drag and drop it on the figure.



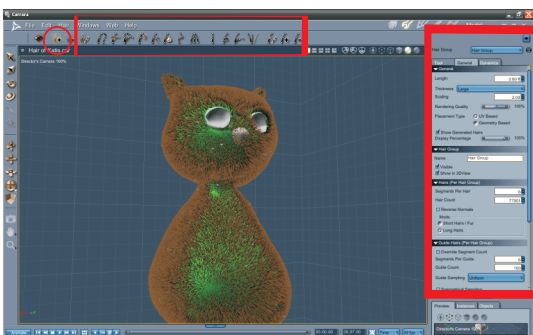
You will be moved to the Hair Room, but before getting the tools for hair adjustment, you will have to define what type of hair will it be. In our case we will select UV Based hair Placement (if you don't have texture map, select geometry based); for density select Guide Based.



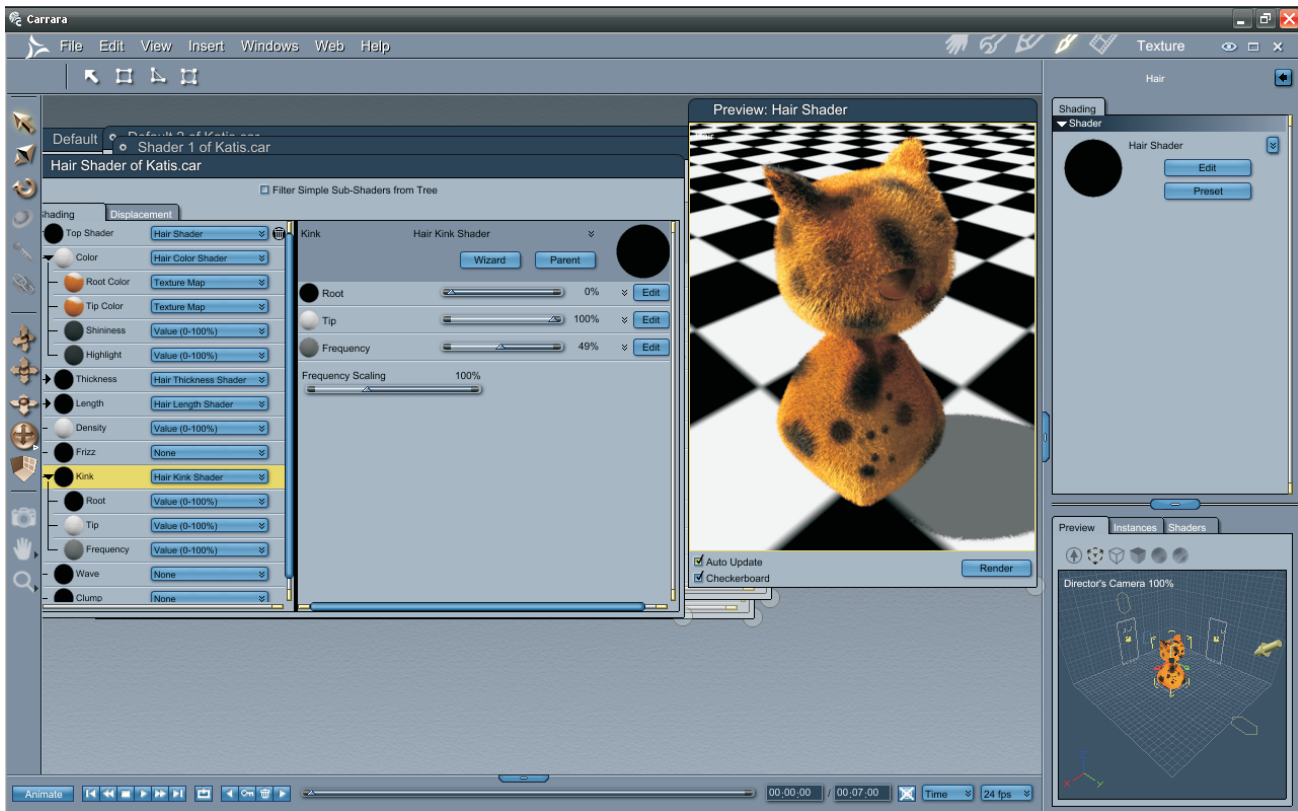
Now you are in the Hair Room with all tools for editing hair. Please select where should be the hair group.



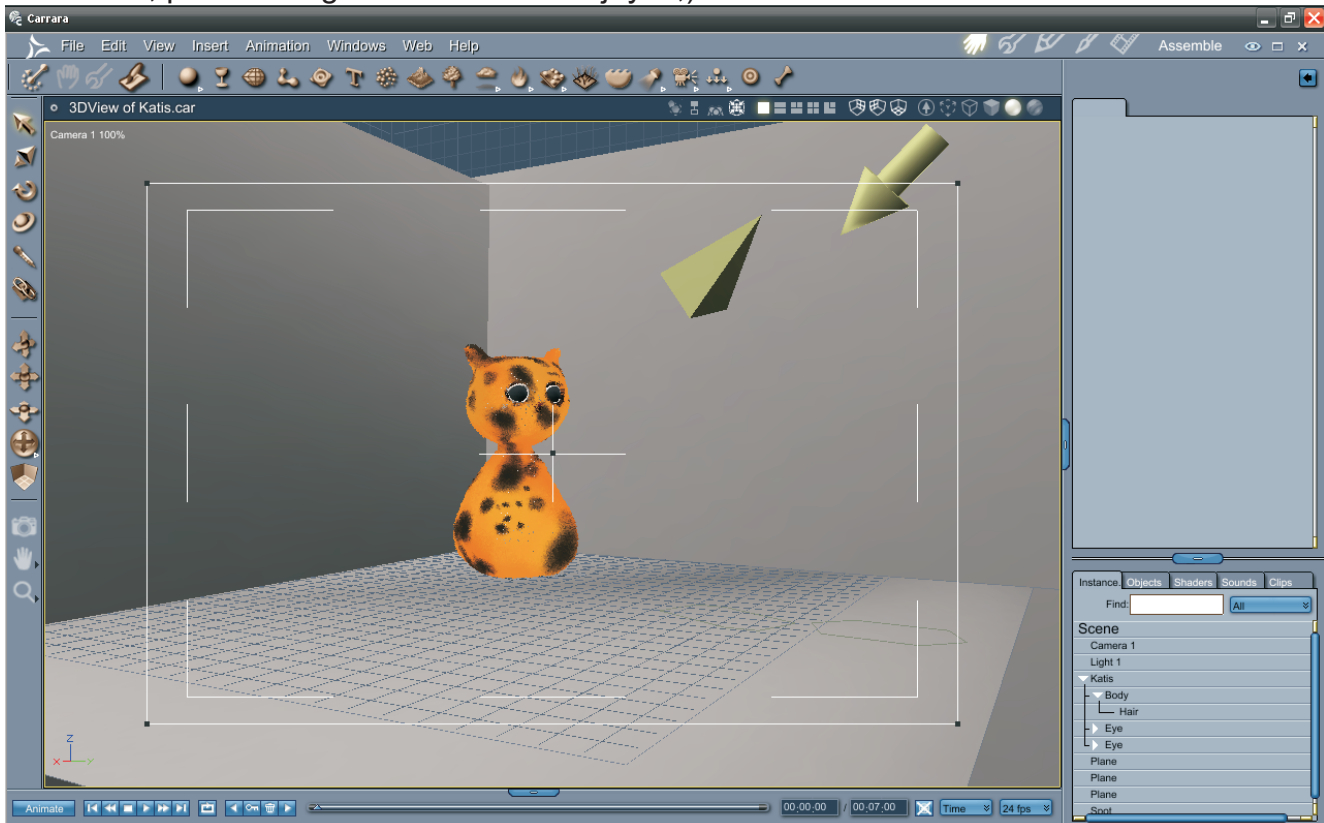
Please leave the eye and nose zones unselected. We don't want to have hair poke through the eyes and nose, do we?



Press Density Add Tool and play with the hair tools to satisfy your vision of fur.



Don't forget, that many hair shape settings belongs to the Hair Shader. Play with hair in the Shader Room. Add some Kink to the hair, Waves, maybe frizziness? You can match fur color to have stripes and spots by adding texture map of your figure so you will have better results that might hide some fur glitches in the complicated areas. Now add environment to the scene, put some lights and render! Enjoy it ;)



Gallery

