Subject: Manic manifold assistance
Posted by notnorm on Wed, 02 Dec 2009 00:35:17 GMT
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Dear Shapeway community.

I am brand spanking new to the 3d printing world. I created an object in 3ds max, uploaded it to Shapeways to make sure the base structure would pass the tests and sculpted it in z brush. I imported it into 3ds max to re attach the hallow inside and got the ever dreaded non manifold error. I've tried running it through the non manifold filters in meshlab and shaken my fist at the heavens for making Magics $8000. I would just start from scratch again but this is a Christmas present and I fear that by the time I re sculpt or manage to sort this error out it will be well into January. I know this forum is flooded with fools like myself but I would be very appreciative of any benevolent help.

The scale is in Millimeters.

File Attachments

1) dadsnoggen3.STL, downloaded 139 times

Subject: Re: Manic manifold assistance
Posted by iguffick on Wed, 02 Dec 2009 09:39:13 GMT
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I've had a look at your file and cleaned it up using MeshLab, see attached file. I tried uploading to Shapeways and it was accepted.

You had a few thousand non-manifold faces and vertices. You were also close to the 500K limit, I've reduced the poly count as you have far more detail than you'll ever get from the 3D print.

If you're not happy with the downsampling or just want to know for next time, here's what I've done in MeshLab.

1. Filters > Cleaning and Repairing > Remove Non Manifold Faces
2. Filters > Cleaning and Repairing > Remove Non Manifold Vertices
3. Filters > Remeshing, simplification and reconstruction > Close Holes
4. Filters > Remeshing, simplification and reconstruction > Quadratic Edge Collapse Decimation (Percentage reduction 0.3)

then just to re-check do (1) and (2) again, it should say 'Mesh is two-manifold, nothing done'.

Regards, Ian.

File Attachments

1) dadsnoggen4.STL, downloaded 151 times

Subject: Re: Manic manifold assistance
Posted by notnorm on Wed, 02 Dec 2009 18:12:31 GMT
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Fantastic. Utterly and completely fantastic! Ian, you have not only saved Christmas but you went the extra mile and taught me how to fix things myself in the future. Thank you so very much sir. I just uploaded and ordered it. I am in your debt. :d

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