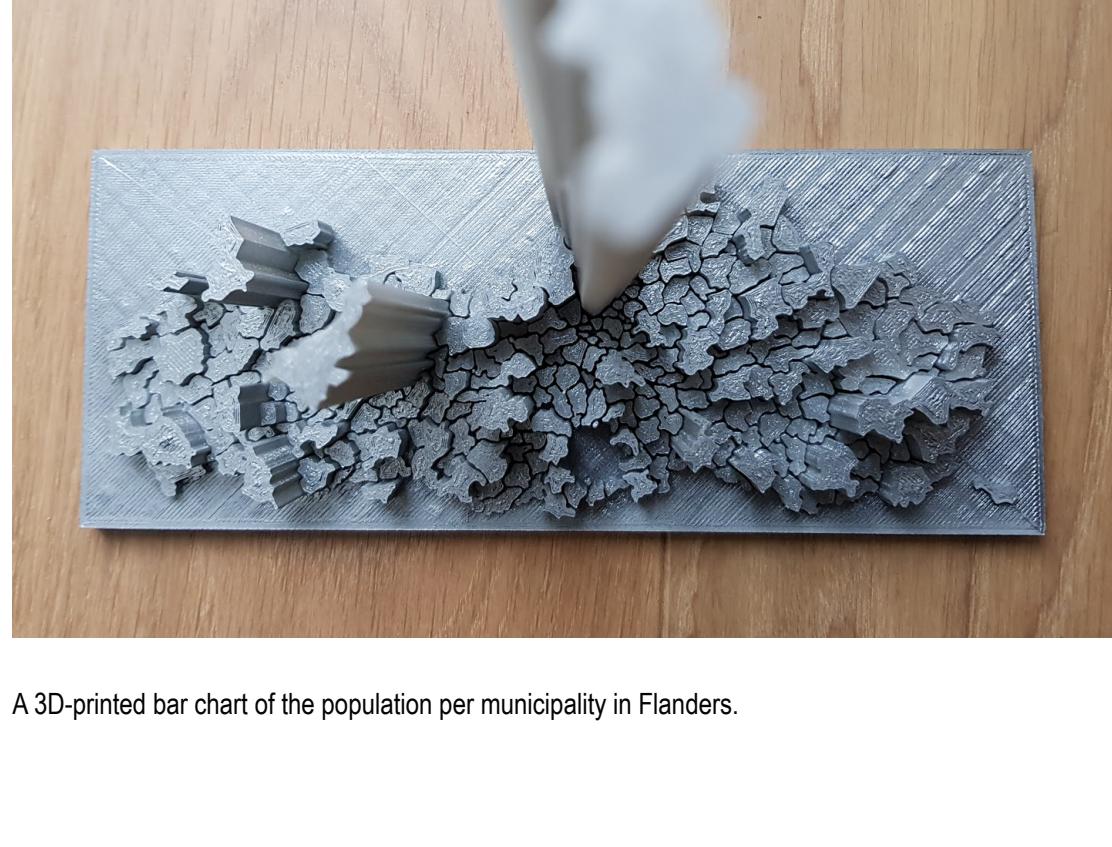


DATA VISUALISATION

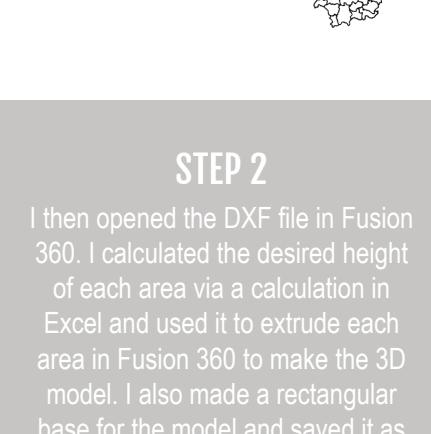
ASSIGNMENT 1: A VISUALISATION OF THE POPULATION PER MUNICIPALITY IN FLANDERS

KELLY TORDEUR



A 3D-printed bar chart of the population per municipality in Flanders.

THE MAKING OF



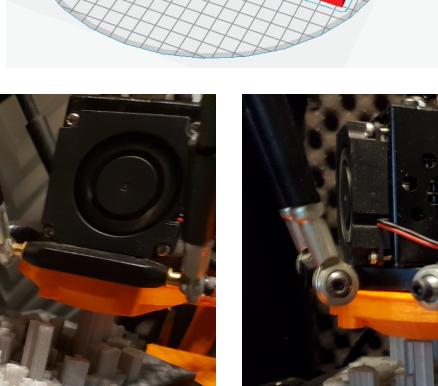
STEP 1

After finding the data and opening it in Excel, I downloaded and opened a map of Belgium in Photoshop and made the lines thicker. This made the spaces between the municipalities bigger and allowed me to image trace the image in Illustrator. After that I saved it as an DXF file.



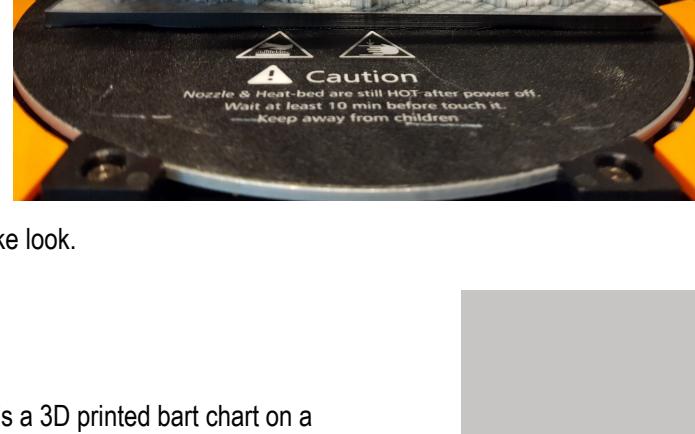
STEP 2

I then opened the DXF file in Fusion 360. I calculated the desired height of each area via a calculation in Excel and used it to extrude each area in Fusion 360 to make the 3D model. I also made a rectangular base for the model and saved it as an STL file.



STEP 3

Finally, I opened the STL file in Cura and adjusted some print settings. I applied extra wall thickness so the higher parts wouldn't have infill and a strong outside shell. I also applied a layer thickness of 0.1 for better quality. I then exported it as a GCODE file to then print it in Octoprint.



After 31 hours of printing, I painted it chrome to give it a city-like look.

GOAL

To make a simple bar chart in a more interesting manner. As it's a 3D printed bar chart on a map, you can pick up Flanders and really look at it from all angles to explore the visualisation of the data.

CHARACTERISTICS

Intend: exploratory

Medium: physical

Other: 3D

Chart: comparison: bar chart. Comparison among items with one variable per item. The items being the municipalities and the variable being the amount of people living there.