

Toothbrush Design Process

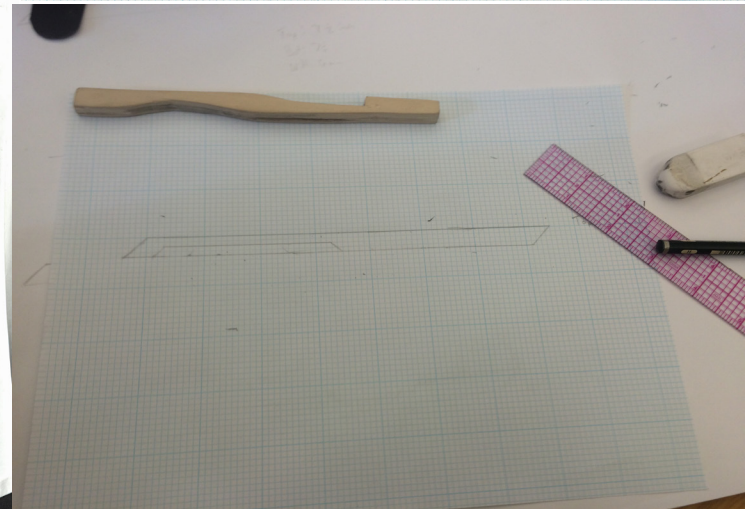
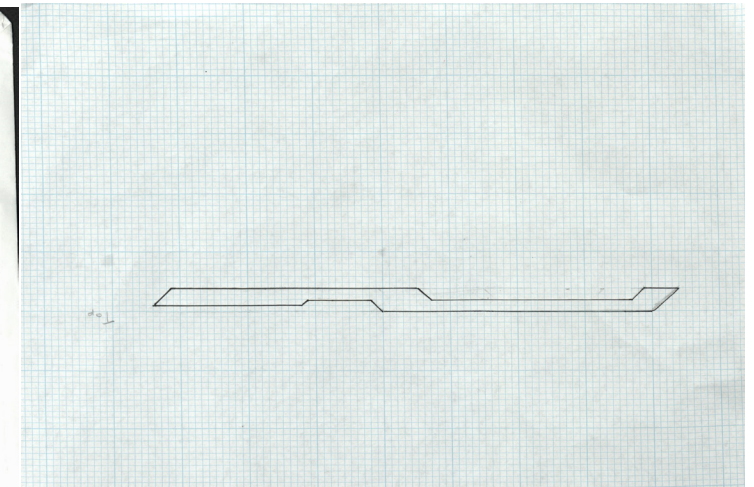
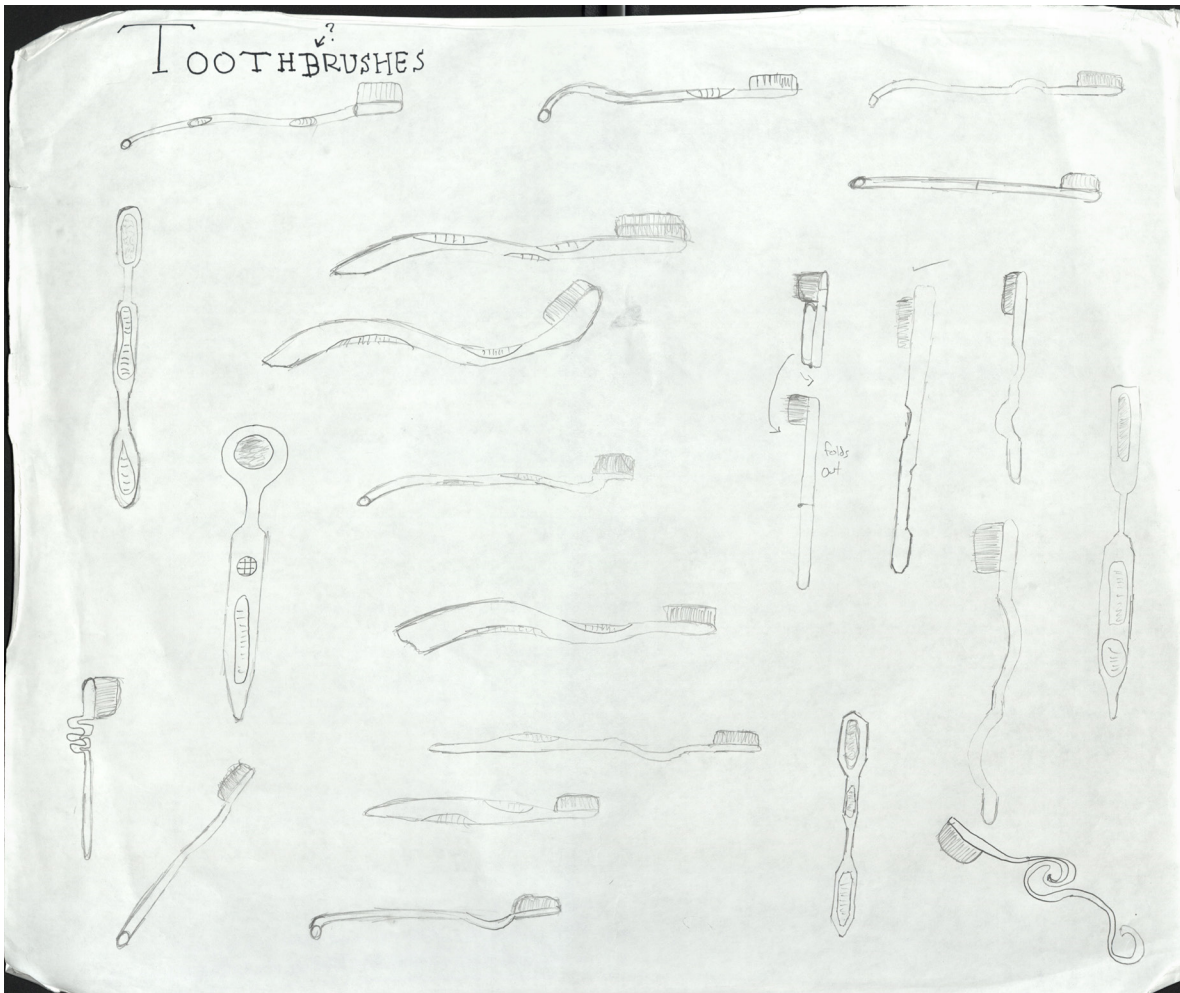
Product Design 240

Maximilian Mendola

Ideation Process

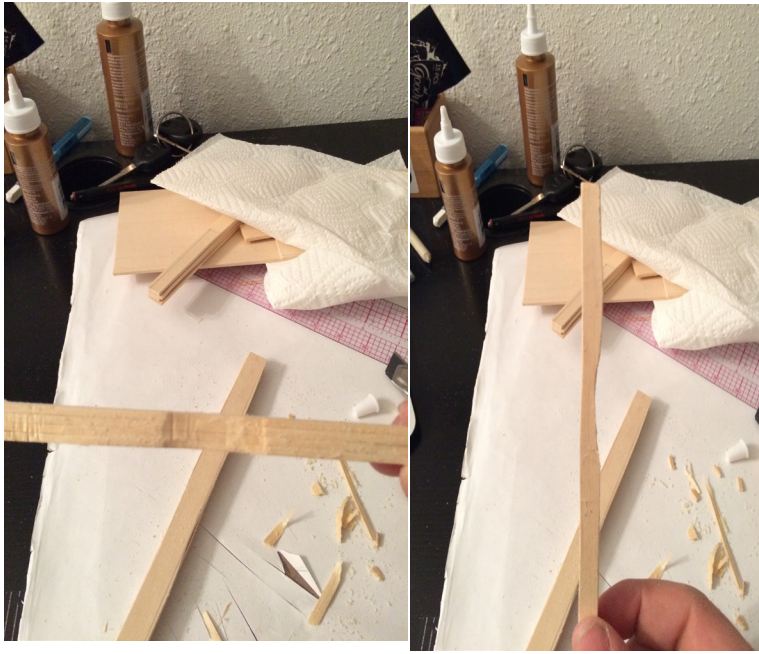
To start off making our toothbrushes we experimented with drawing multiple different forms, varying in width, length, height and form. After developing 20 forms by sketching we moved on to create balsa models, which we would then sanded until we felt they fit the shape that they needed to fit. From there we made a final design, uploaded the image to a digital format and then used a laser cutter to make a final form out of acrylic, which could then be made in to a mold.

Sketching Process

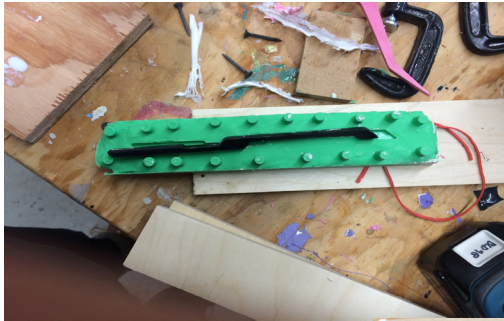


3d Modeling Process

I started out with a few forms and eventually developed my final form into a sleek, angular, and modern toothbrush. I wanted it to be consistent with its angles, sleek in its form and functional with its design. I started out with a smaller and rounder design which eventually progressed into an angular, longer and thinner design to suit the aesthetic that I feel fit the project.



Molding Process



At first the molding process turned out great and was going very smoothly



I was able to use the given material and pour a sufficient mold over the weekend

...Or so I thought!

Because I did not have enough of the given material I was forced to use a product called "Castin Craft" Liquid Plastic. It was not very effective and did not yield a sufficient result.



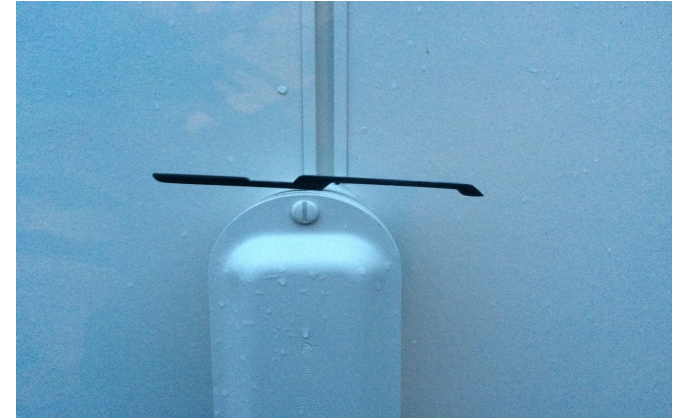
I was forced to set up an odd shop in my garage due to continuous failure with this new material in the shop well after it had closed.

Unfortunately this was my continuous result.



Final Product

I was forced to take my original mold and improve it as best I could, sanding carefully and doing what I could to improve its shape. I was happy with my end result but wish that I had been able to continue to use the original material originally provided so that I could have achieved the end goal that I had desired from the beginning.



In the end I was very happy with the result of my project. I feel like my design was exactly what I had aimed for and could be efficient within the real world. I wish the final materials had been available for me to use as well, but I did the best I could with what I was given.

