Virtual Gizmos!

A Java 3d tutorial

Suppose you just want to show an idea or a machine on a Web page, 3D, virtual, interactive stile?

Java, those clever guys, have a solution for you!

Only, and that's the curse of some real good Freeware, getting that thing to work is, in the words of the immortal James Brown, **a mother!**

So here's a tutorial, so as to prove you can learn something step-by-step, here.

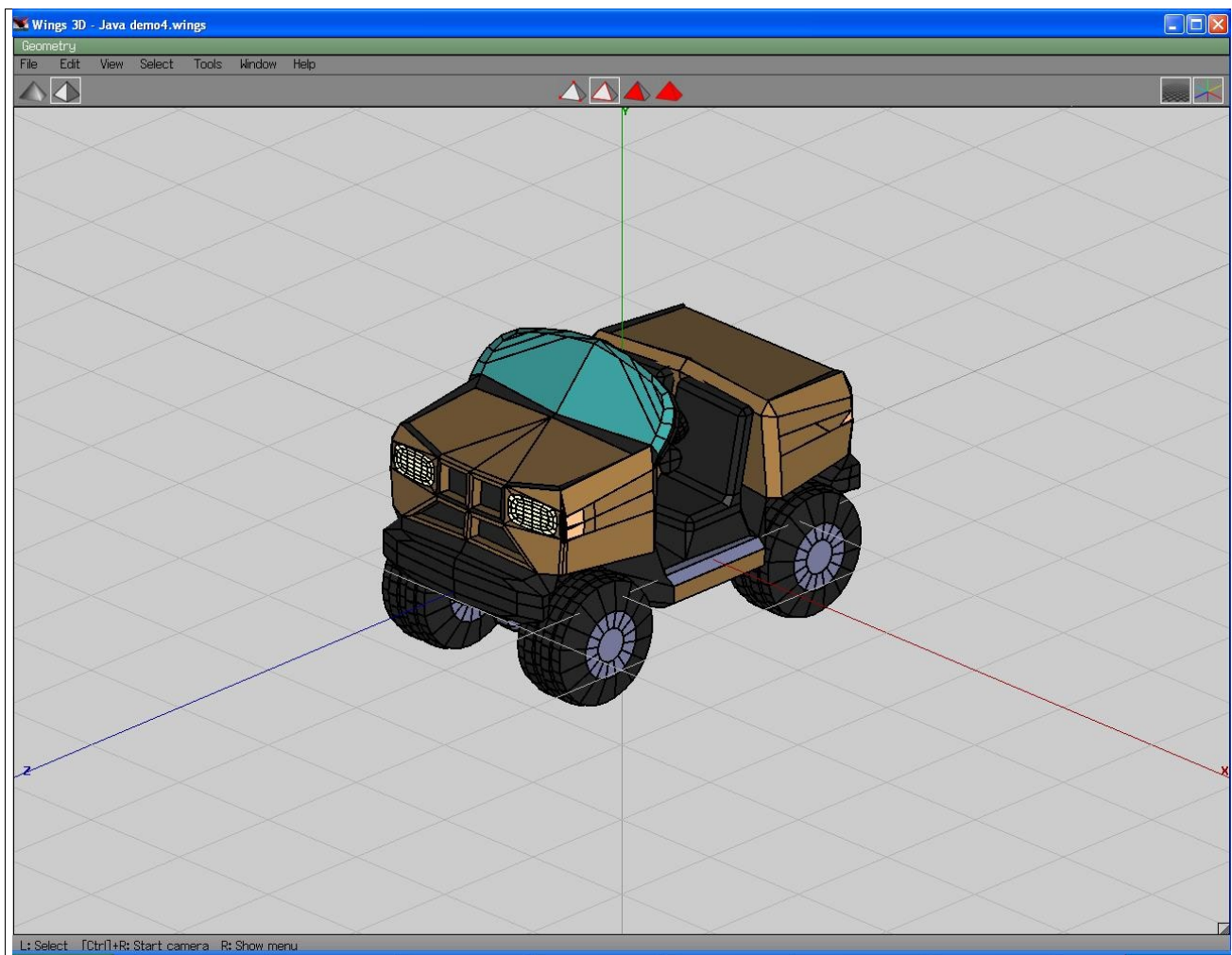First, of course, if you're to show a 3D file on a Web page, you need to build a 3D file.

Illustration 1 A cutesy toy car... When imagination lets you down, resort to your memory, cough, cough...

The file shown is but an example, you make it on the already mentioned Wings 3D, or any other that can export to .wrl format.

Then, you load and install Javaview, and run it.

Have OpenGl installed, too!

You clear the object that comes with it,

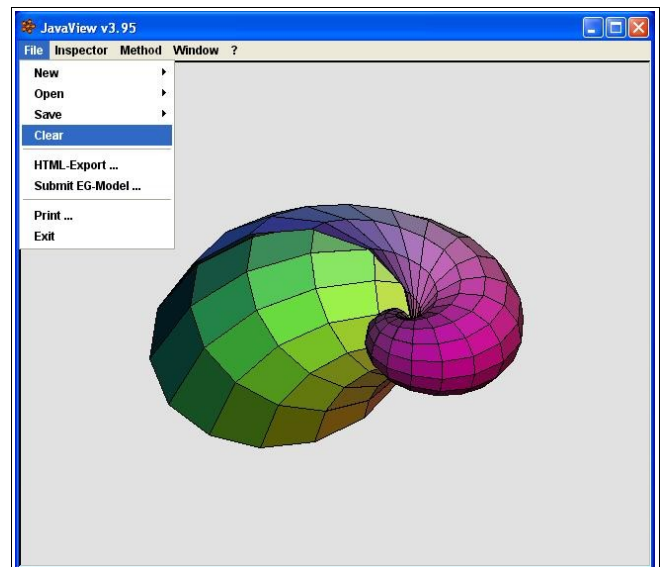**File/Clear**, and load your marvel, by selecting
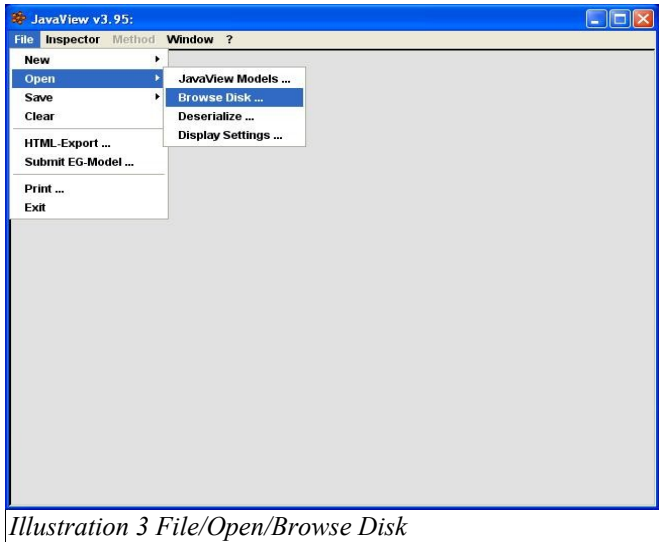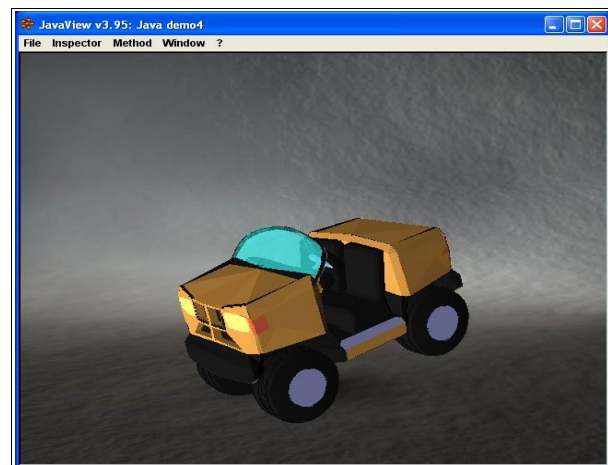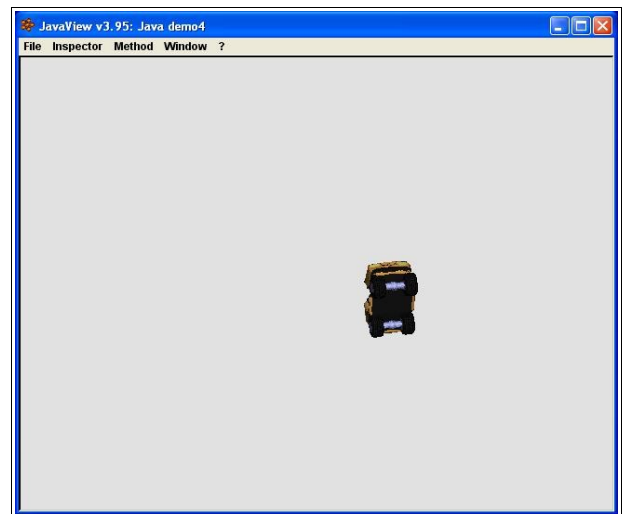

Illustration 2 File / Clear
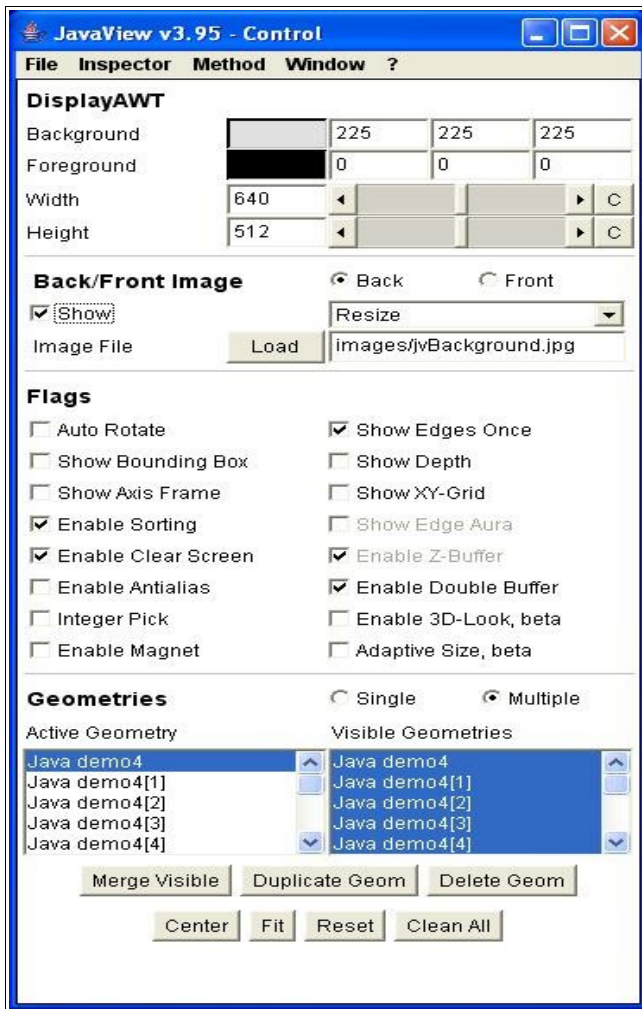

Illustration 3 File/Open/Browse Disk

File/Open/Browse Disk.

Don't be surprised if something like this appears:

Yes, it's small and pointing up, but, you can fix it by clicking into the JavaView's window, and right clicking will present you with a menu, choose Translate and Scale until you've got the thing centered and large enough.

Now that's better! The background you see here, is called by selecting Inspector/Display, in which case the following menu will appear, see it on the next page:

All you have to do is click the checkbox named Show on Back/Front Image, it comes with the program's default image, but you can load one of your own, by clicking the load button and going where you've saved your image.

You see a lot more options, here, but you better leave them alone until you successfully made your first page, then go and play with the various options.

Happy with your model?

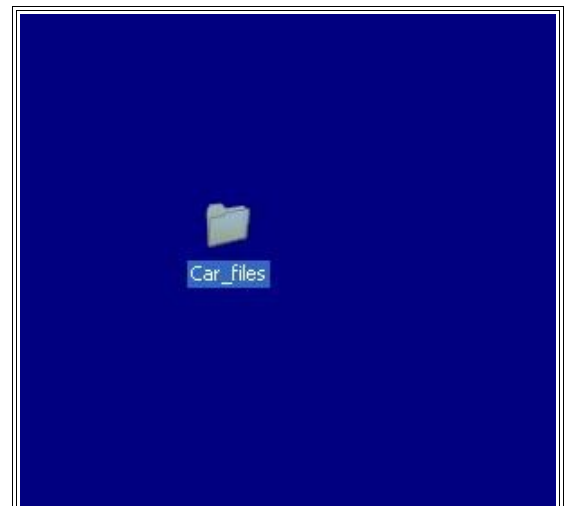**Great, now let's start to make something out of it.**

Illustration 4 Create the Car_files folder

First, you have to create a folder named, in this case, **Car_files**, since the html file will be named **Car.html**, and then you create a few files out of that display you see, by selecting **File/HTML Export**, and saving them to the **Car_files folder**.
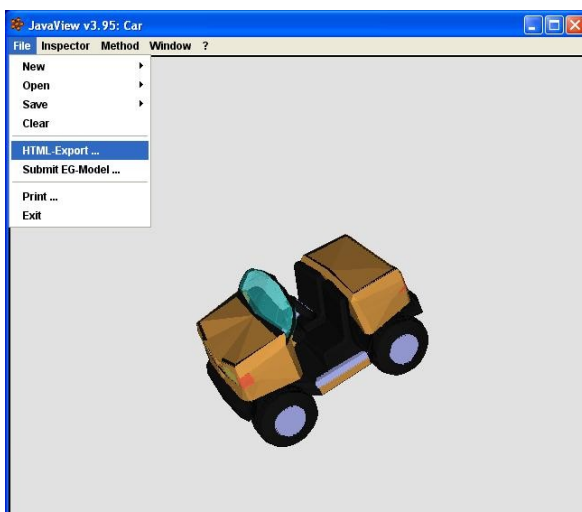

Illustration 5 File/HTML Export

Select **File/Html Export,** and you'll be sent to the <mark>models folder of your JavaView program folder</mark>, it's one of the program's **quirks**, leave that and **go to where you've put your own Car_files folde**r, and save it there.
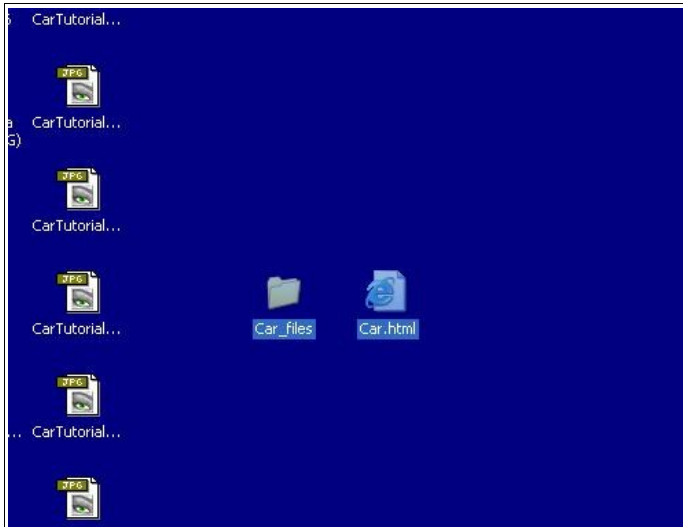

Illustration 6 The folder and the webpage, at the same level.

This **should be** the end of it, but **nooo**, the program has a few other quirks that will drive you mad, if you don't know that you have to do a few things by hand.

Take a look, you'll see what has to be changed...

```
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>
<html>
    <head>
        <meta generator="JavaView v.3.95"/>
        <meta date="Wed Aug 31 16:39:20 BST 2005"/>
        <title>Java demo 4.jvx</title>
    </head>
    <body>
      <h2>Applet shows Java demo 4.jvx</h2>
        <applet height="512" archive="Car_files/javaview.jar" width="640"
code="javaview.class">
                <param name=model value="Car.jvx">
                <param name=displayFile value="Car.jvd">
                <param name=panel value="material">
        </applet>
    </body>
</html>
```

The line that presents **javaview.jar** <mark>is always pointing automatically</mark> to the **Javaview/Jars folder**,and now has to set by hand to point where you have saved the web page files, **"Car_files/javaview.jar"** on this example, for the folder is named **Car_files**.
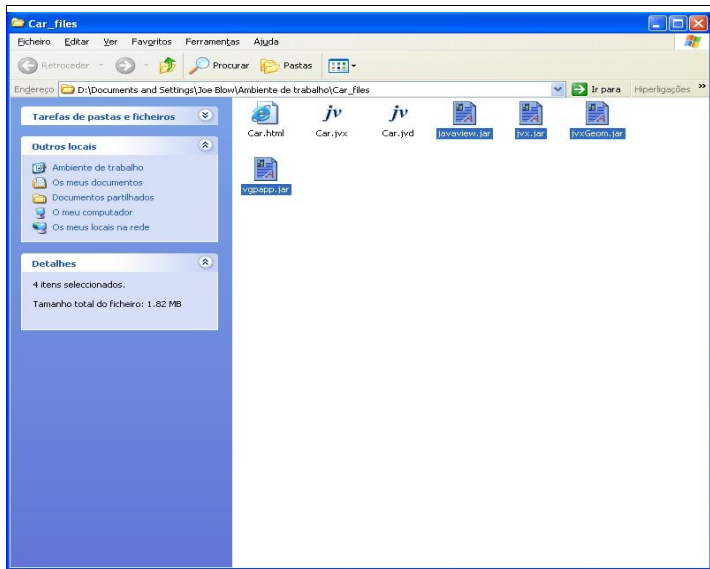
Illustration 7 Copy / Paste them into here...

Don't count on having all those .jar files automatically transferred on that folder, **that won't happen**, go to the JavaView folder and copy javaview.jar, jvx.jar, jvxGeom.jar, and vgpapp.jar for good measure.

You'll probably see the **Car.html** file on the **Car_files**, but since you're to publish the page, take that .html file out and put it at the same level that the _files folder, remember!

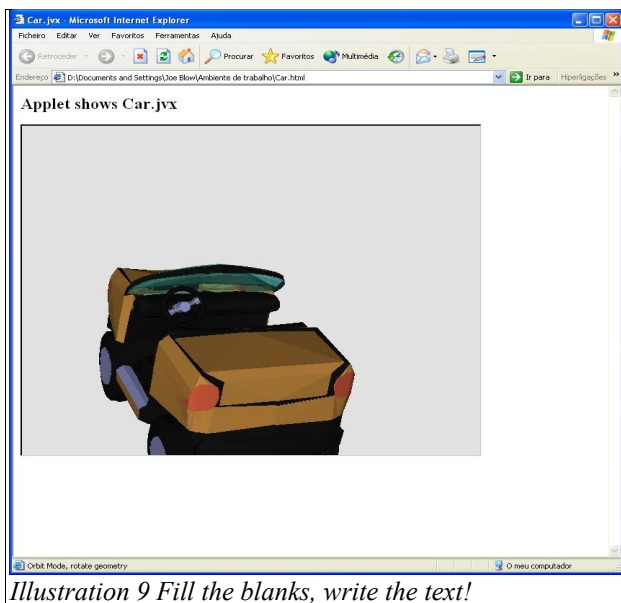All this done, you should have a raw, almost textless page, like this, see! **"Applet shows Car.jvx"**!
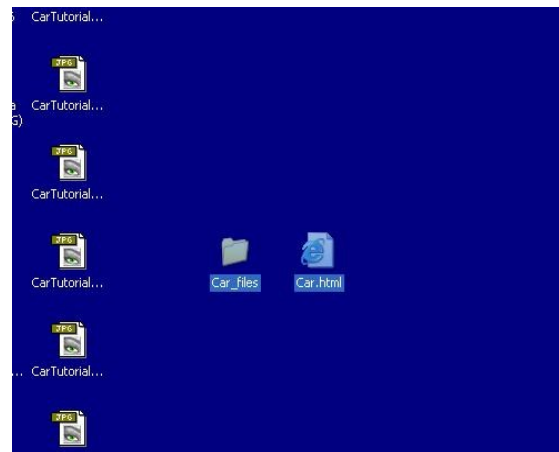

Illustration 9 Fill the blanks, write the text!

Illustration 8 Car.htm goes out to this level...

But then, you've either already know your HTML code, or import it to some easy WYSIWYG Web page editor and do the rest, real easy like!

After you've made that work, **then** you can play with the many options!

So now you've got a way to present your idea on a Web page, be it to the whole world, to those that have access to a special password protected (yeah, right!) page, or just to show on your laptop or make a private presentation with a PC and a Projector!

Have fun!