

Appendix 1

Client Interview:

1. How would you like to run it, would you like a .exe, terminal, or something else?

An executable jar file, easily runnable with J2SE 1.5 and newer.

2. How would you like the user interface to look?

File dialog box for image file, see a preview of the image, a button to generate the output, a button to open the input file, after generating the output file it asks where to save to.

3. What types of inputs would you like to use?

Any common image files, .bmp, .jpg, .gif, .png, ...

4. What types of outputs would you like to use?

Text based .stl format, adhere to the standard, the MakerBot replicator software should be able to use the file

5. Would you like to be able to adjust the size of the resulting model?

Yes, with slide bars for adjusting the output x, y, and z, minimum size .5 in in each dimension and max 6 in. Be able to skew the dimensions

6. Do you prefer the model is filled in, a shell, or being able to choose when creating the object?

Solid is imperative, after the base functionality is implemented and tested, we can decide if a shell feature is possible within the time-frame

7. Would you like to be able to raise the image up, or put it on an angled block?

Its not necessary

8. Would you like the ability to add plug-ins?

No, not really

9. What other types of features would you like to see?

Preview the .stl file in the program as a rotate-able 3D rendered solid, this feature may also be beyond the scope of the time-frame available

10 . Who will be using this program?

I will use it, along with the possibility that students in the 3D modeling and animation class and robotics club using it as well. Many of these students will have no experience in creating 3D models or using image creation software other than MS Paint.

11. What are the needs of the people who will use the program?

Quickly create artistic designs, like key chains, Christmas tree ornaments, and paperweights. Some students may be able to use this software to create mechanically functional pieces, like electrical boxes, gears, and building blocks.