Student Name: Foo Kai Yan
Student ID: 33085625
Student Email: kfoo0012@student.monash.edu

_____

Domain

Daily-frequency ridership data for various public transport services across the country Malaysia.

Why

As a Malaysian citizen that frequently uses public transport services, I have always been curious on how the commuter behaviour is in Malaysia. By visualising the daily-frequency ridership data for various public transport services across the country Malaysia, I may have the opportunity to gain an understanding on commuter behaviour patterns by knowing which public transport routes are more popular and when in the time of the day do commuters travel the most. I also believe that the visualisation of dataset will benefit Malaysian public transport providers as with the visualisation, the Malaysian public transport providers can identify the overcrowded and underutilised routes and with this information, Malaysian public transport providers can adjust public transport schedules and reallocate resources accordingly which can lead to better efficiency and better user experience. Other than that, Malaysian public transport providers can also expand their services to areas with consistent high ridership to help with the overcrowded stations.

Datasets

https://data.gov.my/data-catalogue/ridership_headline

Design Ideas

Each individual type of public transport will be represented by a different colour hue line in a line chart over time to observe any trends in commuter behaviour, seasonal variation or any significant changes. The bar chart can also be used to compare which public transport ride is more popular or frequently used by the public in Malaysia. Stacked area charts can be also used to understand which public transport ride contributes most to the overall public transport services in Malaysia. Last but not least, network graphs can be used to visualise the public transport route connections where nodes represent stations or stops while the edges represent the public transport routes. The network graph allows the identification of well-connected routes and areas as well as the densely and sparsely populated areas.