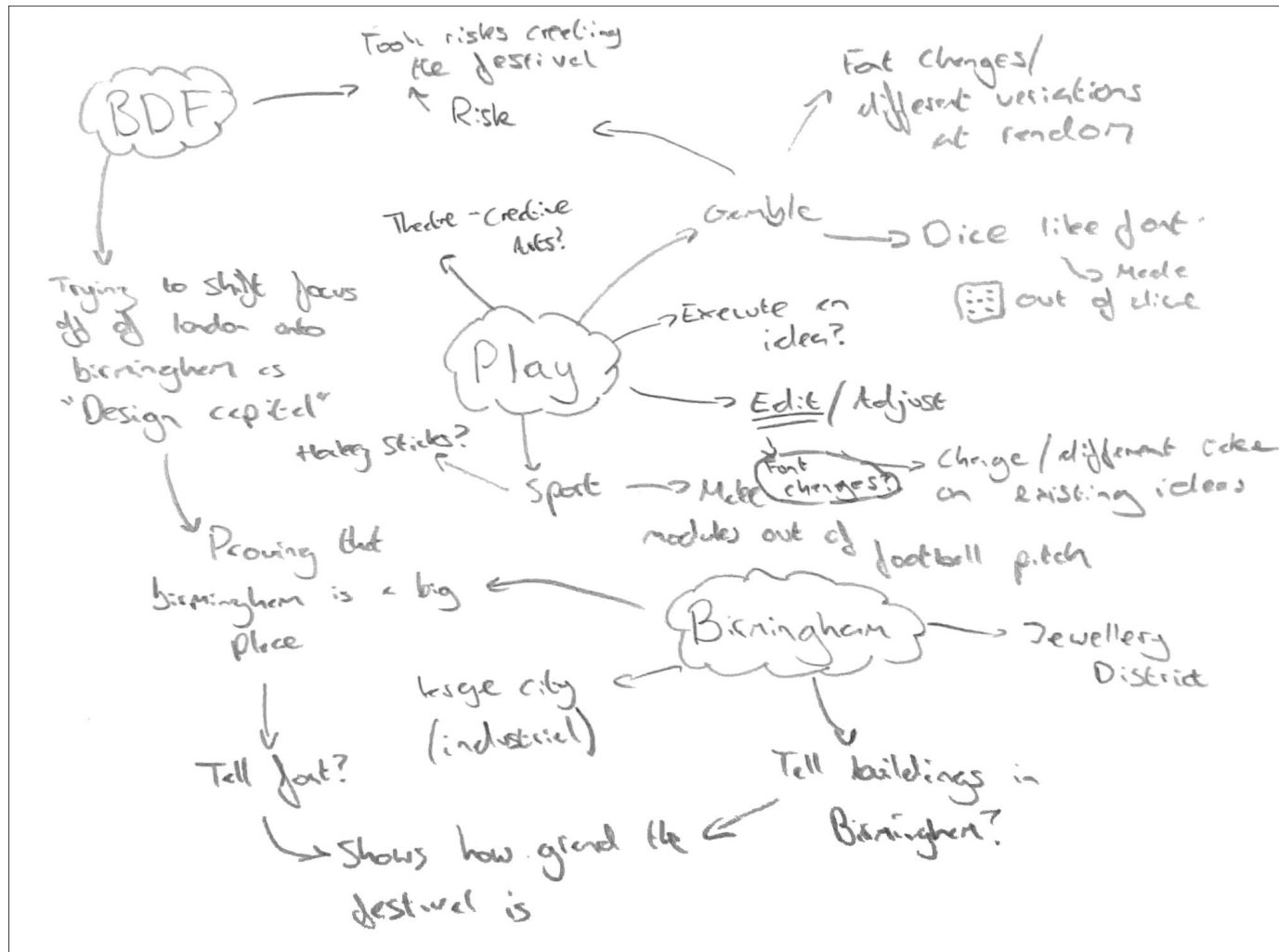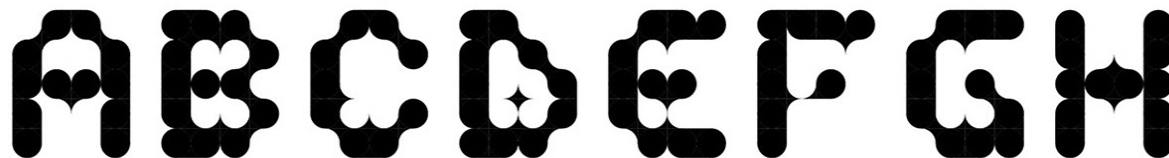# TYPE AND LANGUAGE

Research

I first started by researching both aspects of the Brief. First I looked at play - Different definitions and different synonyms. I also conducted research into Birmingham Design Festival.

My research into this revealed its strong ties with trying to makee Birmingham the "Design Capital" of the UK, and its goal to become both a national and international event. One way I thought to reflect this was by looking at the scale of the festival by creating a tall font, similar to the one pictured below.

To help link my font to the festival's theme of Play, I researched some of its synonyms such as gamble, sport and its use in theatre. However I found these ideas to be far too literal, so instead settled on looking at editing/adjusting the font.

Valentin Bajolle and Spaciofino (2015) Modular Typeface Experiment (Typeface)

Pixel Surplus (2017) *Dugas* (Typeface)

Typographic Exploration

As well as the tasks listed below, we also completed some online tasks around kerning, and forming different letter shapes.

Task 1 - Panagram
This helped to introduce me to modular fonts and taught me some of the key components to developing a clear and concise typeface with a limited set of shapes. Some of my letters came out quite abstract but I believe it still works quite well as a modular typeface.

Task 2 - Completing the letter form
This helped me to consider the different aspects that go into a glyph, whilst keeping it similar to the original style, working with both its limitations and strengths.
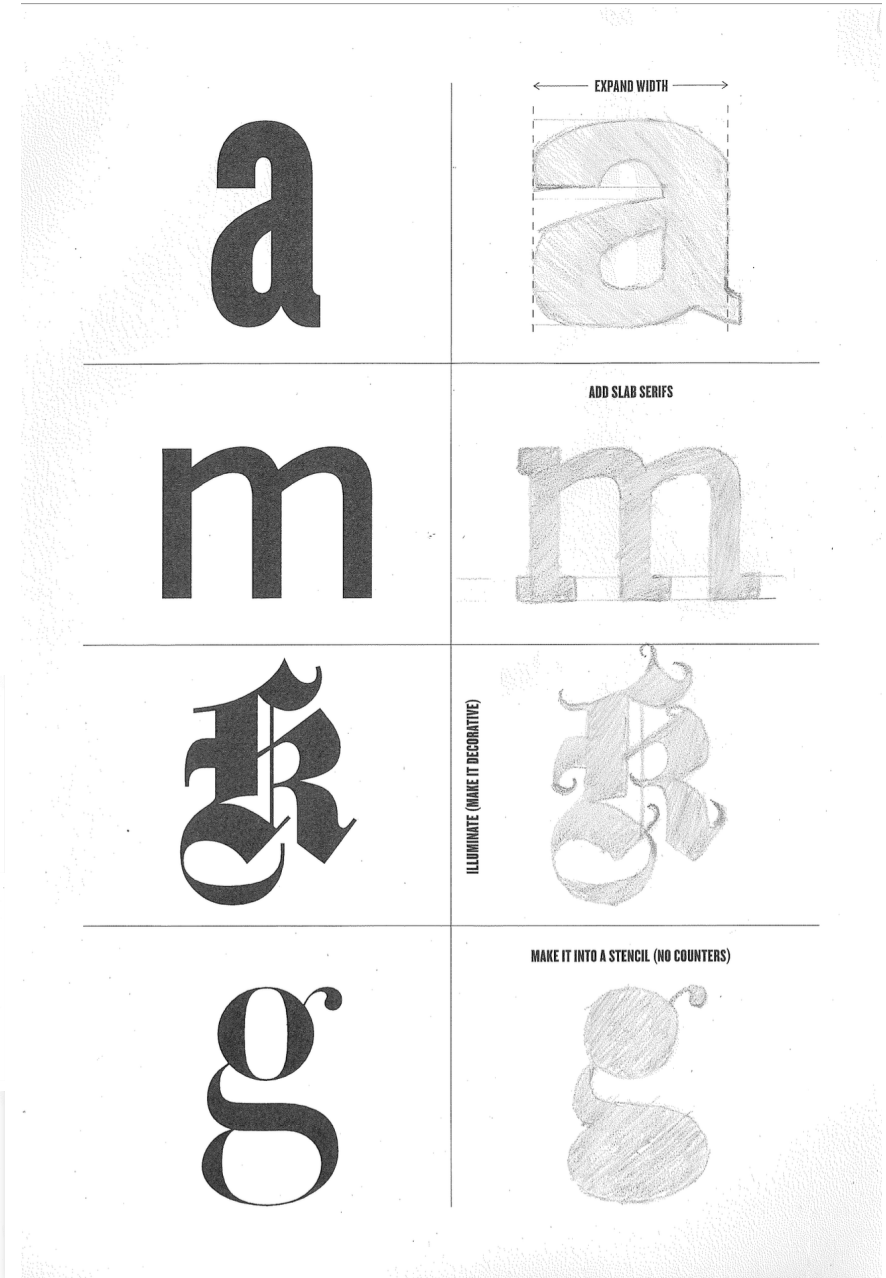
Task 3 - Adjusting type
This helped me to consider how to change different aspects of glyphs whilst maintaining their underlying characteristics and charm. It also gave me a good idea as to which parts of a glyph should be kept true to the original when adding serifs or creating an expanded version.

Task 1

Task 2

Task 3

Bitmap Exercises

The bitmap exercises gave me a good opportunity to develop a consistent design in a typeface, whilst keeping a sense of character and charm. I experimented with a variety of different styles, ranging from a more traditional pixel font, to a more flamboyant serif version. I preferred the look to the latter, so I started to conduct some research on similar styles of fonts that already existed.

I then discovered the collection of bitmap fonts which were included with the original Apple Mac. They matched a similar aesthetic to what I was aiming for. I found this style to be far more practical than some of the more curvy and stylised fonts I had previously experimented with.

My final outcome is a nice mix of practical, but still slightly interesting, and could be easily used as a display font.

Original Apple MacOS font

Pangram Foundry Bitmap Collection

TypeNetwork Bitmap Styles

Typographic Exploration

Task 1 - Typesetting by hand
This was a quick introduction into the process of optically kerning a font, a task which is far more difficult than it first appeared! (Although I think I got quite close)

Task 2 - 27th Letter
The aim of this task was to create a 27th letter to a typeface of our choice. The letter could represent anything we wanted, but should fit in well with the surrounding letters. My group chose to create Skaz, a letter used to help indicate sarcasm. We created it by combining various aspects of the letters in the word sarcasm.

Task 3 - Biscuit Type Identities
In this task we had to link different biscuits to different typefaces. My group used a plain and simple font to represent Rich Teas, but a bitmap font to represent a hobnob, representing the grid like pattern on the chocolate. We chose an outline font to represent the filling within an Oreo, and a more flamboyant font for the Jammy Doger

Jammy Dog'r
Primary Type: Playwrite VN

Chocolate Hobnob
Primary Type: Press Start

Rich Tea
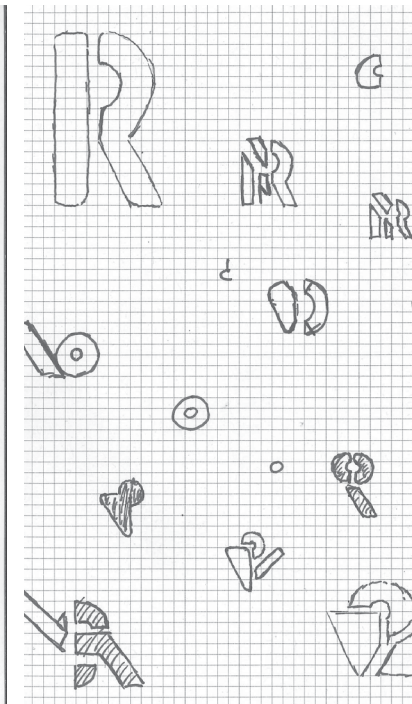Primary Type: AT Name Sans Display

Oreo
Primary Type: Tourney

Task 3

Skaz

Task 1

Task 2

ABCDEFGHIJ KLMNOPQRS TUVWXYZ

Moodboard - Modular Typography

Before creating my own modular typeface ideas, I created a collection of existing fonts from Behance and Dribbble to inspire my work. I love the sans serif style most of these fonts explore, creating a futuristic like idea about them.

Although the fatter, square style fonts don't fit the idea for my typeface as well, I love the use of curves and thick, strong stroke widths to help improve legibility.

I also conducted some more research into more traditional modular fonts, more similar to that created in my panagram task from earlier. Whilst I enjoy the style of them, I struggle to read/scan them due to the strange shapes they're made out of.

The tall fonts I've selected work well to help represent the ambitious goals of the festival. As well as this, they also gave me a good idea to introduce the variable aspect, by letting the user adjust the crossbar height. By making it tall, it creates a large difference between the two ends, making it more noticable.
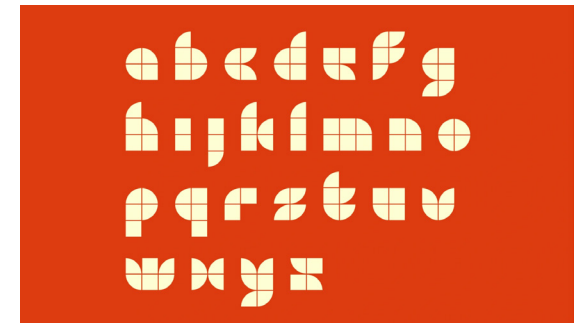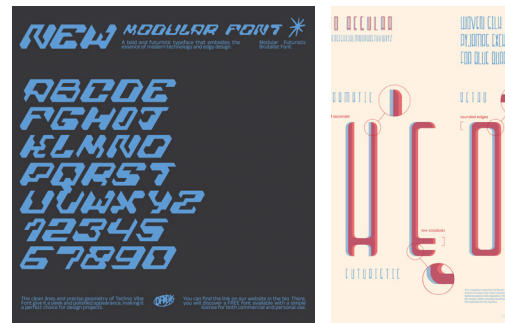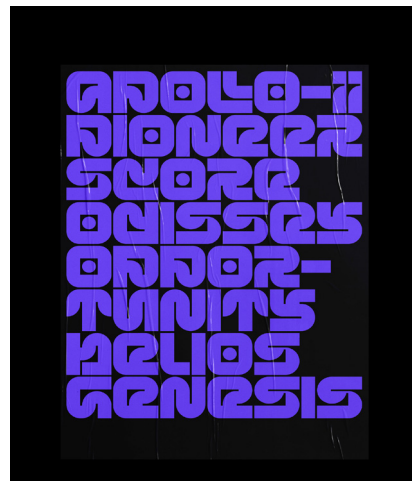
Inspiration images collected from Behance and Dribbble

Research Continued

Birmingham was a key part of industry within Britian, a heritage it is proud of. When conducting some further research into industrial design, I came across Dieter Rams and the style he developed whilst at Braun. The geometric look with consistent curves is something I wanted to mirror in my own font.

Specifically within Braun, Wolfgang Schmittel, a freelance designer who joined in 1952, revised the logo and gave it a reduced, constructively comprehensible form (Singer, 2010). This style was cutting edge at the time, as graphics up until then had often been more ornate and flamboyant. Schmittel's revision fit perfectly within Rams' broader minimalist design philosophy, and it was this particular simplicity that captivated me.
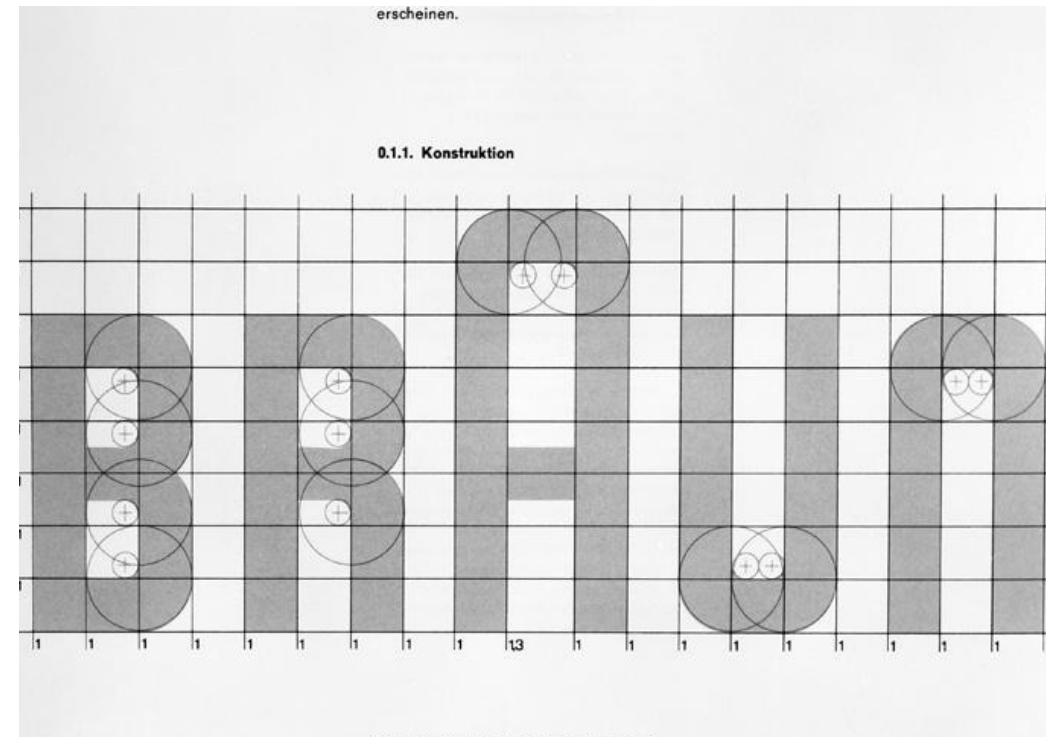
Some other designers who had taken the charge towards this more minimalist style were Max Miedinger and Eduard Hoffmann, the designers of Helvetica. This sans serif style resonated deeply with me, and so became another key foundation of my font.

Braun HiFi Unit by Rams (1960)

A spread from the helvetica book

The Braun logo by Schmittel (1952)

Idea Generation

Idea 1

For this idea I looked at inverting the concept of modules. Instead of combining different shapes to create the letter, I subtracted the shapes from a square. Whilst this gave a nice outcome, I didn't think that it fitted with the theme play very well, nor the ideas I've already presented.
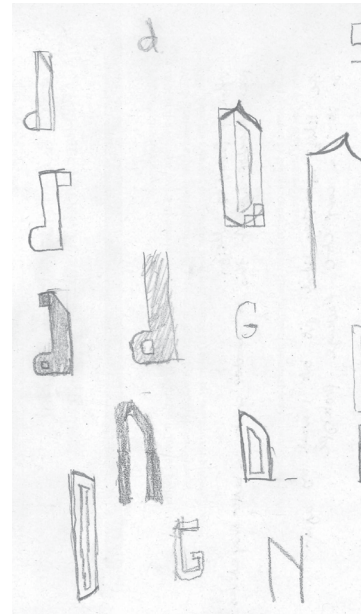
Idea 2

I based this idea around a more traditional modular font. I liked the rough idea, but found - at least with the kerning used in the example - it was quite difficult to read.

Idea 3

I liked this idea a lot. Originally I created the font without the pixels subtracted from it, but after a feedback session, we came to the conclusion that it looked too much like some already existing fonts, and it needed something to help it stand out.
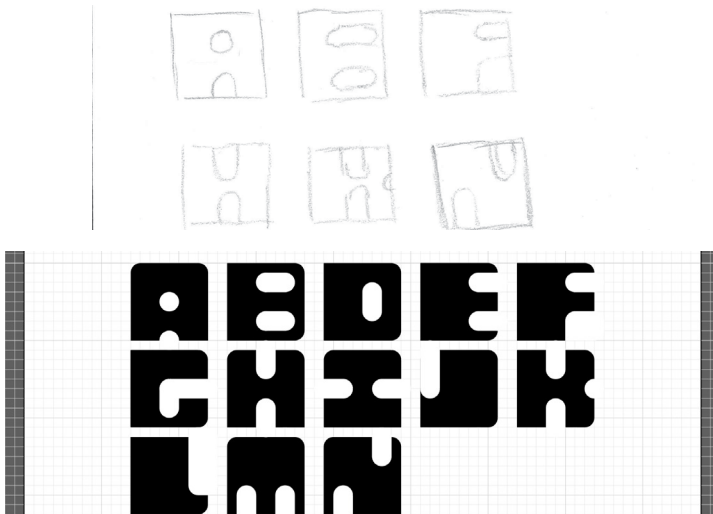
Misc. Ideas

Here I was briefly experimenting with looking at music notes, but quickly discarded the idea for being too literal.
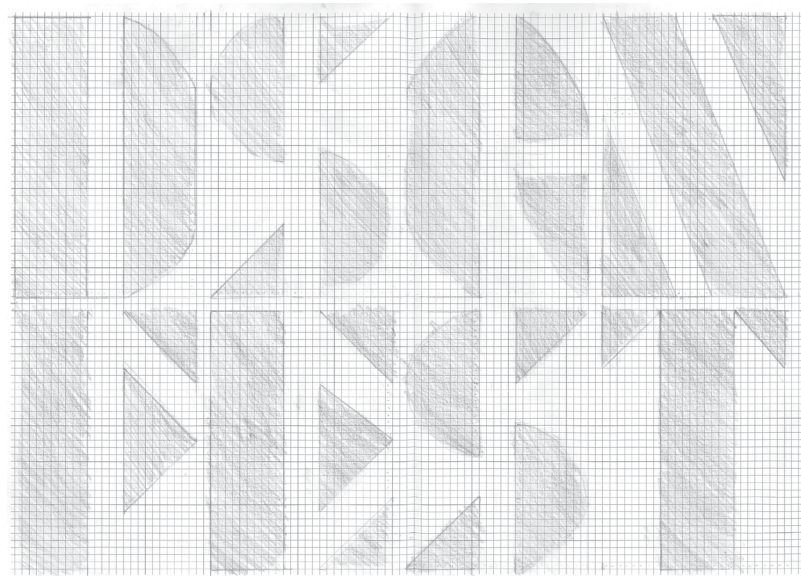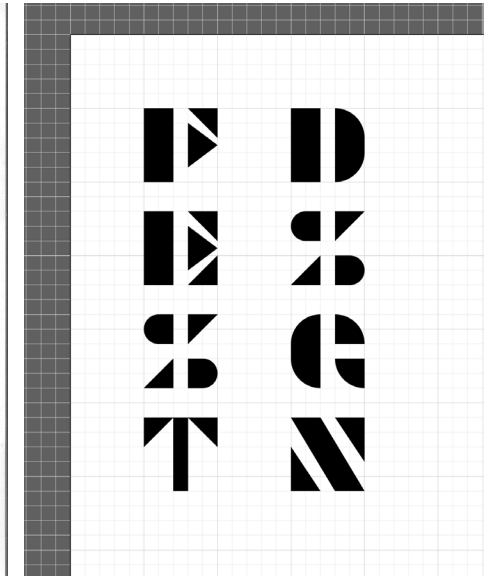

Misc. Ideas
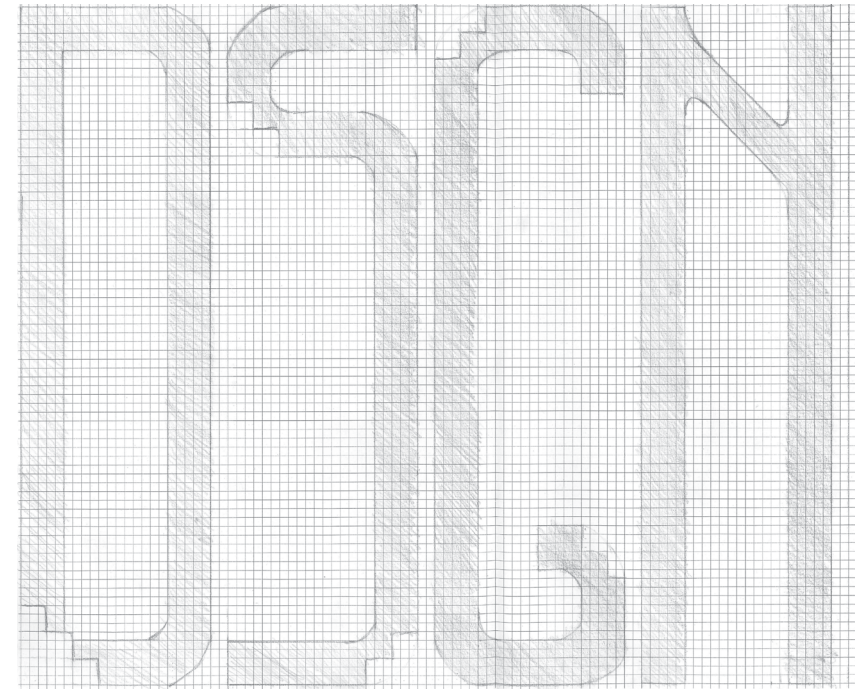
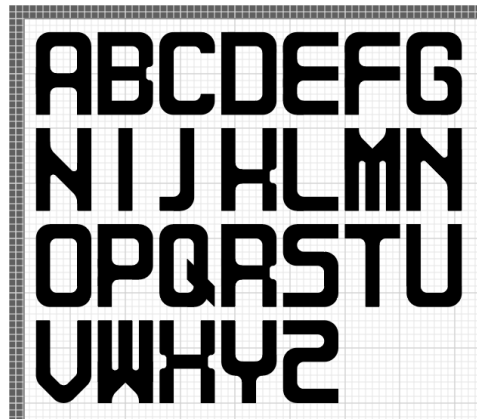
Idea 3

Idea 1

Idea 2

Refinement

My original design in Illustrator

I first started by drawing out the entire base set of glyphs in illustrator to make sure I was happy with them. Upon getting some feedback based off of them, I then made some small changes to the X (difficult to read), the H (looked too much like an N) and the K (having the same issue as the X).


A shorter version I made as an experiment
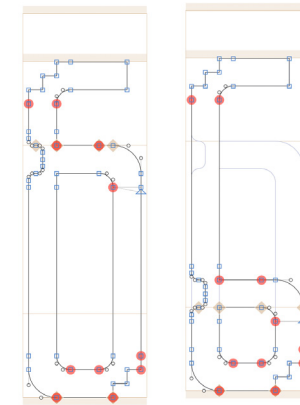
Adding the variants in Glyphs

I also experimented with making a smaller version. My original idea was to create a font which could grow/ shrink depending on the use case, but I soon found out that variable fonts aren't made for verticality.
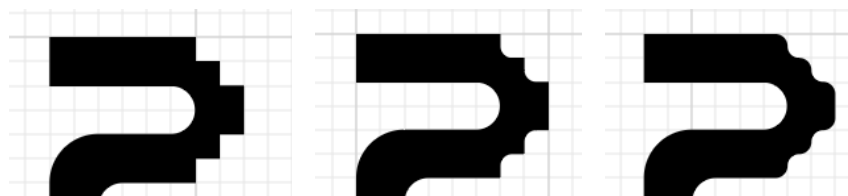
I then created all the pixel cutouts, and experimented with having different border styles on them. I decided to stick to the simple flat style as the curved version only decreased legibility, and you often couldn't even tell they were rounded.
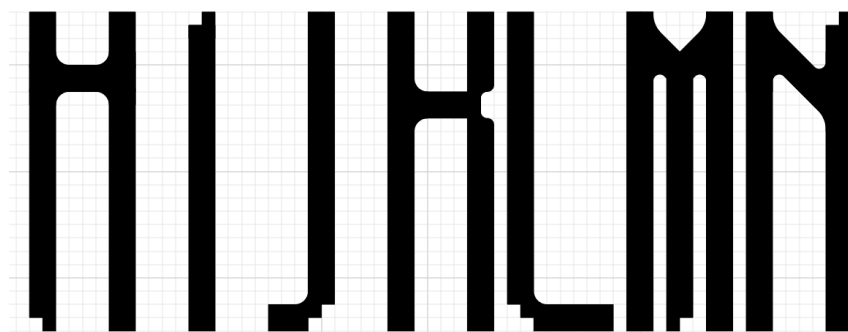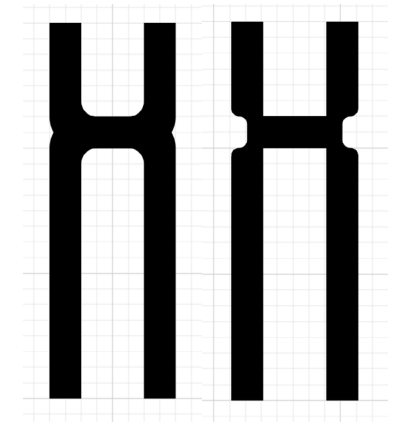

Adding the pixel cutouts

The modules used in my font

Experimenting with adding rounded asepcts

Adjustments to the letter X

Animating my Typeface

To help make my font editable and variable, I first had to turn it into a regular font. Whilst there are lots of options for this, only a handful support variable fonts. I decided to use Glyphs, a MacOS app used to create thousands of professional fonts in various styles.

I then recreated my font within the app. It has an interface similar to illustrator but I still watched various tutorials to help fully understand it (Creating a variable font 2024 and Introducing OpenType Variable Fonts 2018). I then created the alternate version to the glyph with the lower crossbar by creating a new instance based off of the master.
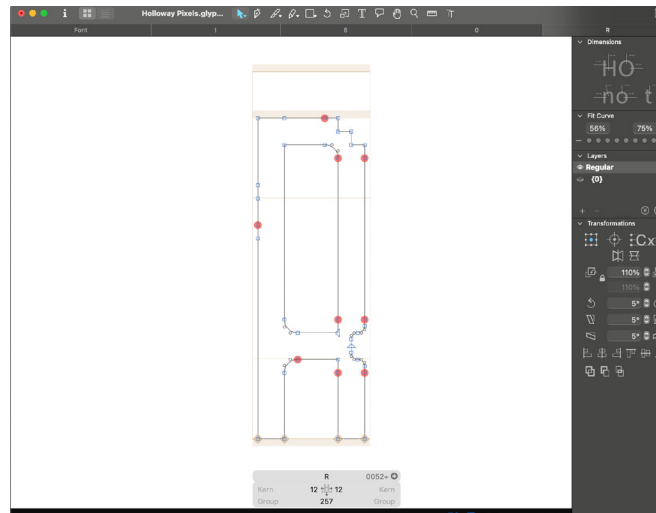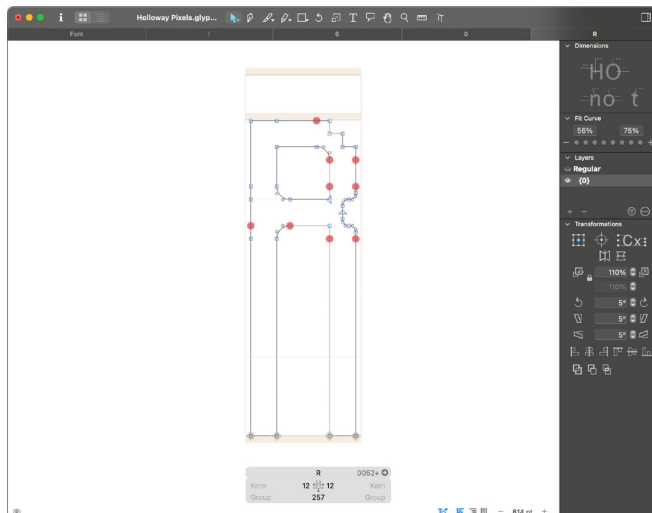
Once I had got the hang of it, I quickly added the rest of the glyphs. By having it be variable I could now edit the crossbar directly within a variety of apps. As well as this new feature, having my typeface be an actual font allowed for far quicker prototyping, as I could now interact with it as I would with every other font.

A screenshot of the program I made the animation in
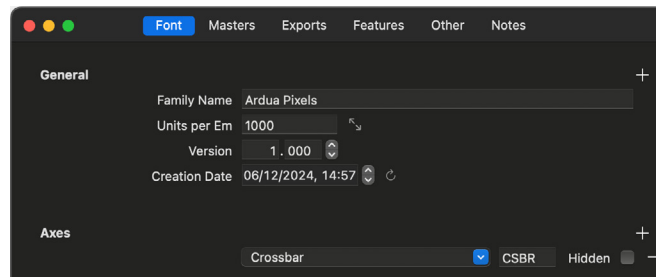
The settings required to make a font variable
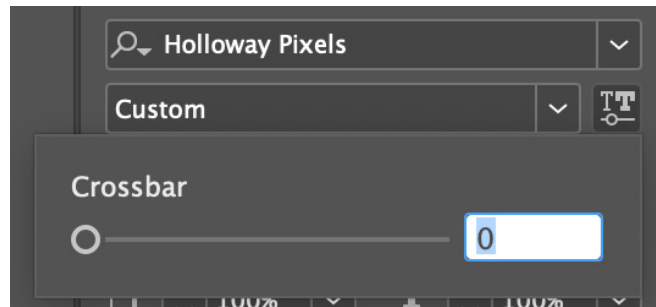
An example of editing a variable font

To help showcase the variable aspects of my font, my tutor suggested to make an animation of the crossbar warping up and down. I originally looked at using Adobe After Effects to do this, but they unfortunately don't support adding key frames for variable fonts without additional plugin support (which the school Macs don't allow to install). Instead, I found a similar program called Cavalry which supports it out of the box.

QR Code in case the video doesn't load

Whilst this is a basic example, it showcases the kind of motion graphics you can easily create with variable fonts, and reminds me of certain iPhone adverts.

Examples of the letter R within the glyphs app

Embedded view of my animated font (may not load in some cases)

Brief 1 Outcome

Here you can see my final type face, which I decided to call Ardua (Large/Tall in Latin - and it also works well to showcase the variability of my font). I've showcased both extremes of my font here, one with the crossbar set to the minimum, and another with it set to the maximum.

Overall, I'm happy with how my typeface came out. I believe it works well to put a creative, playful spin on a minimalist display font. In the future I'd like to flesh out some more punctuation glyphs and add different aspects such as font weight to the variable feature.

The only issue I currently see with the typeface is the I and 1. Apart from these two glyphs, the rest of the font is monospaced. I've found recently that when scanning through text using the font,I often skip over and ignore these two glyphs as they're too narrow, and don't match the others as well.

ARDUA (DISPLAY)

Font Name in typeface

BIRMINGHAM DESIGN FESTIVAL 2825

ABCDE FGHIJK LMNOP QRSTU VWXYZ 12345 67890 !?.,()

Variant 1 (Crossbar High)

ABCDE FGHIJK LMNOP QRSTU VWXYZ 12345 67890 !?.,()

Variant 2 (Crossbar Low)

Type example for BDF

Technical Workshops

Week 1 - Creating basic modular typefaces, looking at using the pathfinder tools to create cool effects and the pen tools to make a basic font.

Week 2 - Using different types of grids, looking at appearance styles, different types of strokes and the offset path tool.

Week 3 - Turning photos into professional looking mock ups by virtually placing them into life-like scenarios, and applying different effects such as displacement to make it look more realistic

Week 4 - Creating different types of magazine spreads in Adobe InDesign.

Week 3 Tasks

Grids

Appearance
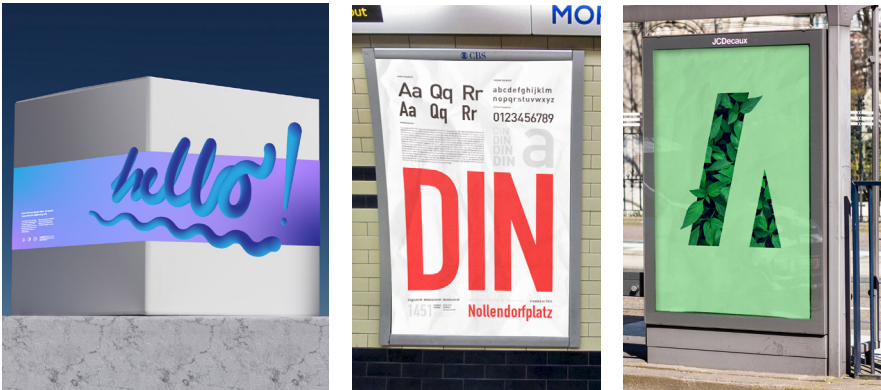
Strokes, Dashes, & Dots

Week 1 Tasks

Week 2 Tasks

Week 4 Tasks

Type Specimen Research

Moodboard

To help make my type specimen, I created a quick moodboard of images to help influence my design. I was particullary drawn to typefaces which feature large glyphs amongst the page, as I found them to help naturally divide the spread in two, giving me room for both my type essay and the showcase of my alphabet.

I was also drawn towards the two column layouts as they help break up text enough to make it easily digestible.

Thumbnail Ideas

I came up with a variety of thumbnail drawings, sketching out a rough layout of my page. I looked at using only certain parts of a glyph to seperate the pages vs the entire letter. I also looked at creating a "breakdown" of my typeface, showing off aspects such as cap height, crossbar and baseline etcetera.

From my previous research, I knew I wanted to lean towards a two column layout so I experimented with different forms of that as well.
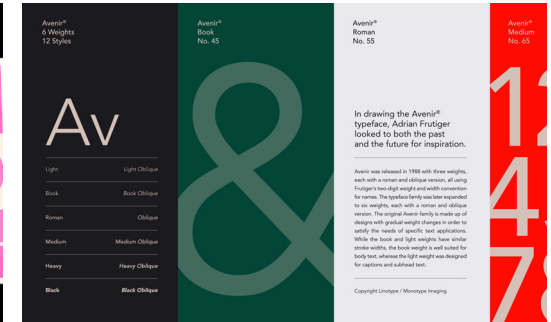
A collection of example type specimens from Behance

Type Spec + Poster Development
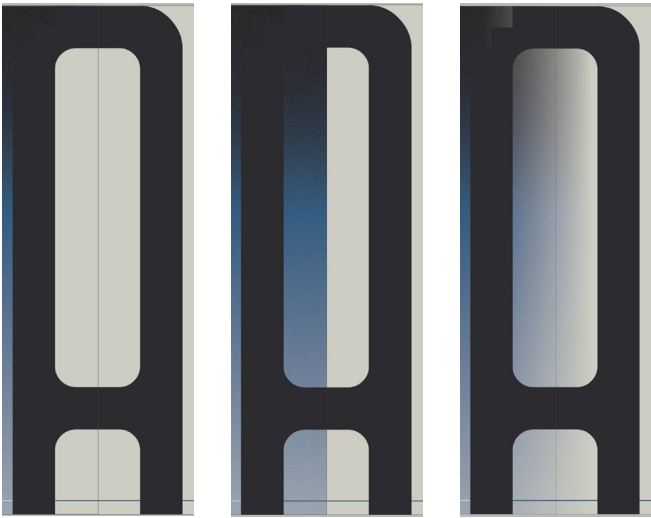
Iterations of the glyph dividing the spread

In the end I used one of my thumbnails from previously as a base. I did change some small things however. One example is moving the showcase of the variable aspect to the other side of the spread due to needing more space for my essay. I also adjusted how the page transitioned from the gradient on one side to the other. Additionally I adjusted my mockup page to help highlight the mockups better.

The front cover of my type spec

The different iterations of my A2 type showcase

Iterations of the right hand page of the spread

Two different versions of my mockup page

Pictured above is my A2 typeface poster. I originally started with a 2 column layout, but found some of the characters difficult to read, and the overall poster to be unbalanced. I instead settled on a centered design instead. I created the background by making a low res dithered gradient and then upscaling it.

Mockup Development

To help fit in with the festival's theme of Play, I looked into colour and its uses, specifically within printing. I came across CMYK testing markers, often used on products to check colour calibration. I really liked the aesthetic, and decided to look into it more. I added similar bounding box markers and a grid background to add some more texture.

I chose to create a simple billboard design which could be used in a variety of locations. I also created a more specialised motion graphic for BDF, which could be used before or after different speeches on the big screen.

A link to a youtube clip of the animated version ([https:// youtu.be/ JPgvp1O3F1c](https://youtu.be/JPgvp1O3F1c))
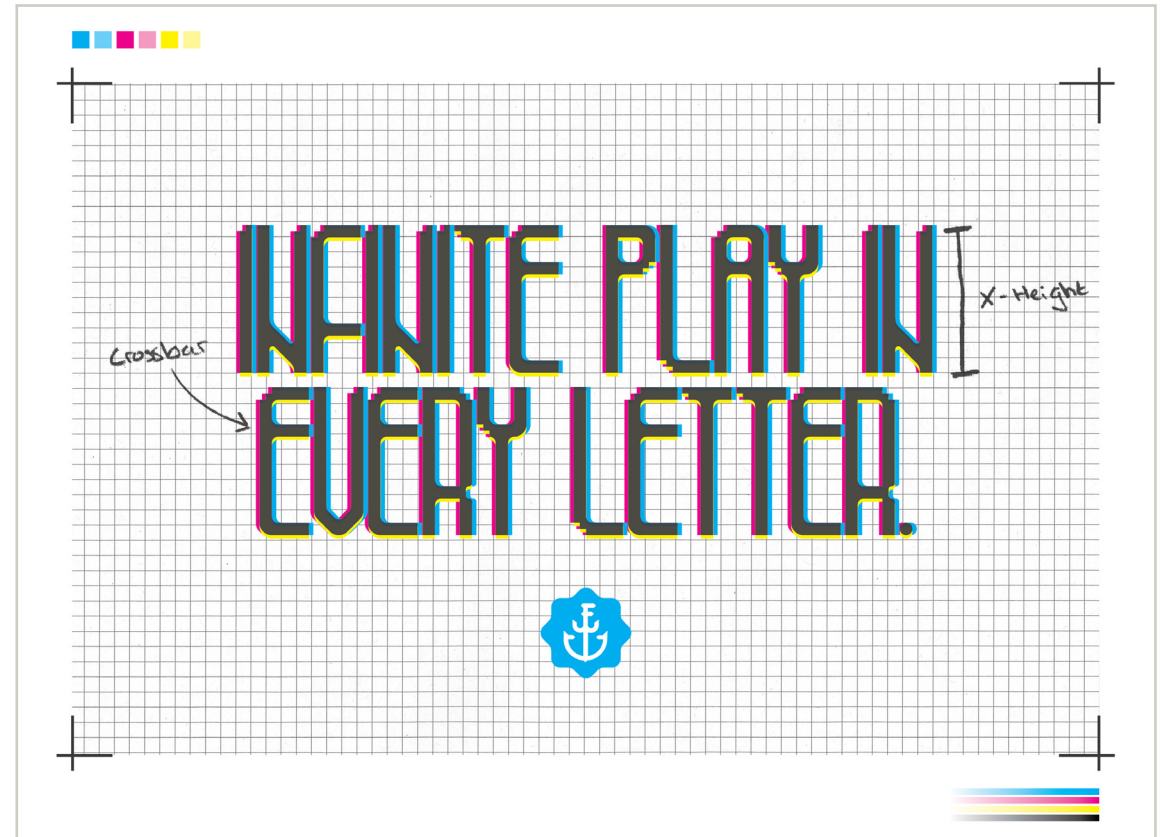
My first design and the in situ visual
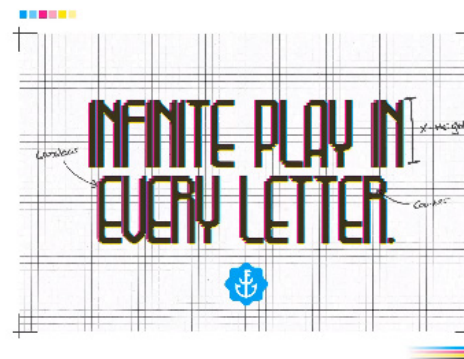
My still screenshot, animated design and the in situ visual

Brief 2 Outcome + Essay

Please note the use of AI to upscale some of these images due to a low resolution mock up being used

The typeface Ardua was developed by Will Baker in response to a brief posed by the 2025 Birmingham Design Festival. The brief was to create a modular display typeface to help promote the festival and its theme of "Play".

Inspiration was drawn from the festival's goal to celebrate the "local, national and international design industry" (BDF, n.d.), and the typeface certainly reflects this ambition with its imposing physical stature.

The font carries a tall cap height in an almost monospaced package, creating a font reminiscent of the Bauhaus movement, but more similar to its sleek predecessor, the style of Braun's design, created by Dieter Rams. This comparison is made even more obvious by comparing the typeface to Braun's logo by Wolfgang Schmittel (1952), both using a similar grid based design with uniform curves. This geometric precision enhances the typeface's legibility, making it particularly suited for display purposes.

Ardua leans into the theme of play by introducing a unique variable crossbar. This allows the designer to play, edit and adjust the typeface to fit into any number of applications. This aspect can turn any one word into hundreds of different variations, reflecting the festivals diverse

line up of speakers from various backgrounds. Furthermore, this dynamic aspect makes it uniquely suited for motion graphics, instigating a spark of life into what otherwise could be an uninspiring design. Additionally, the decorative chunks taken out of it make the typeface instantly distinctive, similar to how the font is intended to encourage others to play, experiment and stand out from the crowd, creating a bold and striking image.

Ardua was developed on a consistent grid and features a fixed visual width (with the exception of the I and 1). This allows for a seamless flow of writing and can be helpful for those with dyslexia. Moreover, its distinct uppercase style suits its role well as a promotional typeface for the Birmingham Design Festival, making it designed to be read in large sizes and to be used as for an impactful title or heading. The heavy weight of the lettering, along the tall cap height and decorative elements, effects its legibility when used in body copy and as such, not recommended for it.

Within the VOX Classification system (1954), Ardua falls under a lineal geometric typeface as it is a sans serif font with a consistent style. The type is contemporary in style to be effective for the nature of the brief.

Reference List

Books
Cheung, V. and Hui, K. (eds)(2015) Print Matters. 1st edn. Hong Kong: victon workshop ltd.

Haslam, A. (2006) Book Design. 1st edn. London: Laurence King Publishing Ltd.

Research
Hudson, J. (2018). Introducing OpenType Variable Fonts. (online) VariableFonts.io. Available at: https://medium.com/variable-fonts/https-medium-com-tiro-introducing-opentype-variable-fonts-12ba6cd2369 (Accessed 15 Jan. 2025).

Singer, J. (2010). Less and More: The Design Ethos of Dieter Rams - Sight Unseen. (online) Sight Unseen. Available at: https://www.sightunseen.com/2010/02/less-and-more-the-design-ethos-of-dieter-rams/ (Accessed 15 Jan. 2025).

Wikipedia Contributors (2019). Vox-ATypI classification. (online) Wikipedia. Available at: https://en.wikipedia.org/wiki/Vox-ATypI_classification. (Accessed 15 Jan. 2025).

Tutorials
Glyphs (2024). Creating a Variable Font | Glyphs. (online) Glyphs. Available at: http://glyphsapp.com/learn/creating-a-variable-font (Accessed 15 Jan. 2025).

Holke79 Motion Design (2024). KTS - Animating Variable Fonts in Cavalry. (online) YouTube. Available at: https://www.youtube.com/watch?v=D7ZtncvWtxU (Accessed 15 Jan. 2025)

Images and Mockups
Birmingham Design Festival (2022). BDF Logo. (Logo) Website. Available at: https://birminghamdesignfestival.org.uk (Accessed 15 Jan. 2025).

Birmingham Design Festival (2024). Photo of Conference Hall. (Photo) Article. Available at: https://paradedesign.co.uk/news/birmingham-design-festival-2024-process (Accessed 15 Jan. 2025).

Mockups Design (2023). Billboard in the Trees Mockup. (Photo) Downloaded. Available at: https://mockups-design.com/billboard-in-the-trees-mockup/ (Accessed 15 Jan. 2025).

Schmittel, W. and Braun (1952). Braun Logo. Website. Available at: https://www.logodesignlove.com/braun-logo (Accessed 17 Jan. 2025).

Fonts
Arrow Type. (n.d.). AT Name Sans (font). Available at: https://www.arrowtype.com/name-sans (Accessed: 15 January 2025).

Colophon Foundry. (2015). Space Mono (font). Available at: https://fonts.google.com/specimen/Space+Mono (Accessed: 15 January 2025).

Will Baker. (2025). Ardua (font).