DATA VISUALISATION 2

FIT3179

Name: Tan Per Hoong  
Student ID: 29940893   
Tutorial Group: 5  
Tutor: Dr Grace Ting

[[Visualisation URL](https://ptan0021.github.io/FIT3179-Assignment_2/)]

# 1.0 Introduction

For this assignment, I have chosen tuberculosis (TB) datasets as the domain to visualise the infection rate and the treatment effectiveness of tuberculosis for different countries over the years.

# 2.0 Rationale

## 2.1 What

The datasets used for the visualisations in this assignment are from the Global Health Observatory (World Health Organization, 2021). The relevant dataset attributes that I have used for my visualisation are as follows:

1. Continent ( categorical attribute)
2. Country (categorical attribute)
3. Year (ordinal attribute)
4. TB incidence per 100,000 population (quantitative)
5. TB treatment coverage (%) (quantitative attribute)
6. Total death cases per 100,000 population (quantitative attribute)

## 2.2 Why and How

In my data visualisation (Figure 1.0), I have chosen to use dashboard with infographic layout so that information that can be conveyed under one page as well as readers can have an easier time trying to understand and learn without clustering the visualisation with data.

A picture containing website

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[Figure 1.0]

The table idioms that used in this dashboard are the following:

1. Choropleth map
2. Line chart
3. Bar chart

Different visual channels applied:

1. Colour lamination
2. Spatial
3. Length
4. Position

## 2.3 Design principles applied

* Layout
  1. Viewing path from top to bottom for both dashboard and tooltip
  2. Clear sight lines where the text is aligned along the border of the visualization.
  3. Proximity gestalt principle is used to provide enough white space to differentiate between different components in the dashboard.
* Typography

1. Consistent combinations of typeface and font size used to define title, subtitle, text, diagram, as well as the tooltips for the map and the diagram.
2. Only one typeface is used, Arial for sans serif.
3. Varying font weights used to emphasize keywords in texts.

* Colour

1. Data visualisation uses a fixed colour palette with only 4 colours (Color Hunt, 2016).
2. Map uses a sequential colour scheme to better represent increasing quantitative value.
3. Applied figure-ground principle by using desaturated colours for the dashboard background.

* Storytelling

1. Anointed chart genre is used for this dashboard
2. Partitioned poster genre is used for this dashboard

# 3.0 Reference

1. World Health Organization. (2021). *Cases and deaths.* Retrieved from  
   <https://www.who.int/data/gho/data/themes/topics/topic-details/GHO/cases-and-deaths>
2. *Color Hunt*. (2016). Retrieved from  
   <https://colorhunt.co/palette/08d9d6252a34ff2e63eaeaea>
3. Di. (2020). *Donut Chart in Vega-Lite.* Retrieved from  
   <https://observablehq.com/@didoesdigital/18-may-2020-donut-chart-in-vega-lite>

## 4.0 Appendix

Diagram

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Diagram

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Diagram, engineering drawing

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Diagram

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