Subject: All in one GoogleSketchup?
Posted by ambiguX on Thu, 05 Aug 2010 15:06:36 GMT
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Hi,
I am a beginner - with Shapeways + in Google Sketchup.
My goal is Collada format. Exports + imports are not a problem.
A flat part was adopted by the shapeways-Robot as OK.
A simple part of two levels / layers was not OK/manifold and had to be corrected manually by Shapeways with other tools and was exported in STL. So I can not re-import the post-edited in SketchUp to compare with my Original to check/learn for errors.

Question: Is the use of multiple tools a MUST or is there a way to create a simple piece properly + manifold only within Sketchup?
If so, is there already a tutorial, I have not found?

ThanxInAdvance + ciao
Ambi

Subject: Re: All in one GoogleSketchup?
Posted by jimfoltz on Thu, 05 Aug 2010 17:05:46 GMT
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Hi Ambi,

I am also interested in a Sketchup-only workflow. I think it's possible if you are careful about how you model in Sketchup. If you model from scratch with the idea of making a "manifold" model, it should be a smoother workflow than trying to turn an already completed model into a manifold model.

I don't think external tools are a "must"; but you need to have a good understanding of Sketchup, and what it means for a model to be manifold. The way Sketchup works can work against your desire to create manifold geometry.

For example, Sketchup will create a face (or faces) automatically when you close a shape. Sometimes, this face is internal to your model and there is no indication the face is added; but internal faces make the geometry non-manifold. You need to find and remove internal faces. X-Ray mode can be useful to do this; or use a Section and Move it through the model to find them.

There is a great plugin for SketchUp that can help in cleaning-up a model of loose and un-used

geometry. It is called cleanup. It's a must-have plugin as far as I am concerned.

I am not sure how Shapeways handles Groups/Components, I'm still experimenting with that; as well as with which collada export options are optimal for Shapeways. For now, I explode all Groups/Components before exporting.

I don't know if Shapeways' collada importer supports image textures. I know if your model uses only colors in Sketchup, the colors are preserved and shown in Shapeways' preview image - so I assume they can be printed using the full-color material.

If image textures are used, i think you would need to edit the .dae file and the location of the texture files, and create a .zip file of them all to upload. But I haven't tried this yet.

Hope this helps some.

Subject: Re: All in one GoogleSketchup?
Posted by dizingof on Thu, 05 Aug 2010 18:25:33 GMT
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Hi Ambi,

All my designs were made with SketchUp.
I agree with jimfoltz, you must have community plug-ins that will make things so easy for you when it comes to designing with SketchUp & 3D printing.

Such as STL/IDX exporter/importer,cleanup , fredo6 collection (scale, toolsonsurface,roundCorner)
and many many more..

Here are some resources for free Rubi plug ins:

http://www.sketchucation.com/extensions-index/

http://rhin.crai.archi.fr/rubylibrarydepot/index.php

my favorite:
http://sketchuppluginreviews.com/

Cheers
Dizingof
http://www.shapeways.com/shops/dizingof

Subject: Re: All in one GoogleSketchup?
Posted by ambiguX on Thu, 05 Aug 2010 20:00:32 GMT
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Hi Jimfoltz and Dizingof,
thank you both for quick response and resources!
These are good prospects; I am willing to learn - but rather one tool completely than many as half

And nope, there is nothing tricky like textures or so, I am a real beginner and it's only like http://www.shapeways.com/model/135056/ymanikin_03.html , which shapeways modeled of my sketch for that contest. And since then I'm fighting with CorelDraw + GoogleSketchup to 3D-model it myself
And I thought best practice should be to avoid manifold etc. in the creating-process. But it seems that even in Sketchup, I should model first and than fix it.
Thanx, I'm going to learn/do my homework now
Ciao
Ambi