**DECLARATION:** I understand that this is an **individual** assessment and that collaboration is not permitted. I have read and I understand the plagiarism provisions in the General Regulations of the University Calendar for the current year, found at <http://www.tcd.ie/calendar>. I understand that by returning this declaration with my work, I am agreeing with the above statement.

# Tools & Technologies Used

The visualization presented here, as can be found at <https://ggn1.github.io/cs7ds4_assignment4/>, was built using ***HTML***, ***CSS***, ***JS*** and ***D3.js*** *(version 7)*. A library for in-browser D3 v7 (<https://cdnjs.cloudflare.com/ajax/libs/d3-legend/2.25.6/d3-legend.min.js>) was used to simplify colour scale legend creation as D3 does not provide legend functions by default. ***Python3*** (pandas, numpy, matplotlib, seaborn, jupyter notebook) was used for data processing and exploratory data analysis.

# Dataset

The data visualized, comprises 32 attributes related to 105 (no. of data points) dog breeds regarding their physicality, behaviour and AKC popularity rankings over the years 2013 to 2020. The visualized dataset is an amalgamation of data from 4 separate datasets obtained from

Dataset/data types.

Attribute types.

Derived attributes.

Why complexity necessitates visualisation.

# Pre-Processing Steps

# Tasks

# Encoding Channels & Idioms

# Novelty

# Strength & Weaknesses

If you are not using Latex or Word, try to heed the following basic format description.

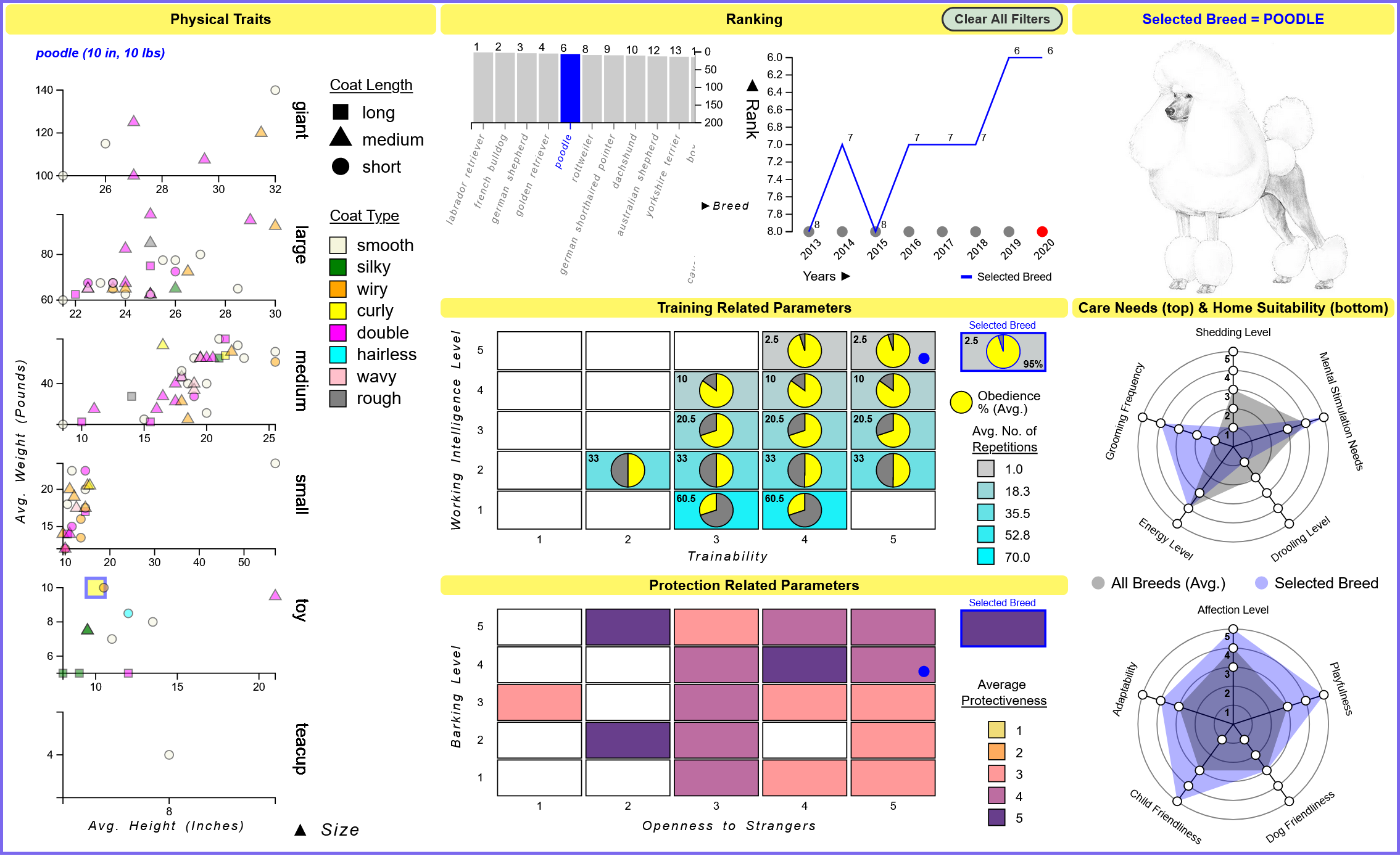
* Text should be 10pt Helvetica and single spaced
* Headings should be between 10pt to 16pt.
* A space of at least 6pt should be left after every paragraph or heading.
* Margins should be 1 inch on all four sides.
* A small header should be included and must contain your Name and Student ID. You should also indicate the module code, module name, year and assignment number.

# Citing third party resources

It is important that You provide a reference to where you got your data. You must also cite any third party sources for elements you have included in your project or report. This includes code-snippets, libraries, tools.

There is no need to cite the lecture notes. Avoid repeatedly (more than once) citing commonly used references in the module such as Munzner’s book unless you are directly quoting something.

A basic example of a bibliography is provided but you may alternatively use BibTex (for latex users), Endnote orany other bibliography manager.



# References