

CM50266 Applied Data Science Lab 1

Task 2 Infographic Report

This task has really challenged me to look beyond just the basic data, and try to observe and dig out unique trends and patterns that can convey something important to anyone reading it. For my infographics in Task 2, I have decided to go ahead with the same template for both my monthly and seasonal data. This makes it extremely easy to compare between the monthly and seasonal data, as well as look for common trends and patterns between them.

For the rainfall, I have decided to represent the average rainfall for each month/season using visual icons of various rain clouds. I have used three types of clouds, one for little or no rainfall, one for medium rainfall, and one for extensive or heavy rainfall. The icons are self-explanatory and can easily be comprehended by anyone reading it. In the monthly data, one interesting observation I made was that there was extensive rainfall from June to September, and then a sudden drop in October, then again heavy showers in November. It would be interesting to find out why there is a sudden drop in rainfall in the month of October

For humidity, I decided to plot the maximum, mean and minimum humidity for each month/season. The reason I decided to do this is because a better understanding of the trends in each month could be seen when looking at all three line graphs simultaneously. For example, using these charts, we can observe without much effort that January has a fair distance between the maximum and minimum humidity, whereas August has almost no difference between max and min. I have used dark blue for max and pink for min, to depict the extreme ends of the range, and a lighter blue for the mean, to show that it runs between the two of the extreme points.

For temperature, I have split the Indoor and outdoor data into two bar graphs. Each bar represents one month/season, and each bar ranges from the lowest temperature of that month to the highest temperature. This has been portrayed using multiple colours for certain temperature intervals. Lighter shades have been used for Indoor temperatures, since it ranges only from 14.9°C to 31.1°C. Darker shades have been used for indoor temperatures, since they span over a much wider range of temperatures. Shades of blue have been used for colder temperature ranges, and shades of red have been used for the highest temperatures. Orange and yellow have been used for the ranges in between. The reason for using these colours, and for splitting the data into Indoor and Outdoor, is so that anyone reading it, can quickly understand the range of temperatures for each month/season and draw comparisons between indoor and outdoor temperatures.

For atmospheric pressure, I have used a Donut chart, and the reason I did this was because the pressure was more or less in the same range across months/seasons, and a donut chart helps validate this point in a visual manner. I used shades of blue for the chart, since my overall template has a blue base, and also is soothing to the eye

I have used light blue as the main colour of my infographic, and added various weather icons like clouds, sun, wind, thermometers and a barometer, so that there is a visual indication as well that this is a weather infographic on a whole.