

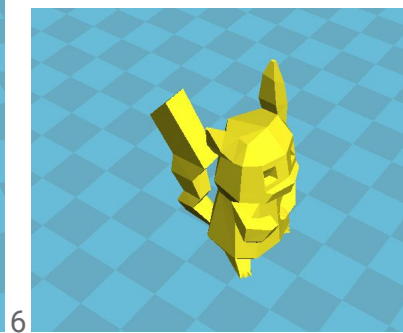
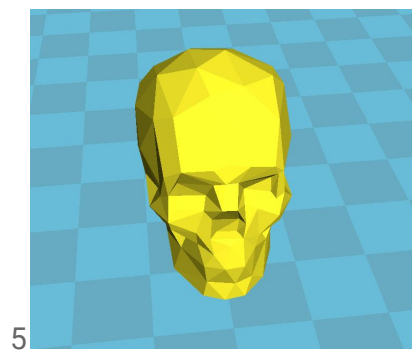
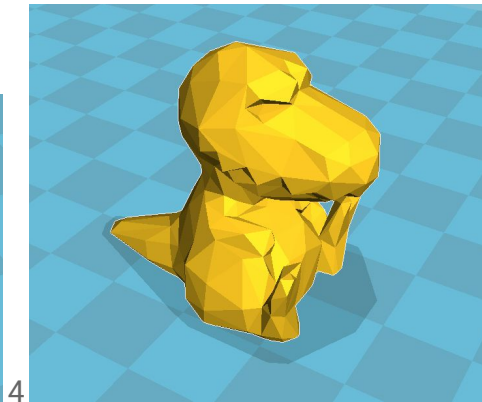
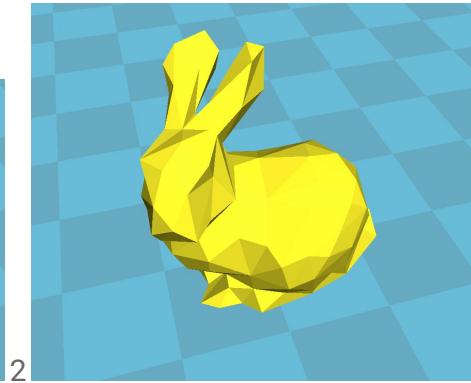
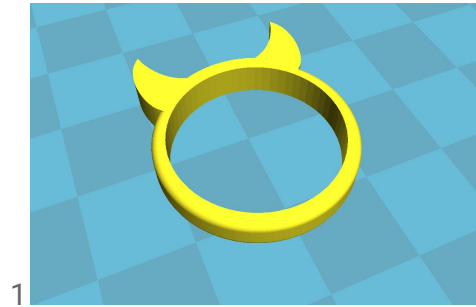
Task Instructions

March 03, 2016

Overview

As a participant your goal today is to follow all the steps involved in taking a model from the virtual world into the physical world with the power of 3D printing. Starting by choosing from a small subset of models which I have pre-selected, you will download this and load it into the slicing software which I have developed. The models which you will be using for this study have been pre printed and you will be able to take one home at the end of the study.

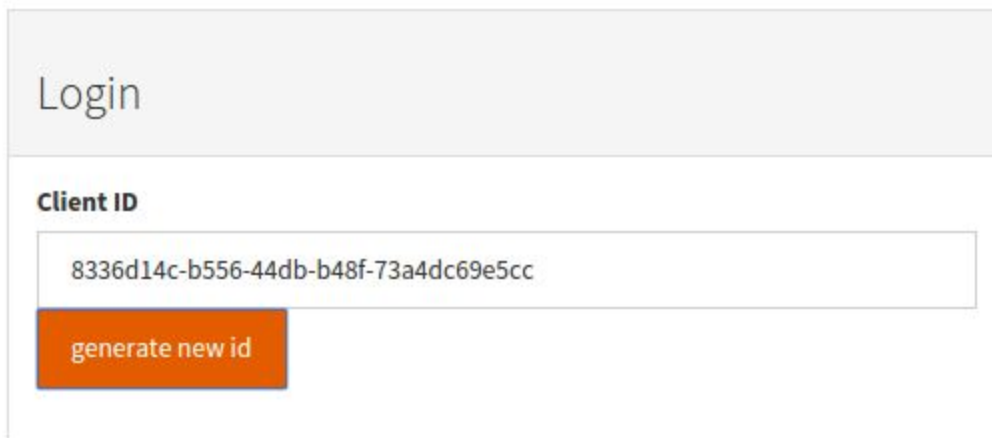
Choose Your Model



Task 1: Create a new user

User Goal: Get a new login ID.

This task is pretty simple. All you need to do is click the orange button labeled “generate new id.” If you wish to return to your work later please copy this number as it is your reference number to your file.

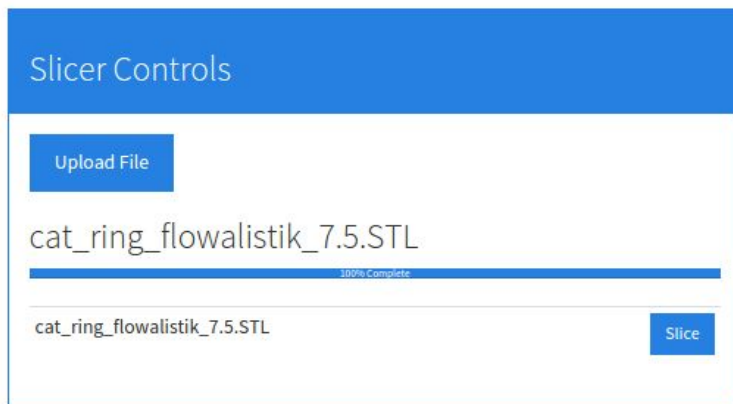


The screenshot shows a web form titled "Login". Below the title is a section labeled "Client ID". Inside this section is a text input field containing the alphanumeric string "8336d14c-b556-44db-b48f-73a4dc69e5cc". Below the input field is an orange button with the text "generate new id" in white.

Task 2: Upload your file

User Goal: Take your chosen model file and upload it to WebSlicer.

In this task you simply need to take the file which you have chosen and upload it using the upload button under slicer controls. The file will be provided to you on a USB stick. You upload to Webslicer in the same way that you would by selecting a file in Word.



Your output should look something similar to the picture above.

Task 3: Adjust slicer settings

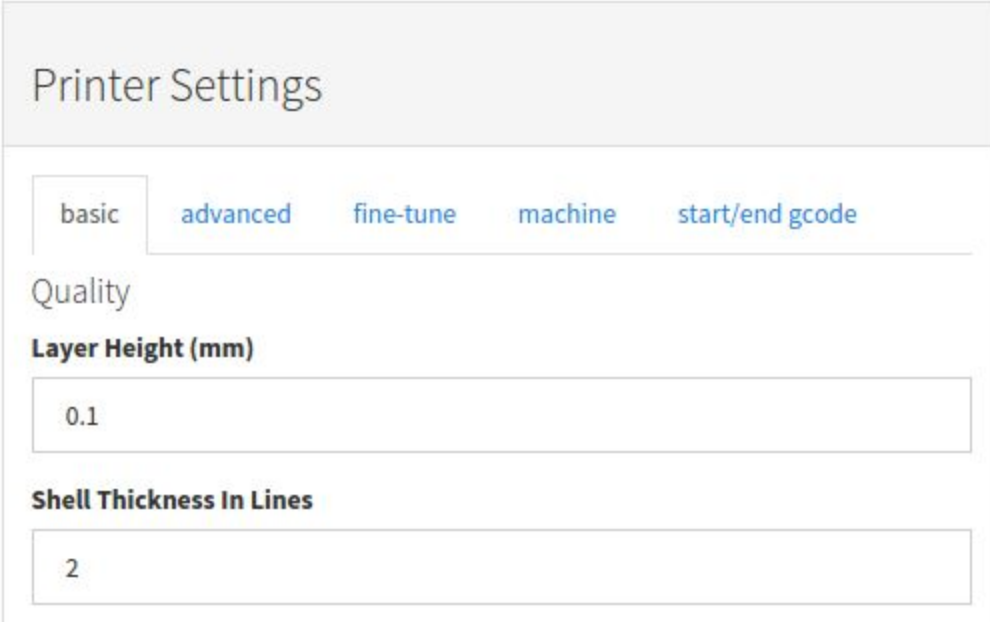
User Goal: Adjust settings so that the model will print correctly.

Basic Settings

The only settings that you will need to adjust will be under the basic tab. The settings that you need to find and change are as follows,

- Layer Height: 0.2
- Infill: 80%
- Filament Diameter: 1.75
- Shell Thickness in Lines: 2
- Printing Temperature: 245
- Bed Temperature: 110
- Print Speed: 40

The default values for the rest of the settings should do fine for your model.



Printer Settings

basic advanced fine-tune machine start/end gcode

Quality

Layer Height (mm)

0.1

Shell Thickness In Lines

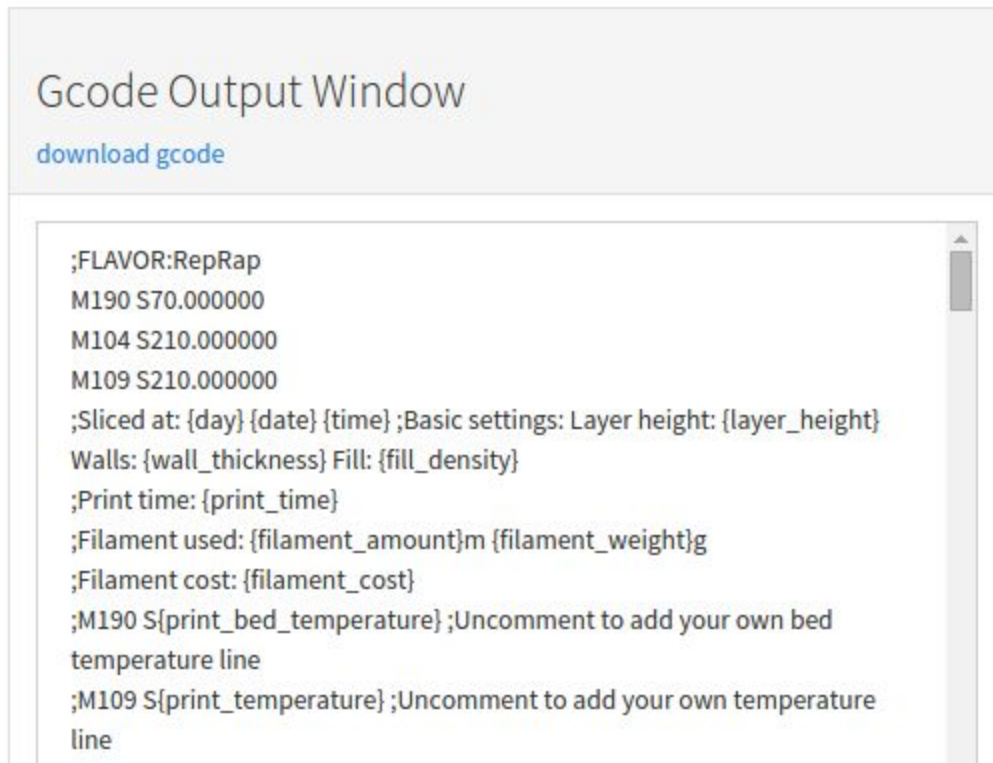
2

Your window will look different from the one above. The picture is simply as a reference.

Task 4: Analyze and download Gcode

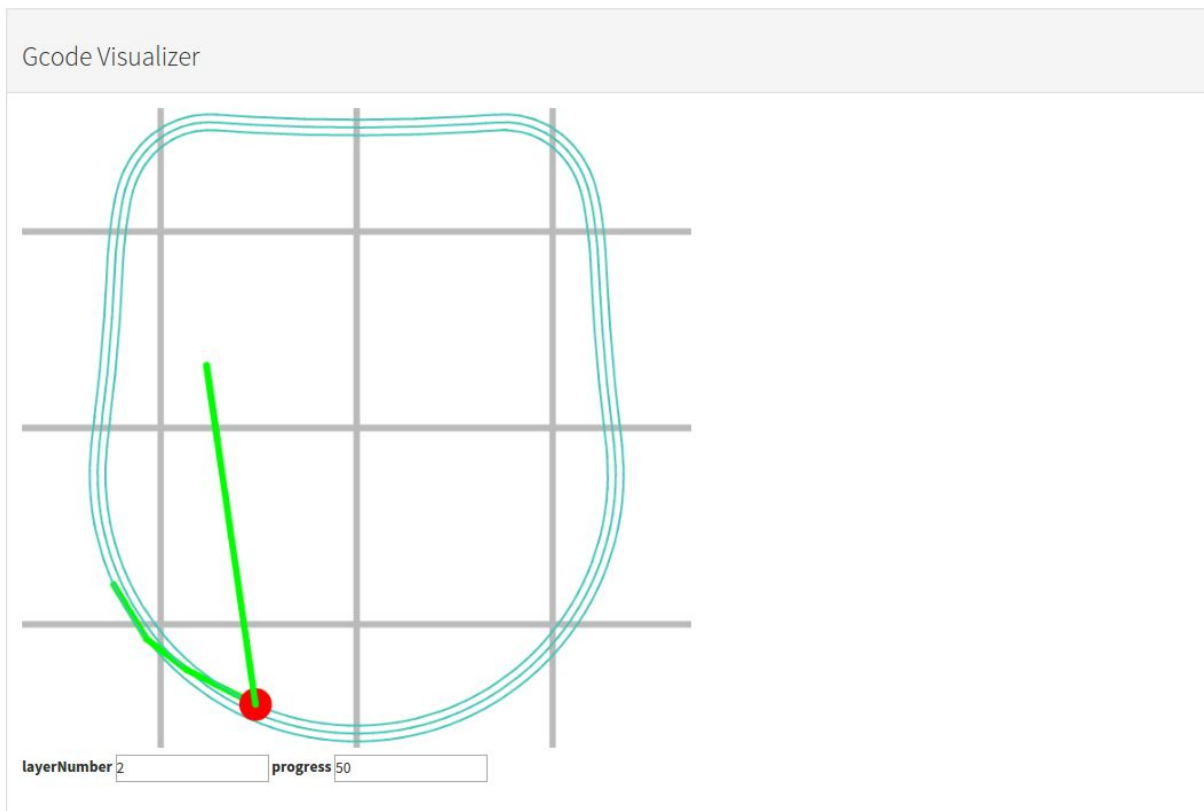
User Goal: Use visualizer to see the resultant Gcode and download it for printing.

When you have completed task 4 you have to press the slice button next to the model you wish to slice. The slice button should change into a spinning cog to indicate that it is working on slicing your model in the cloud. When it completes you should see some output that looks something like the following image,



You should also see a visualizer window like the one in the next picture. This is where you can step through all of the layers of your model and see exactly what it will do while it is printing.

When you are satisfied with this output you can press the "download gcode" text as it appears in the photo above. You will then get your Gcode file ready to be printed.



And that's it! You have successfully sliced your first model using WebSlicer. All that is left to do is grab the person conducting the research and tell them that you are done and you can watch as your model will get printed for you.

Thank you for your participation.