Data Visualisation 2

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GitHub Public URL:  
<https://public.tableau.com/views/Assignment1v2Dashboard/Dashboard1?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link>

Word Count:  
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# Domain

The domain of this HTML infographic visualization focuses on climate change, an issue of paramount importance in today's world. The significance of this domain lies in the impact it has on our planet's environment, ecosystems, and the future of humanity. The target audience for this infographic includes individuals interested in understanding the implications of climate change and its potential consequences. This information is vital for policymakers, environmentalists, educators, and the general public.

# Topic

The data used in this visualization is drawn from various sources, including:

* Global Mean Sea Level Data: The dataset, available at source link, provides information on global mean sea level from 1993 to 2021. It comprises measurements taken throughout the years and is visualized using a point spread.
* World Population Data: To contextualize the impact of overpopulation on climate change, data from source link is included, showing global population trends.
* Power Generation Methods Data: The visualization also includes data related to power generation methods in Australia during 2021-2022, sourced from source link. The pie chart illustrates the composition of power generation methods in this time frame.
* Country Temperature Data: Data showing the change in country temperatures over time is drawn from source link. The dataset compiles measurements from major cities and calculates average temperatures in Celsius across the years.

# My choice of Data

# Why and How

I chose specific visualization idioms to effectively convey the information to the users. The following idioms were selected:

* **Pie Charts**: To represent the proportion of different coffee preferences.
* **Tree map**: To visualize coffee consumption geographically.
* **Line Charts**: To depict trends in coffee prices over time.

These idioms help users easily understand complex data by providing visual clarity. I added interactivity to the price comparison line chart to allow users to select a more relevant date range if they prefer to compare coffee price during their lifetime. Users can hover over data points to see specific statistics and trends, making the data more engaging and informative.

I would have preferred to use an actual map for the visualisation of “Who Drinks the Most Coffee?” but decided not to due to marking restrictions. However, I feel a visual map would have been more appropriate.

# Layout

The layout is structured in a clean and organized manner to enhance readability. I initially considered going after a coffee-shop style layout, with dark brown colours and artistic fonts, but later reconsidered as I found difficulty improving readability and clarity. Data on coffee consumption and pricing is presented in separate sections. I intentionally created a simple poster-like layout to encourage the user to explore at their own pace and not be overwhelmed by a landscape view of every graph. Furthermore, it allows me to fit one graph and paragraph nicely inline, which makes each graph section distinct and visually discrete.

# Colours

Colours were chosen to ensure clarity and consistency throughout the visualization. I used four basic colours in green, blue, brown, and yellow to ensure that data stands out where necessary.

I used green to denote the minimum wage line, as green is generally the colour associated with greed and money. Furthermore, on the same graph I used brown to symbolise the colour of coffee; brown. The colours are distinct enough that the graph is clear, but still have meanings behind their choice. Furthermore, there is no colour blindness that can’t distinguish these colours, so the graph readability is all-inclusive.

I used blue for the colour of the tree map to have a distinction between light and dark values clearly, as the light and dark blues used are noticeably different in contrast.

Finally, I used yellow for the colours of the pie charts as they are generally the colour of happiness and fulfillment, which associates well with the coffee preferences dataset, as it discusses what coffee they prefer and enjoy.

I also formatted the paragraphs that describe the graphs in a way that highlights the colours of the graphs and makes each section more distinct by only containing a black colour and the colours in the graphs, making the graphs themselves the focus.

# Figure Ground

Graphical elements were varied in size and position to create a visual hierarchy. The largest graph, being the tree map was placed in the middle to both not cover the whole viewport when initially viewed but also create a sense of discovery for the rest of the dashboard to not give too much away. Furthermore, I used some minor clip art to make the title and opening lines of the infographic more engaging and clearly demonstrate what the domain would be.

I also used spacing effectively to ensure that emphasis is put on certain features of the infographic, such as centering the interactive date slider to the x-axis of the line chart.

# Typography

A clean and easily readable sans-serif typeface was chosen for text. Headings and labels use a bold font to stand out, while the body text is in a standard weight for clarity. Text layout is consistent, with ample spacing to improve readability, and the same font is used in all paragraphs; Arial.

The title font used is a serif font named Georgia, which is stylistic enough to provide some interest to the viewer more so than a sans serif font could, while remaining readable from any distance.

# Annotations

Annotations are strategically placed to provide context and guide the user through the visualization. The majority of annotations are in the form of legends to ensure the reader can understand an idiom even without needing to read the paragraph associated.

# Bibliography

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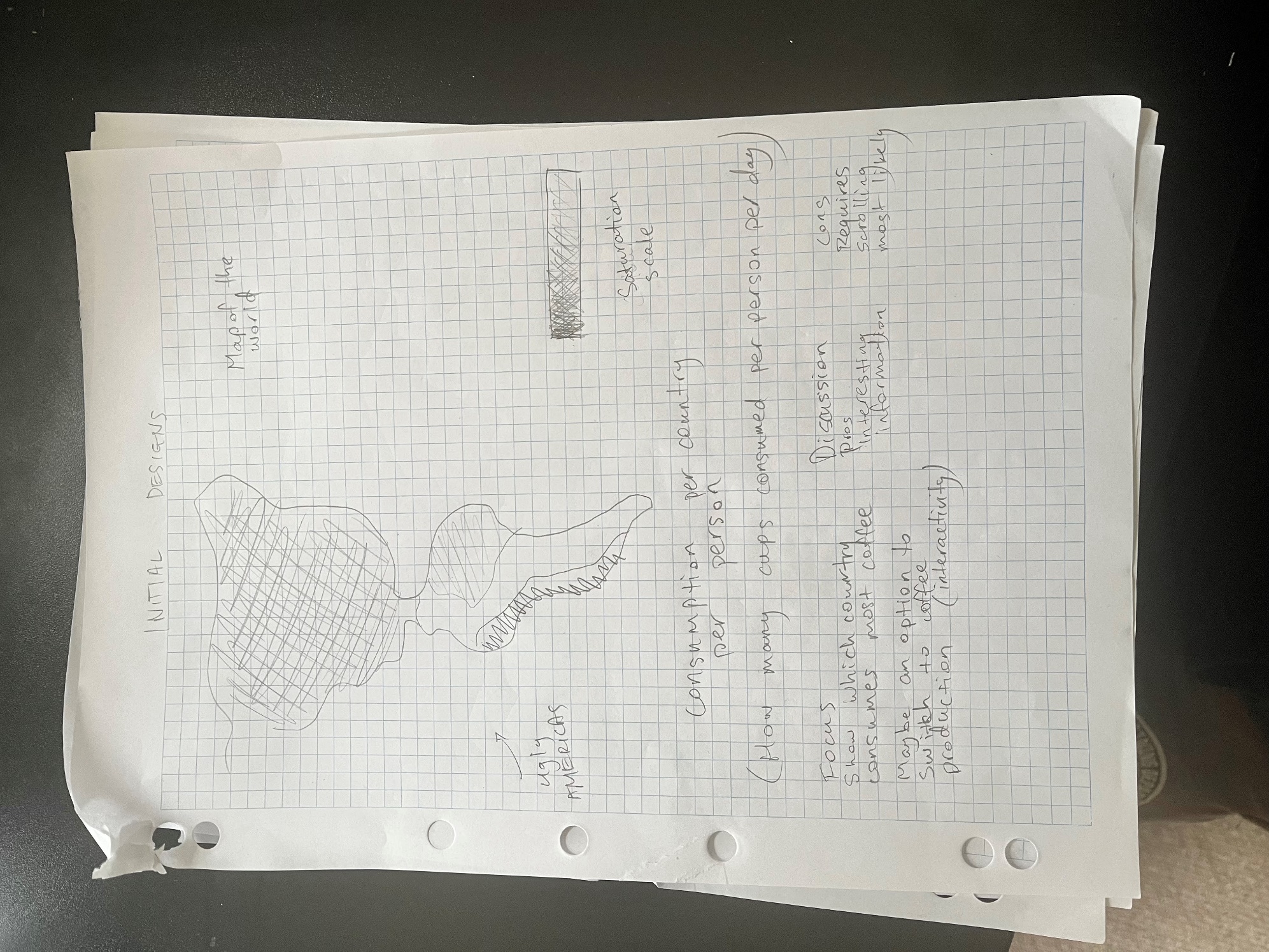
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