

## **TASK**

## **Data Visualisation II**

Visit our website

## Introduction

### WELCOME TO THE DATA VISUALISATION II TASK!

Now that you have a good understanding of some of the basic data visualisations, it is time to become familiar with more advanced ones.



Remember that with our courses, you're not alone! You can contact your mentor to get support on any aspect of your course.

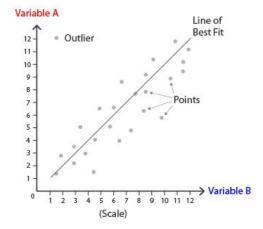
The best way to get help is to login to <u>www.hyperiondev.com/portal</u> to start a chat with your mentor. You can also schedule a call or get support via email.

Your mentor is happy to offer you support that is tailored to your individual career or education needs. Do not hesitate to ask a question or for additional support!

## MORE DATA VISUALISATION TECHNIQUES

Depending on what you want to find from your dataset, you need to choose appropriate visualisations. We have already considered some techniques in the previous task. Here are some more basic visualisation techniques:

• **Scatterplot:** A scatterplot is also known as a scatter graph, x-y plot or point graph. It uses a collection of data points placed on the cartesian coordinates (the x-y axis). Through this visualisation, you are able to identify a trend or relationship between two variables.

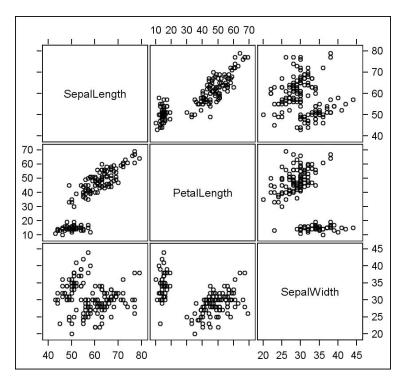


Best used for data that is characterised by:

- Numerical values
- o 2 variables (X, Y)

Not useful for:

- o Categorical data
- o Time series
- **Scatterplot matrix:** Unlike scatterplot visualisations, a scatterplot matrix helps you determine relationships between multiple variables.



Reference: https://blogs.sas.com/content/graphicallyspeaking/2012/10/07/scatter-plot-matrix-with-a-twist/

Best used for data that is characterised by:

- Numerical values
- o Multiple variables

### Not useful for:

- o Time series
- **Double axis chart:** A double axis chart is also known as a dual-axis chart. A double axis chart has two y-axes, thus the graph will have x, y1, y2 axes. It can be both a bar chart with a line graph or multiple lines on a visualisation. Be careful about having a messy visualisation because of the dual-axis.



Reference: https://onlinehelp.tableau.com/current/pro/desktop/en-us/as\_combo\_charts.htm

Best used for data that is:

- Time series
- Discrete
- Continuous



# A note from our coding mentor **Nkosi**

Data visualisation, also known as infographics, can be overwhelming! But there are many resources, as well as information worth consulting. **Here** is a quick catalogue of some of the latest data visualisation techniques.

## **Compulsory Task 1**

## Follow these steps:

• Create a file named **CompulsoryTasks.txt**. Conduct research to find at least 3 different types of visualisations that are not mentioned in this task and the previous one, and describe each of them. For the 3 visualisations that you have found, explain what type of data or information each visualisation is good for and why.

E.g:

Visualisation A name

Good for discrete data types because...

## **Compulsory Task 2**

## Follow these steps:

- Inside this Task folder, find three data visualisation images (Visualisation A, Visualisation B and Visualisation C).
- In the same text file you created for the first compulsory task, provide the heading "Compulsory task 2" and explain:
  - Three improvements made on each of the visualisations and why
  - o For example:

### Visualisation A

- Make the font size bigger because...
- Second recommendation
- Third recommendation

#### Visualisation B

- Change the colour of... because...
- Second recommendation
- Third recommendation

## Completed the task(s)?

Ask your mentor to review your work!

**Review work** 



HyperionDev strives to provide internationally-excellent course content that helps you achieve your learning outcomes.

Think that the content of this task, or this course as a whole, can be improved? Do you think we've done a good job?

**<u>Click here</u>** to share your thoughts anonymously.