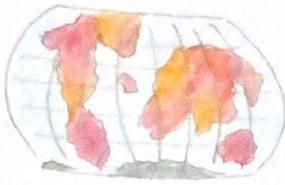
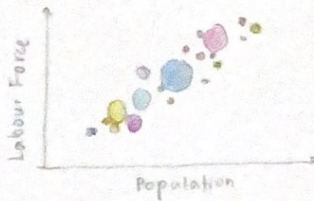


IDEAS

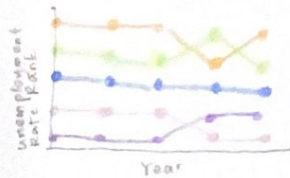
① Global Labour Force Trends



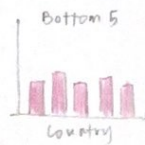
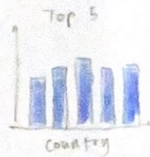
② Labour Force Participation Rate



③ Unemployment Rate (% of Total Labour Force)



④ Top 5 and Bottom 5 Labour Force Participation Rate Countries



Title: Global Labour Force

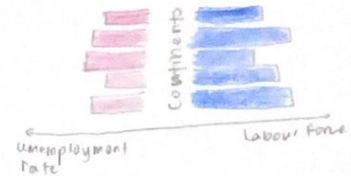
Author: Yap Qian Ting

Date: 7/10/2024

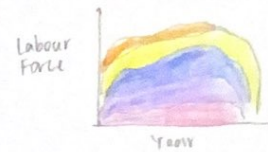
Sheet: 1

Task: FIT3179 Data Visualisation II

⑤ Labour Force vs Unemployment Rate



⑥ Labour Force Growth by Continent



FILTER

① Global Labour Force Trends

↳ Choropleth map

② Labour Force Participation Rate

↳ Stacked bar chart

③ Unemployment Rate

↳ Bump chart

④ Labour Force Growth by Continent

↳ Stacked area chart

CATEGORISE

Global Labour Force Trends

↓

Labour Force Participation Rate

↓

Labour Force Growth by Continent

↓

Unemployment Rate

COMBINE & REFINES

Labour Force Growth by Continent

↳ The stacked area chart can be separated into facets to have a better view of comparison.

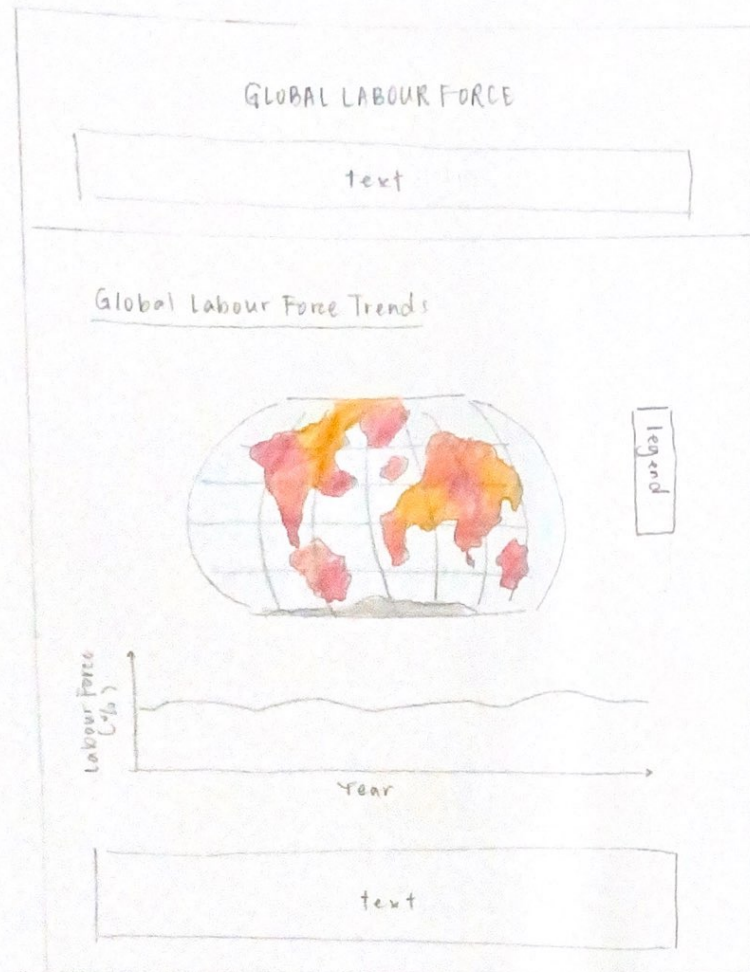
↳ Can be combined with stacked bar chart or bump chart for analysis.

QUESTIONS

↳ Is the implementation of the visualisations doable using Vega lite library?

↳ Is the variety of the visualisations clear enough to perform a thorough analysis on labour force?

LAYOUT



Title: Global Labour Force

Author: Yop Qian Ting

Date: 7/10/2024

Sheet: 2

Task: FIT3179 Data Visualization II

OPERATION

Choropleth map:

- ↳ Highlight the country region when user click on it.



- ↳ Show tooltip about the information of the country when user hover over a country

Line chart:

- ↳ Act as a time brush to filter the data for the choropleth map by year

FOCUS

Choropleth map:

- ↳ The colour intensity will show the labour force participation rate of each country

Line chart:

- ↳ A time brush to filter the data of the map by year.
- ↳ Shows the overall world labour force participation rate.

DISCUSSION

Advantages:

- ↳ Labour force trends over year can be seen using time brush filter
- ↳ values can be told easily by the colour scales from lighter to darker colour indicating lower values to higher values

Disadvantages:

- ↳ Countries nearby that have similar range values will have same colour.

LAYOUT



FOCUS

Stacked bar chart:

- ↳ use different colour for the regions/continents so that the difference between regions/continents across the year can be seen directly

Multiple area chart:

- ↳ Labour force sizes of each region/continent is clear and direct to compare with consistent colour usage from the stacked bar chart

Title: Global Labour force

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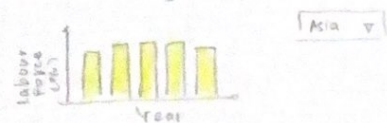
Sheet: 3

Task: FIT3179 Data Visualization II

OPERATION

Stacked bar chart:

- ↳ Filter can be used to filter a particular region/continent to see only that particular region/continent data trends over the years



- ↳ Tooltip can be seen when user hover over the bars

Multiple area charts:

- ↳ Tooltip can be seen when user hover over the area

DISCUSSION

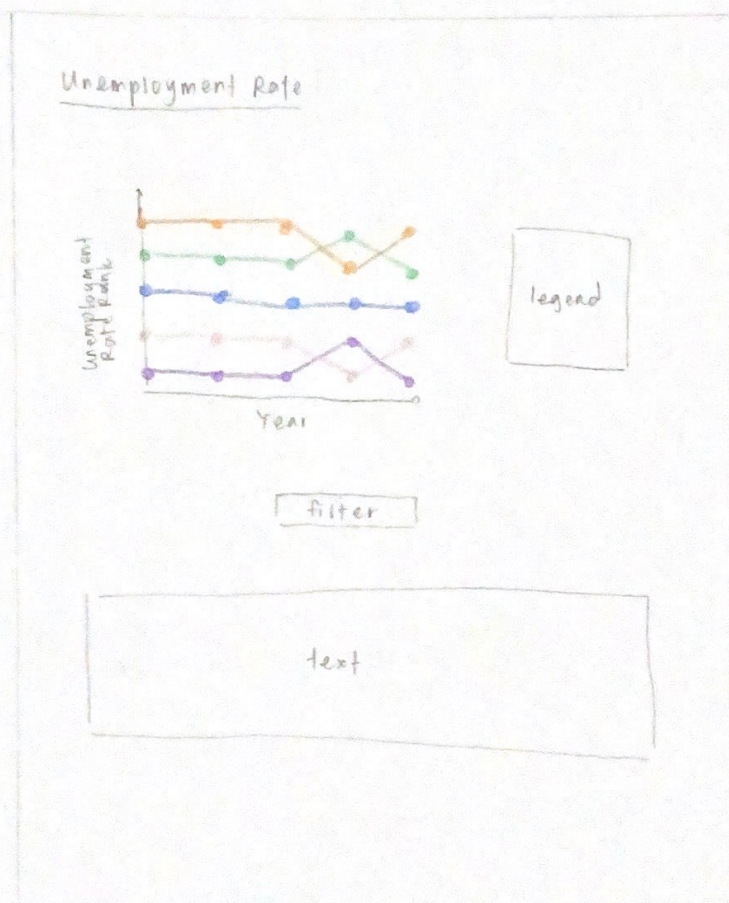
Advantages

- ↳ Easy comparison of the labour force participation rate across different years
- ↳ Clear colour usage makes it user friendly when using filter.

Disadvantages:

- ↳ Both charts might look too alike and might make them redundant

LAYOUT



Title:

Author:

Date:

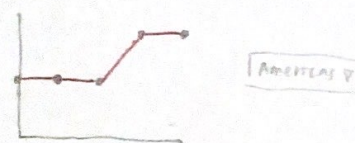
Sheet:

Task:

OPERATION

Bump chart

- ↳ Filter can be used to filter a particular region/continent to see its rank throughout the years.



- ↳ Tooltip can be shown when user hovers over a data point.

FOCUS

Bump chart

- ↳ The ranking of each region/continent can be clearly seen from the chart with different colours representing each continent.

DETAIL

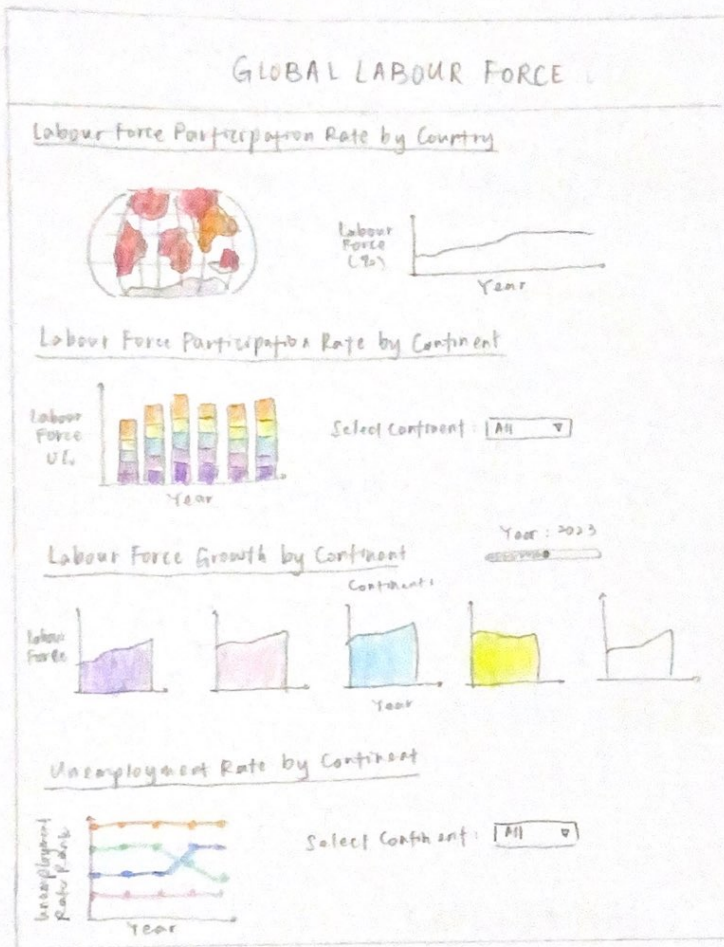
Advantages:

- ↳ Easy comparison of the unemployment rate shift across the years.
- ↳ Filter is also used if want to focus on a particular region/continent.

Disadvantages:

- ↳ Only one chart, might be too plain.

LAYOUT



Title: Global Labour Force

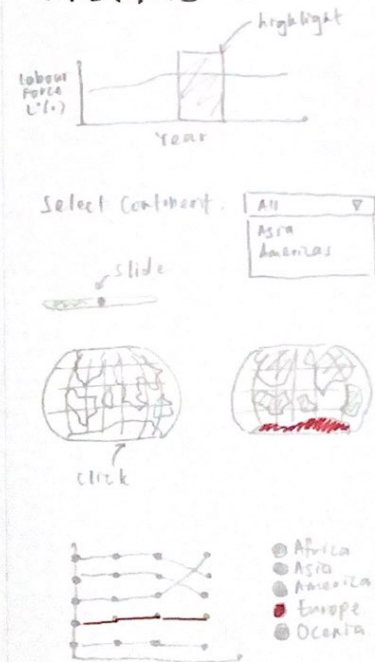
Author: Yap Siang Ting

Date: 7/10/2024

Sheet: 5

Task: FIT3179 Data Visualisation II

OPERATION



FOCUS

Labour Force Participation Rate by Country

- ↳ The data of each year can be viewed by using time brush (line chart) to filter the year.
- ↳ The area of a country can be viewed/highlighted by clicking on the particular country on the map.

Labour Force Participation Rate by Continent

- ↳ The data of each continent can be viewed by selecting the interested continent from the Selection menu filter.

Labour Force Growth by Continent

- ↳ Use the slider filter to selectively view a particular year data.

Unemployment Rate by Country

- ↳ The ranking of each continent can be viewed by selecting the interested continent from the selection menu filter.

DETAIL

- ↳ Data manipulation is required like normalization of data for choropleth map.

- ↳ Vegalite library will be used for the visualization.

- ↳ Pure css will be used for the layout of the html.