Subject: Maya Help
Posted by Raizer04 on Fri, 30 Nov 2012 06:59:05 GMT
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I have a number of 3d files that I am trying to print on my printer, yet the problem i am facing is the normals inverting. I've tried various software to include

MeshLab
Maya (currently toying with)
Netfabb Studio

I need all the normals facing the same way in order for it to print properly, but whenever I try to reverse the normals, the opposite side then becomes the problem. I have tried the conform feature in MAYA as well and it still wont work. Can someone please show me how to get the normals to face all the same way, without the other side of the object becoming the issue as well? here is the files I am working with.

File Attachments
1) Maskfinal.obj, downloaded 54 times

Subject: Re: Maya Help
Posted by Raizer04 on Fri, 30 Nov 2012 07:22:50 GMT
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Here is the other files I am working with as well that is giving me problems.

File Attachments
1) BackFinal.obj, downloaded 50 times

Subject: Re: Maya Help
Posted by Raizer04 on Fri, 30 Nov 2012 07:24:24 GMT
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last one

File Attachments
1) Jawlinefinal.obj, downloaded 49 times

Subject: Re: Maya Help
Posted by JACANT on Fri, 30 Nov 2012 20:18:54 GMT
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Your models have no thickness to them. They are just skins. Open them in Blender. Add Modifier. Solidify. Add whatever wall thickness you want. In the file I did I entered 1. Export to STL. Open in Netfabb where you can check and measure.

File Attachments
1) Blender Modifier.png, downloaded 132 times

Subject: Re: Maya Help
Posted by JACANT on Fri, 30 Nov 2012 20:21:06 GMT
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Fixed file. Wall thickness 1mm.

File Attachments
1) Maskfinal fixed.stl, downloaded 45 times

Subject: Re: Maya Help
Posted by Youknowwho4eva on Fri, 30 Nov 2012 20:31:28 GMT
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Jacant, I think you mean blender instead of Meshlab for the solidify command, those look like blender screen captures.

Subject: Re: Maya Help
Posted by JACANT on Fri, 30 Nov 2012 20:39:28 GMT
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Sorry Michael. It is Blender.
Edit done
Regards Rob

Subject: Re: Maya Help
Posted by Fredd on Sat, 01 Dec 2012 07:07:22 GMT
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A 2d plane has no thickness, thus no material volume. Extrude that plane, an interior volume is created.The normals oriented correctly define the volume on a manifold mesh. The term "Not watertight" fits your problem exactly. You just want the end result to be a manifold surface defining the interior volume, similar to a filled balloon. You don't want the air escaping, heh.

There are some pretty good tuts on the basics of the principles of preparing a model here for 3D printings. They are really worth reading.

Keith