Covid19 Map

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Dataset

https://opendata.ecdc.europa.eu/covid19/casedistribution/csv

The downloaded dataset don't have .csv ext but don't worry, read_csv can process it.

Current dataset:

2020 week 1 - 2020 week 52(according to the dataset)

Library Used

- ggplot2
    - To plot the graph
- dplyr
    - provide basic function for data manipulation
- scales
    - For scaling the number for plotting
- maps
    - To get the world map
- animation
    - To compile multiple plot into GIF file.

Work distribution

潘建琿(0716103):
- Search and Find dataset
- Search and Find library
- Plotting the graph
- Animate the graph

洪德輝(0716106):
- Search and Find Dataset
- Check dataset
- Match Corona dataset with World Map Countries data

郭志龍(0716336):
- Filter data used
- Search and Find Library
- Plotting the graph
- Animate the graph

Work explanation

- Find a good Covid-19 dataset
- Find libraries to do plotting and animation
- Check and Match dataset
- Filter Dataset to do plotting
- Plot each week Graph
- Put each week graph plotting into list
- Animate the plotting list using "animation" library

Problem encounter

1. Matching the country name

   World map country name is different with our dataset country name

   Solution: manually check the country name with NA weekly cases

2. Plotting world map have some blank part due to the join of corona dataset and world map data.

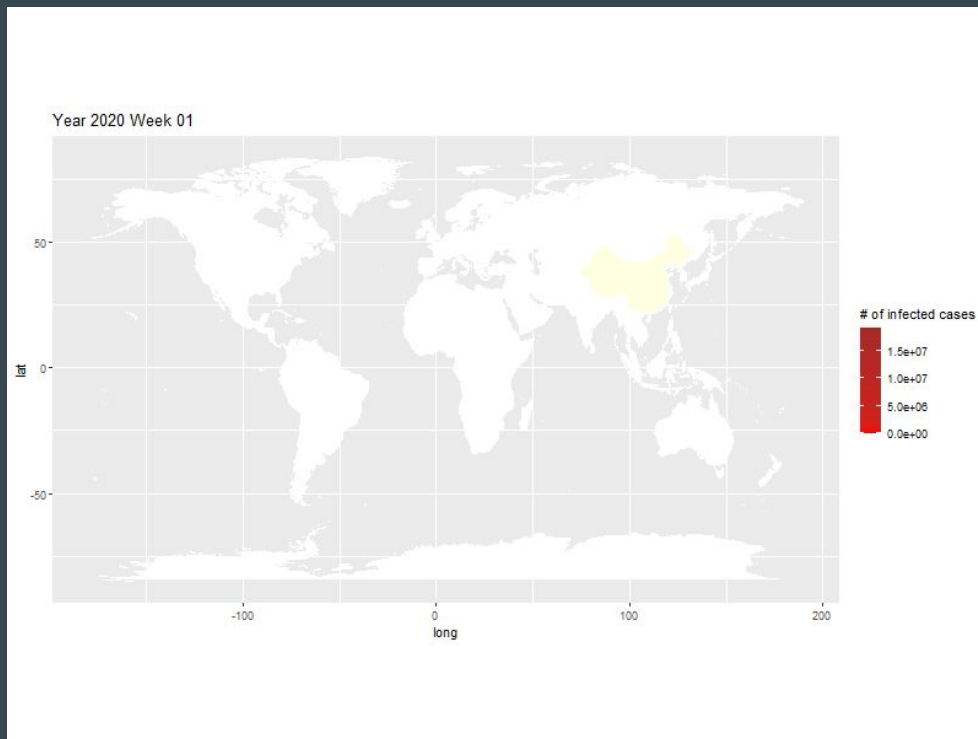   Solution: plot the corona infected distribution on top of the world map plot.

Problem encounter (Cont.)

3. Choosing the suitable color for the map
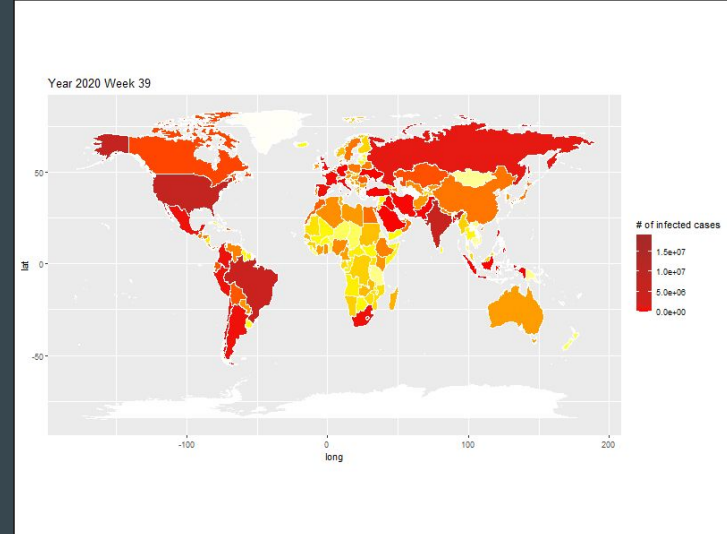
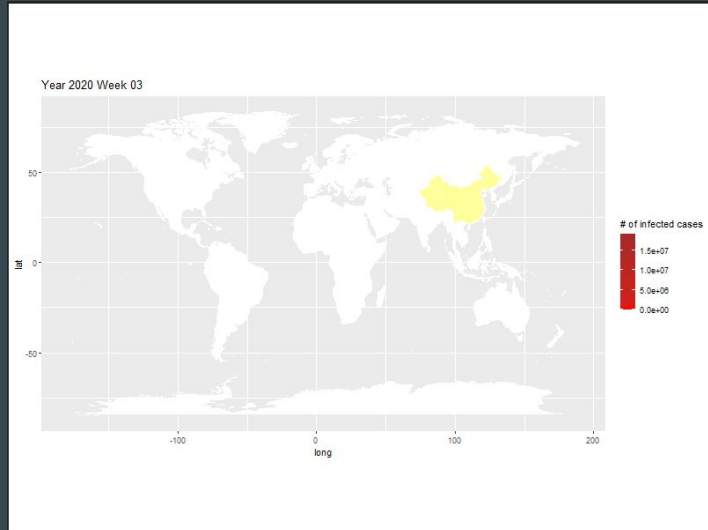   Solution: white → yellow → red → brown

Code Demonstrations

The result(.gif) is attached on the submitted files

Result Analysis

- Using the animation plotting we can see the growing case of COVID-19

- Based on the animation it can be seen the Virus is highly infectious and the number of infected growing rapidly.

Thank You