

oliver engel  
vis 141a

**typefaces are the single most  
versatile and valuable tools of design.**

**naturally, someone out there is  
stealing them.**

Type permeates every aspect of our lives: the books we read, the signs that direct us, the websites we visit. From their origins in physical, lead-cast block sets, typefaces have developed immensely—there’s now more variety and nuance than ever before. That’s mostly due to the fact that nearly every new typeface is created on a computer.

Today, fonts are wrapped up into tidy, lightweight files that can be installed with a few clicks of a mouse. This relatively new advancement for type, while wonderfully convenient for designers, carries the baggage of every other digital media: *it’s really easy to steal them.*

A large, bold, red 'Aa' in the Franklin Gothic Book font. The 'A' is tall and narrow with a thick vertical stem and a horizontal crossbar. The 'a' is lowercase and has a thick, rounded body with a small loop at the top.

franklin gothic book

Every font file is made up a set of glyphs (the characters we can type, like G, 7, or &), which are made up of *contours*, which are then made up of *points*. The essence of a font is contained in this data, which details every vertice and bezier handle.

Among other things, font files are also encoded with various levels of copyright protection and font names. These also help distinguish the font from the millions of others, and in some case are even patented.

## For my project, I wanted to confront this notion of copyright and how it should be interpreted in the digital age.

Increasingly, artists’ and designers’ works are shared, altered, and created digitally—how do we manage ownership of these non-physical goods?

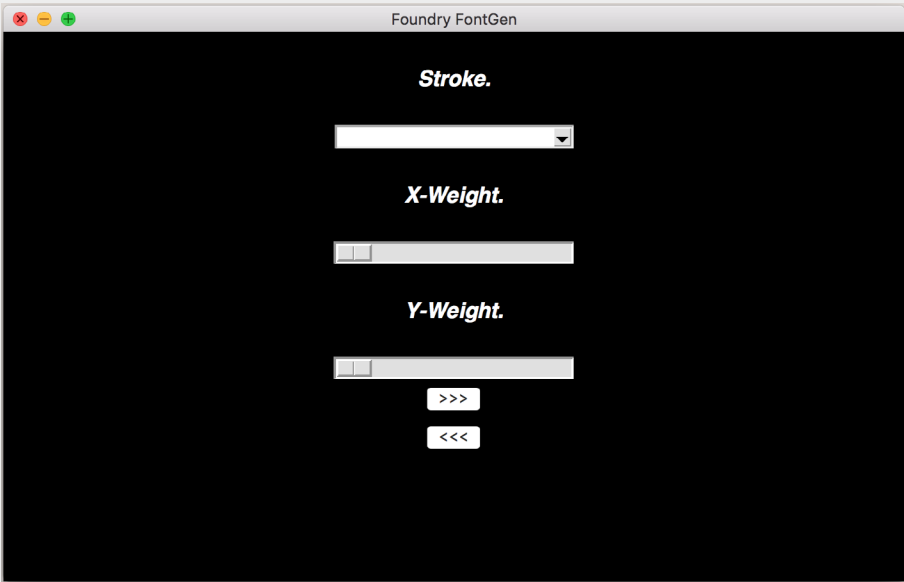
I created a program using Tkinter and the Font-Forge API—an API meant for automating iterable tasks on font files, such as converting filetypes

or reducing type design inefficiency—that lets a user take an existing font and alter it to create a completely new font. The program allows the user to rename the font and write their own copyright message. By altering the data structures of font files themselves, the program erases any trace of data that could be used to look for copyright infringement.

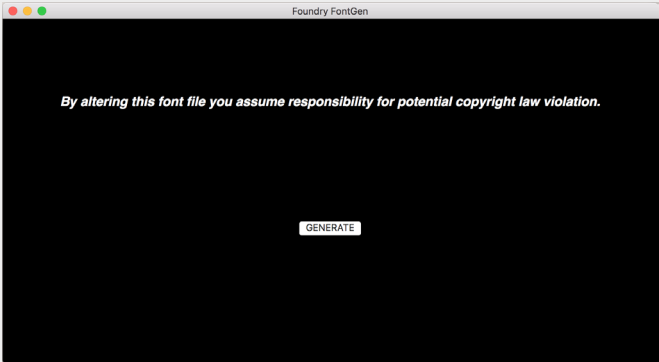
# How it Works

The program prompts the user to choose a font. The user can then rename the font, write their own copyright message, and then cycle through a variety of different distortion and styling

options to customize their new font. By playing with the settings, a user can create a novel font in seconds, which may or may not resemble the original font.



One of the screens in the interface, which lets the user create a stroked font.



On the final screen of the UI, the user generates the new font file.

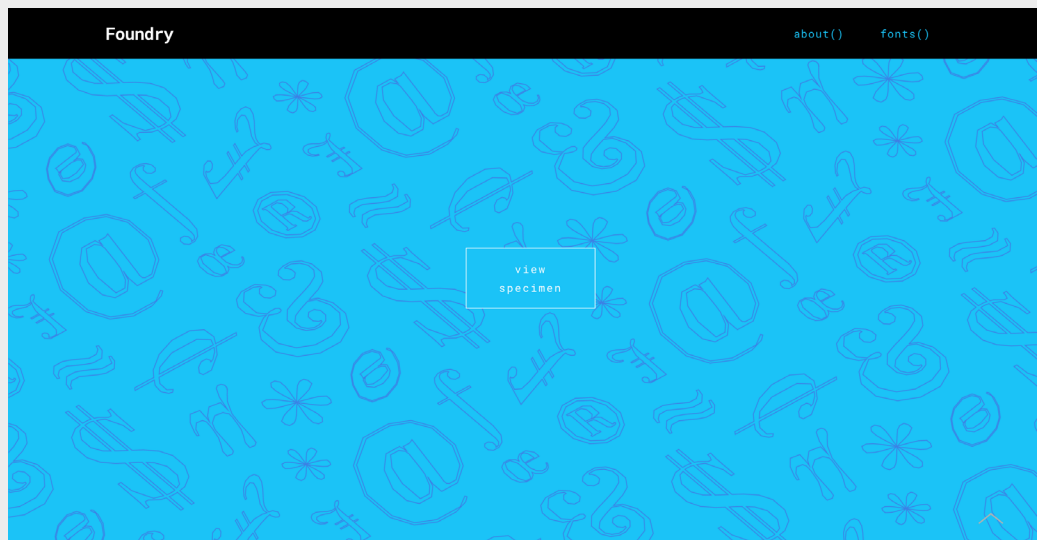
PostScript name	Morse
Full name	Morse
Family	Morse
Style	Regular
Kind	OpenType PostScript
Language	Afrikaans, Albanian, Asu, Basque, Bemba, Bena, Bo: Esperanto, Estonian, Faroese, Filipino, Finnish, Fren Indonesian, Irish, Italian, Jola-Fonyi, Kabuverdianu, I Luo, Luxembourgish, Luyia, Machame, Makhuwa-Me Northern Sami, Norwegian Bokmål, Norwegian Nync Sango, Sangu, Scottish Gaelic, Sena, Shambala, Sh Teso, Turkmen, Upper Sorbian, Vunjo, Walser, Wels
Script	Latin
Version	1.000
Location	/Users/oliverengel/Library/Fonts/MorseRegular.otf
Unique name	1.000;VLLG;2014;Morse
Manufacturer	(The Digital Type) Foundry
Designer	Foundry Digital Type LLC

Examining the font information reveals that the PostScript name, as well as Manufacturer and Designer have all been altered within the data structures.

I couldn't just leave the project at that.

So I came up with my own digital type foundry—aptly named “*Foundry*”. *Foundry* is a legally dubious online font repository which provides fonts which were “made” with the generator for download by the masses. It has its own website, which you can visit right now:

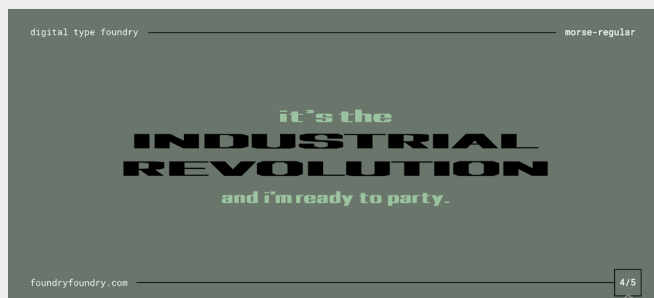
<https://www.foundryfoundry.com/>



The homepage of (The Digital Type) Foundry.

There's a few fonts which I created using my own program, all available for download by the general public. I also did the web design and all the graphics contained in the site. Each font has

a “specimen”, showing the font in use. Real type foundries do this too, in order to illustrate to the customer the versatility and personality of the typefaces that they offer.



Some screenshots from the type specimens.

## The Future

I've planned for this to be an ongoing project. As an aspiring designer, I see real potential for expanding on this concept and continuing to make improvements to the program and its output. Right now, the UI is functional but lacks some of the more complex features that I used to create some of the fonts I released on foundryfoundry.com.

I plan to polish up the program, convert it into a standalone application, and then release the application for download on the Foundry website. As I discover new ways of utilizing the FontForge API to explore new typographical aesthetics, I'll release new fonts for download, too.

## References

<https://www.plagiarismtoday.com/2015/11/10/when-typefaces-and-fonts-meet-piracy-and-plagiarism/>

<https://www.wired.com/2015/10/you-wouldnt-think-it-but-typeface-piracy-is-a-big-problem/>

<http://fontforge.github.io/en-US/>