

for more please visit :

<http://articlopedia.gigcities.com>

Hair CG Tutorial - by yokaze.

Introduction

Hey everyone! *waves* Well... a couple of people of so have asked me for a tutorial on how I do hair CG, so here it is all of its basic glory, and you'll all see how east it really is. Before you start though... I highly **highly** reccomend you familiarise yourself with *paths* [the 'pen' tool in Photoshop]. If you want to know a little bit about paths... you can read a breif [tutorial \ introduction](#) to them I wrote a little while ago... or ask someone a little more knowledgeable than I! ^o^ Anyways... enjoy the tutorial and I hope it gives any one of you help!

Step One

Scan the picture.

For this example I scanned an A4 page at 200 DPI [100 would have been fine too] with the default page settings [no brightness\contrast differences]. A lot of people have better computers than I do, however, and choose to work a lot bigger... so if you have RAM to burn you can pump that DPI without losing your system's cooperation.

Okay... Here is the scanned page [PLEEEASE don't laugh at all my weird scribblings and almost inevitably incorrect kana and such...]

But as you can see, I don't exactly start with anything fancy, the pencil lines that I have inked over I don't even bother erasing [unless you are going to resize a picture very small its not worth it!] You will probably also notice the text on the other side of the page, again no problem with our friend *brightness/contrast* ^_^

Just for you information.... this image is 25% real size, i.e. the true size was 4 times as big.





Step Two

Crop the area of the picture with the crop tool [shortcut 'c']

Resize the image so that it is twice the size you would like it to be when you finish. [i.e. so when you are looking at 50% it is how you would like it to when you have finished.]

Step Three

Now change the Brightness\Contrast of the picture. [*Image > Adjust > Brightness/Contrast*]

The settings used to change this example were:

Brightness: 45

Contrast: 20

Transparent outlines:

You don't have to do this next bit if you don't want to.. however I tend to use it, I think it makes at least the hair look nicer in the end ^__^

In the *layers* palette double click the bottom layer called 'background' [it should be in italics] rename it to 'Lines' or something suitable. The layer should now have an editable transparency [not italics]

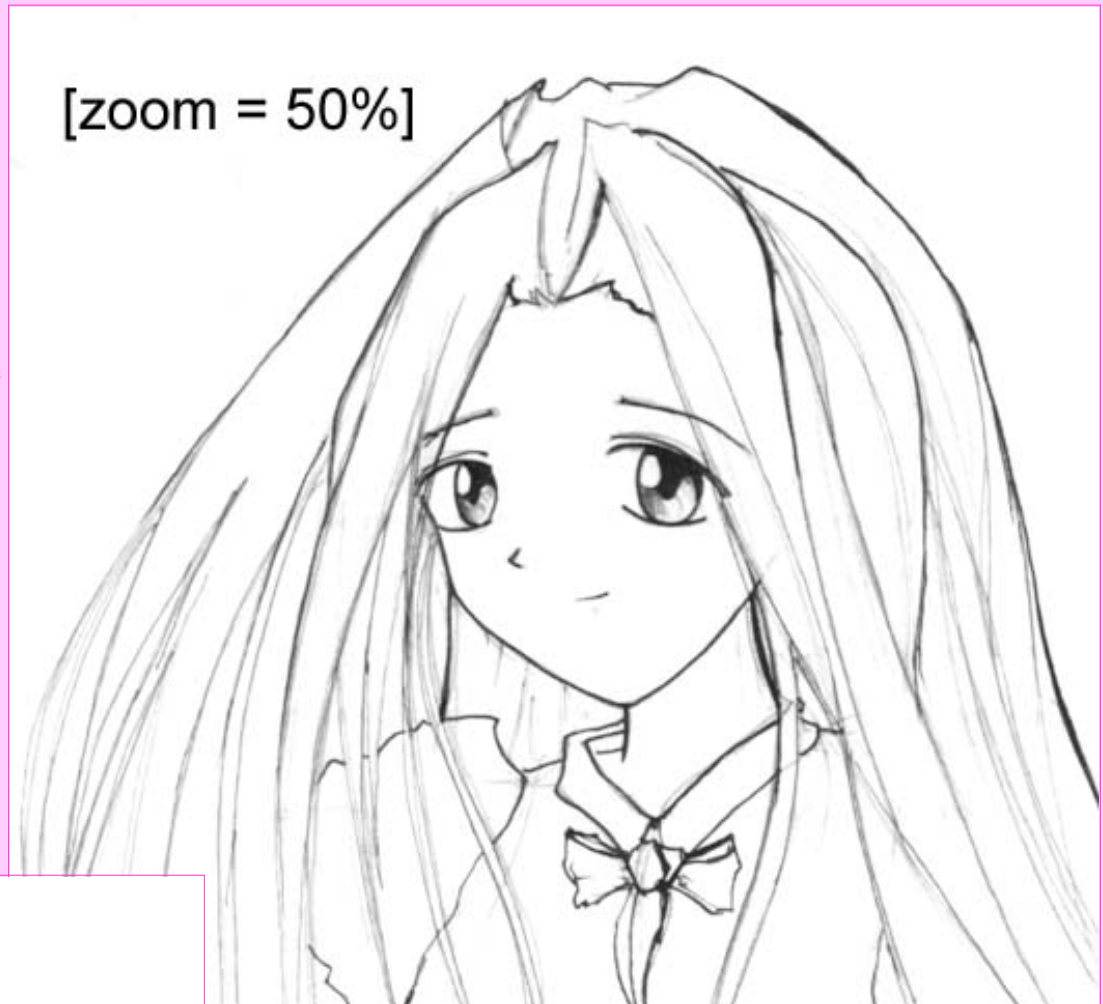
Goto the *channels* palette, select 'make selection' [the dashed circle on the bottom bar. Then clear the selection [*DEL*] and deselect [*CTRL+d*]

Make a new layer [new layer button on the *layers* palette] and fill it with white [make white foreground colour, *ALT+BACKSPACE*]. Place this completely white layer below the one called 'Lines'.

Reselect the 'Lines' layer and make sure '*preserve transparency*' is checked.

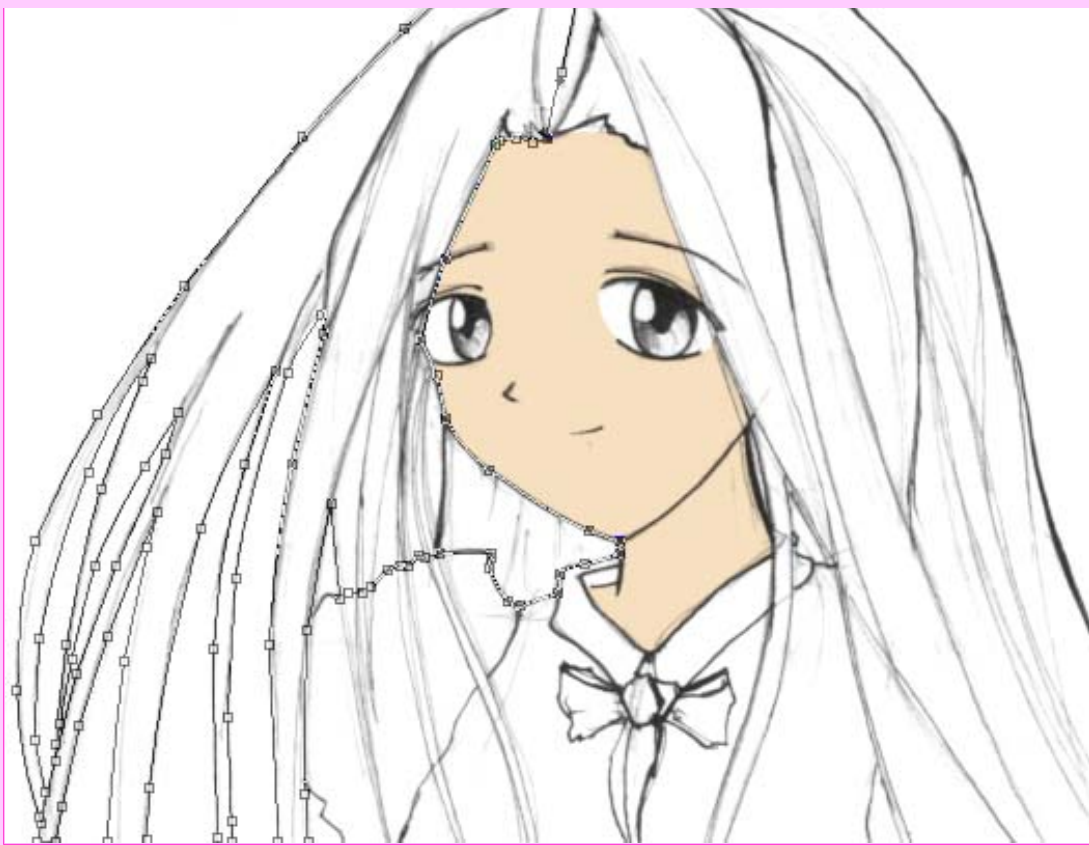
Select black as foreground colour and fill [*ALT+BACKSPACE*].

Go to 'Fade Fill...' [*Filter > Fade Fill...*] and adjust the fade so you have lines that are reasonably easy to discern [see example above].



[zoom = 50%]





Step Four

Now you will need to do some basic CG colouring... I am sure most of you are familiar with this.. however I'll just skip briefly over how its done..

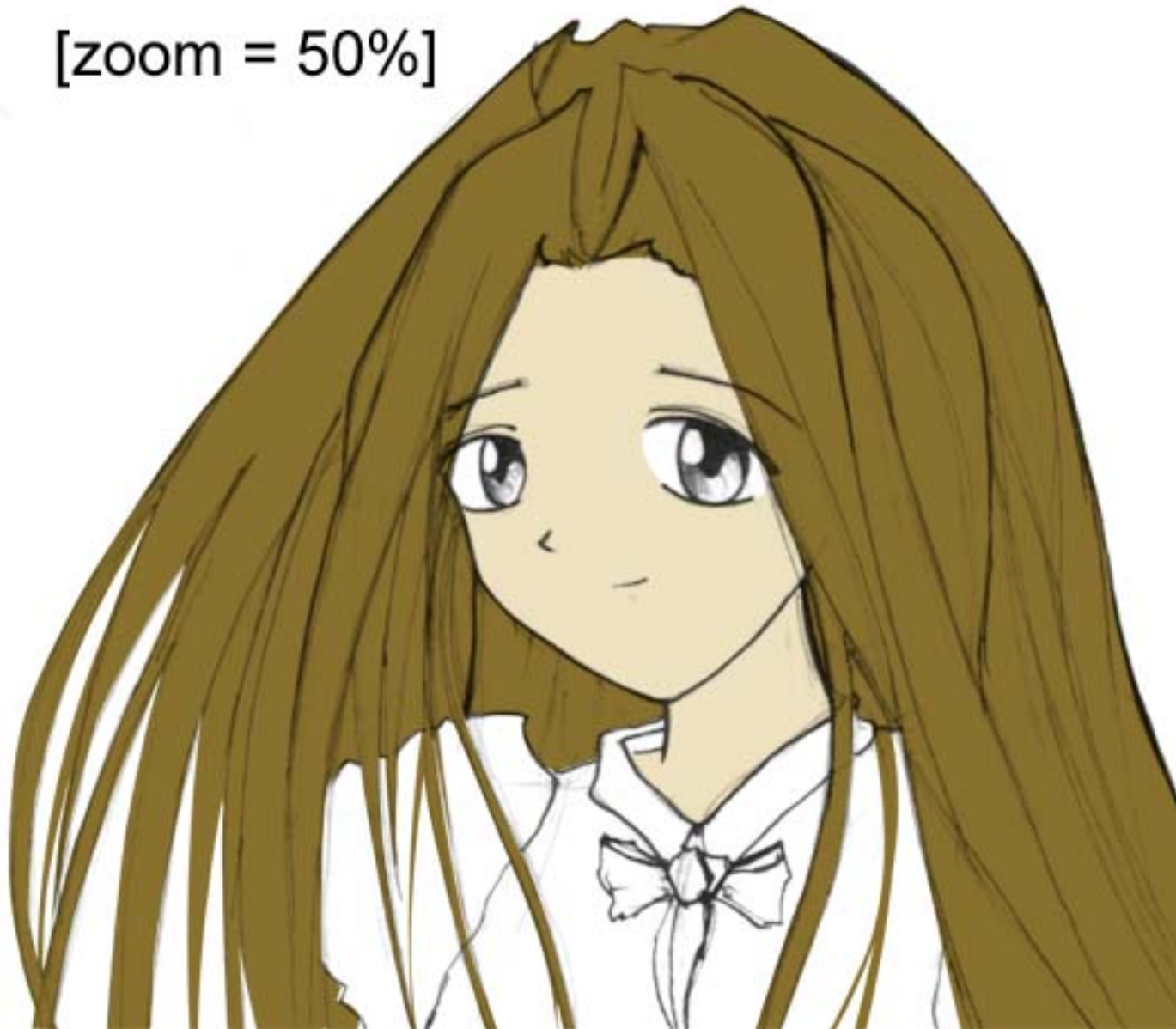
Make a new layer for every colour, for example one for skintones and one for hair... and so forth. These layers should be set to the *Multiply* blending mode [from the drop-down blending selection palette defaulted to 'Normal'] Fill in the colour on these layers by any means you see fit... shown left here is an example of me filling in some hair using paths, however I also use the paintbrush tool [helps to have a tablet for it!]. ^_~
Once you have filled in the areas using a flat colour, make sure each of the colour layers have '*preserve trasparency*' enabled.

[Click to proceed~~~~! >>](#)

Hair CG Tutorial - *by yokaze.*

Step Five

[zoom = 50%]



Once you have filled the layers [I just did the hair!] You should have something that looks like this [or neater, preferrably.]

This is the easy bit.. now open your ears nice 'n' wide cos the next part is the most crucial of all...

Okay, listen up cos this little 254x266 pixel block is the key.

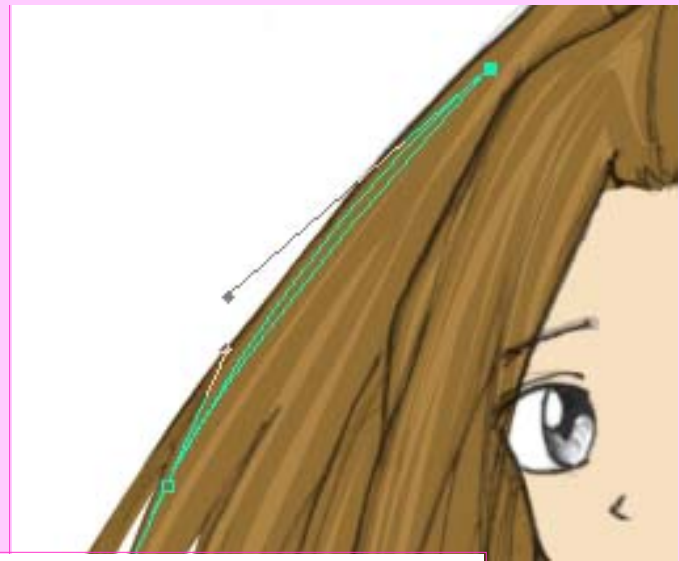
Basically, what you'll need to do, is make a little path for each hair. Yup. Each and every lil one. The way you need to

[zoom = 50%]

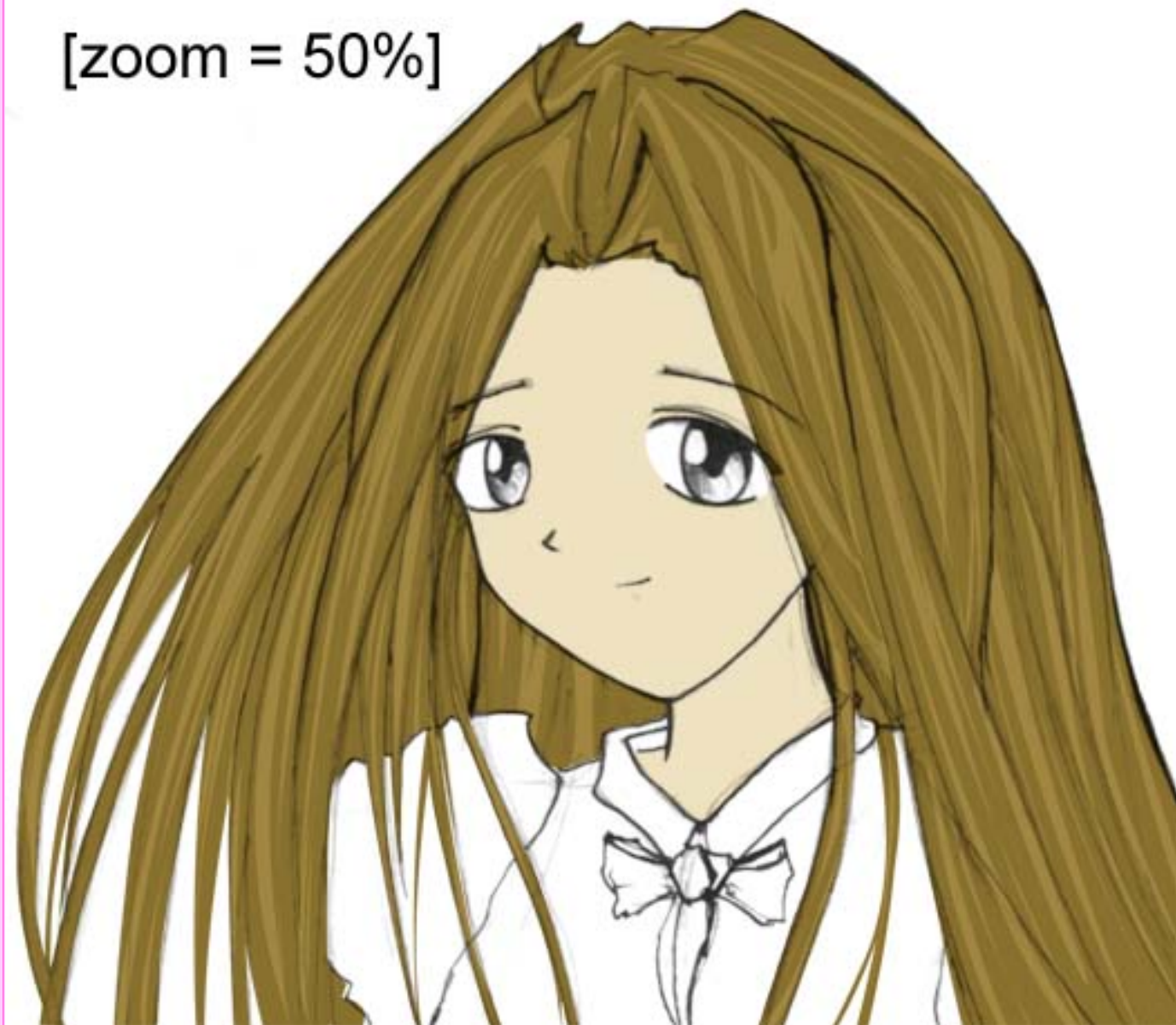


do this is by making a little path in the shape shown in the diagram. Then repeat lots of times over. Usually I like to start with a lighter colour. Its also important you make sure each one looks right before you keep it. If it looks dumb, just go back, after all, that's what history is for, ne? ^_^ Now, proceed carefully, and remember to follow the shape of the hairs. And also, Yokaze's rules of path-hair:

1. The thinner each path, the better.
2. The more paths, the better.
3. The smoother the path's curve, the better.



[zoom = 50%]

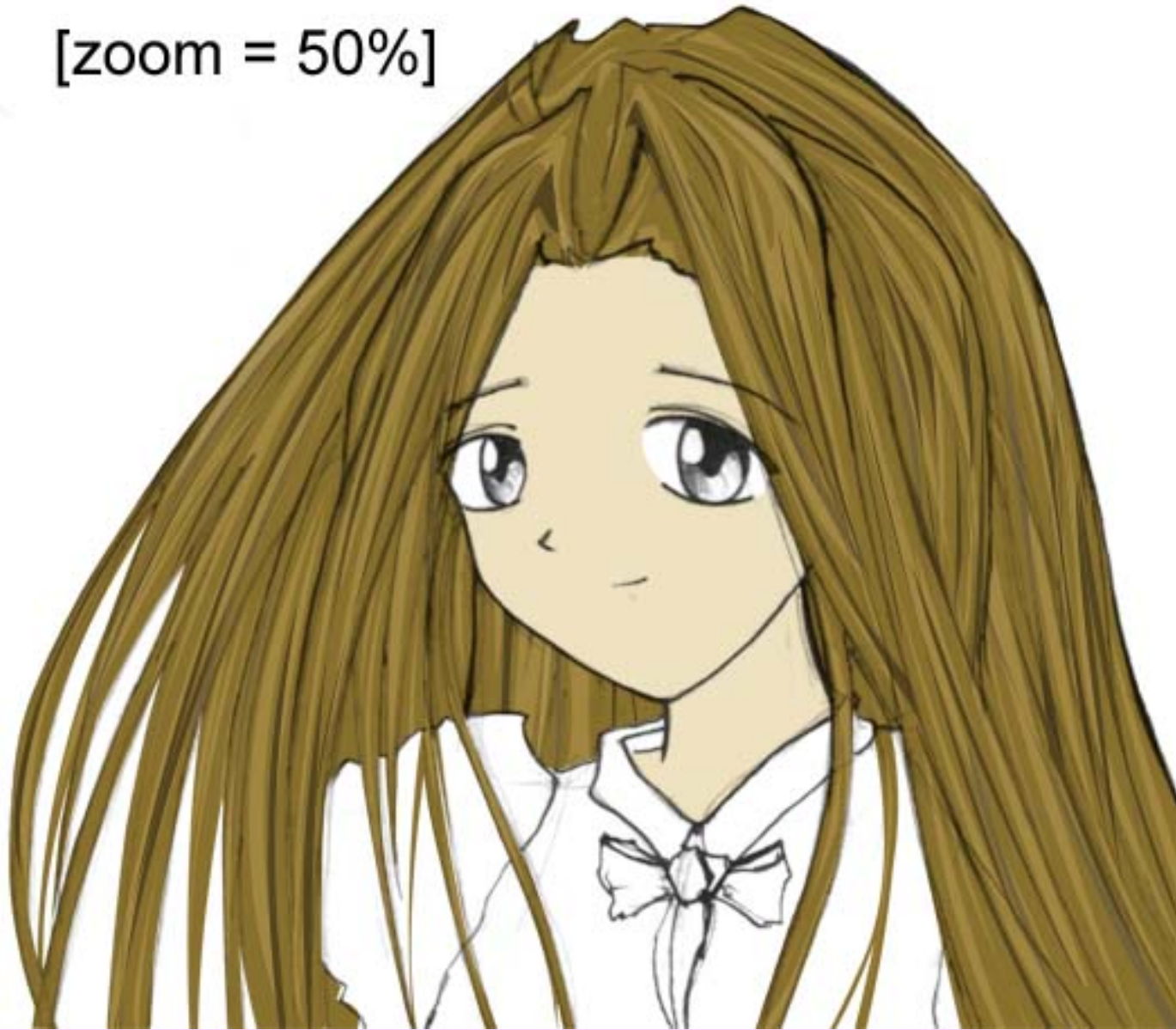


By the end of this path-ing with the first colour, you should hope to get something that looks a little like this. Remember, when doing this it is very important to have the hair layer that you are colouring onto 'preserve transparency' checked.

Now this may look a

little complex at first, but don't worry, once you make a few paths you like, you'll get the hang of it really quickly! I'm no expert at paths myself, but I think that a little bit of practice goes a long way! ^_~

[zoom = 50%]



Step Six

Repeat step 5!

Do the same thing with two other colour, to create a variance of tone.

Remember when doing this though, a couple of things.

1. We are NOT shading the hair here, just doing random strokes. Making a hair texture, if you will
^_^

2. Don't be afraid to

overlap! Why? Because in real life hair does too! ^_~

3. Try to make the lines curvy [bad example here], as it give the hair more flow, and makes it seem more natural.

4. Be creative, if you try different curves and stuff it sometimes looks cool even if its a fluke! Heehee. ^.^~

Go Forth!!!~~~~~>

Hair CG Tutorial - by yokaze.

Step Seven

If you already have no regrets about the colour how have chosen for you hair, you can proceed unaffected through this section, however, even so It may be worthwhile reading this section, to pick up one of the most useful little tools in Photoshop [IMHO!].

Select the 'Hair' layer and go to the Coloriser [*Image > Adjust > Hue / Saturation*].

Check the 'Colorize' check box.

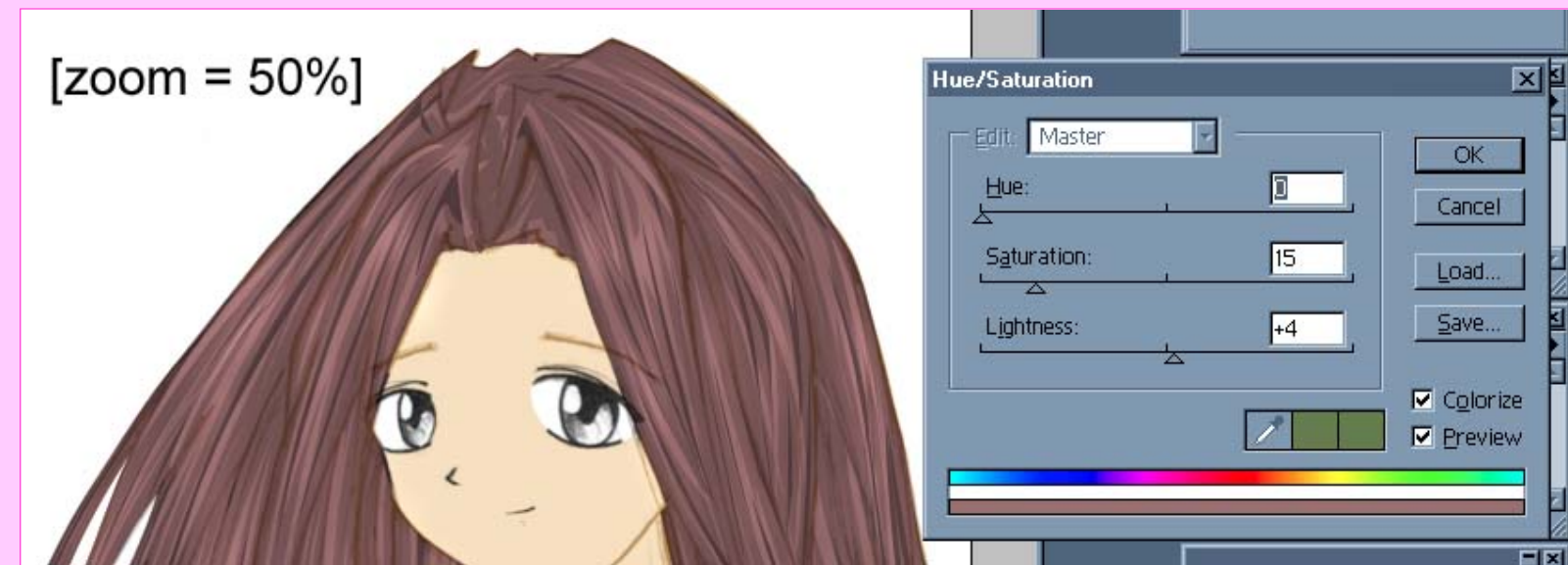
Move the sliders to change the colour of the hair.

Hue: Colour

Saturation: Colour Intensity

Lightness: Brightness / Darkness

I urge all of you to muck around with this tool, because it is really useful in so many situations, especially when you have regret about the colour of some clothing or something... it makes it extremely easy to change.



Step Eight

Before you freak out... let me explain exactly what this is.

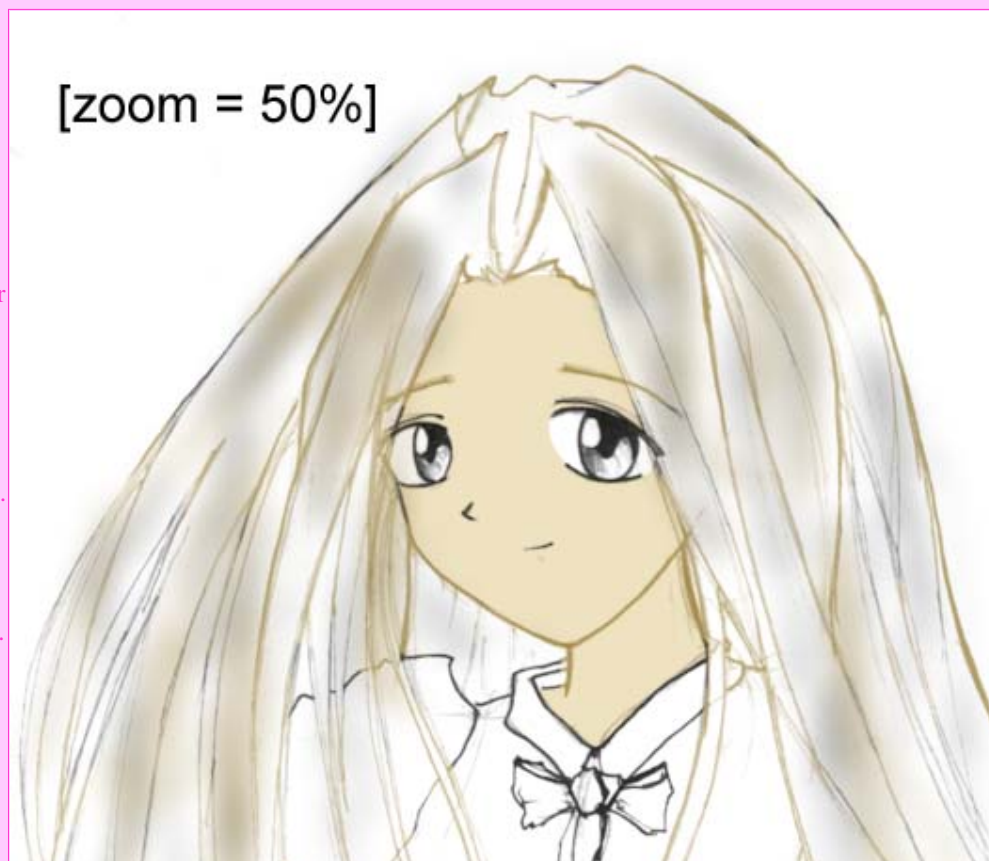
IMPORTANT!

Imagine all of the light grey airbrushes are actually white... as I needed to show their existence in this example they are coloured black.

What this area basically shows is the areas where Colour Dodges have been applied to help give the hair texture. THIS has a really dramatic effect so if you are going to listen to anything.. make it this...

Make a new layer for the initial colour dodges.. [set the layer's blending mode to *colour dodge*]. Use the *Airbrush* [opacity = 2%] on a fairly large size [40 or so... with faded edges] with **pure white** as the colour. You will see the effect this has and it becomes easy to just add them where you need them.

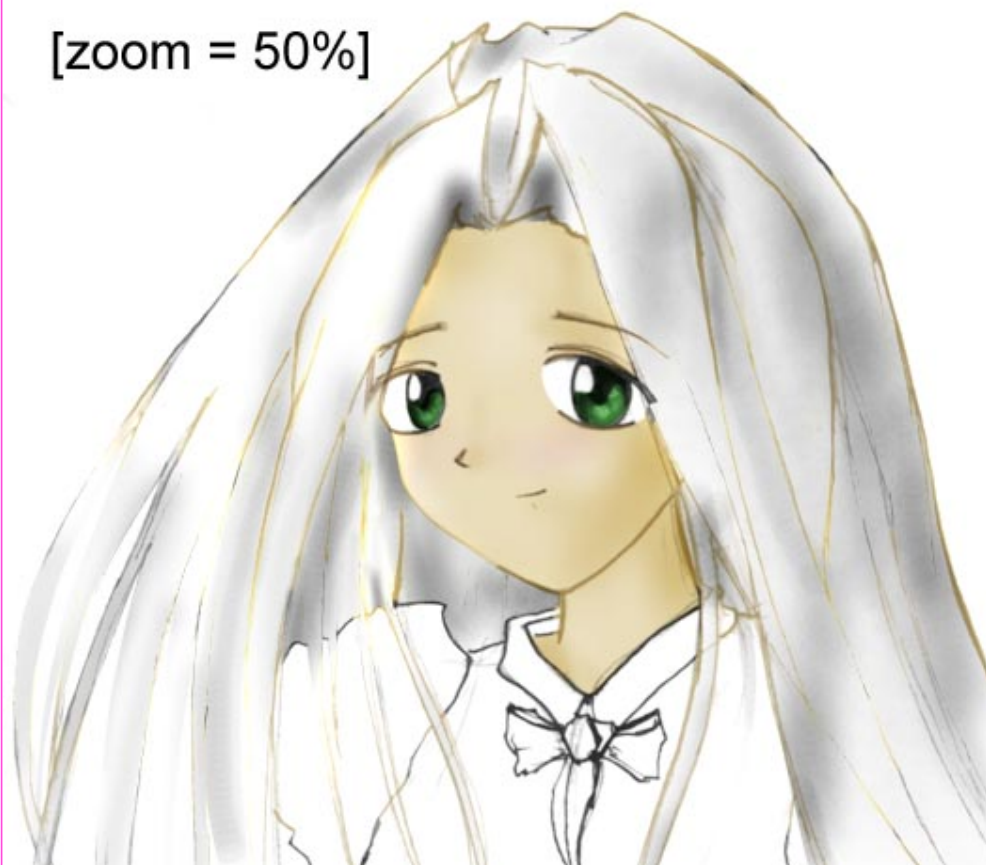
Make a second layer for some secondary colour dodges.. these are more really to represent different areas of colour in hair [no-one has completely monotonal hair, ne?] so select a light variation of the colour you chose for your hair [e.g. if you made red hair choose pink.] This layer is exactly the same as the above aside from the fact that these dodges are a different colour. The example to the right might help show you where to but



these dodges on the hair ^_~



[zoom = 50%]



Step Nine

Okay this is where we finally add shading to the hair.

CTRL+Click the 'Hair' Layer and keep the selection selected. Make a new layer. Fill the selection with White [on the new layer]. Deselect. Click Preserve Transparency on the new layer. Change the Layer's blending mode to 'Multiply'.

Now get the airbrush tool [opacity = 10%] and shade the dark/light areas of the hair roughly.

Note: the example shown to the left it what the layer will look like on 'Normal' mode... to apply the shading set it to 'Multiply'.

[zoom = 50%]



Step Ten! [Fin!]

This is the final step... make a final layer and add some more extreme colour dodges [in white] to the areas where light will catch the hair. Use *Airbrush Size = 25 [faded edges], Opacity 8%*.

Also before you decide to finish the hair you can go back to step seven and change the colour of the 'Hair' layer. If not because you don't like the hair colour, do it for fun!



Finished CG! ^_~

