Assignment 2 Data Visualization

Please ensure that the final submission adheres to the following guidelines:

1. **File Format**: The submission should be in the form of a Tableau Workbook (twb not twbx, one can save the workbook as a twb file by selecting 'File' -> 'Export As' -> 'Tableau Workbook').
2. **File Name**: The file should be named as `Assignment2_Student_ID_Name.twb` .
3. **Content**: The workbook should contain the following sections:
   - **Sheet 1**: Number of Circuits in Each Country
   - **Sheet 2**: Detailed Information of Circuits
   - **Sheet 3**: Average Circuit Altitude
   - **Dashboard**: The workbook should contain a dashboard that combines the three sheets.

Dataset:

In the Week 6 folder on Canvas, you will find a dataset titled 'circuits.csv'. This file comprises detailed information about the circuits used in the Formula 1 racing series. The dataset contains the following columns:

Task and Expected Output:

The task is to visualize the data in the dataset. Using the tableau and the skills learned in the class, one should create a dashboard as follows:

Number of Circuits in Each Country

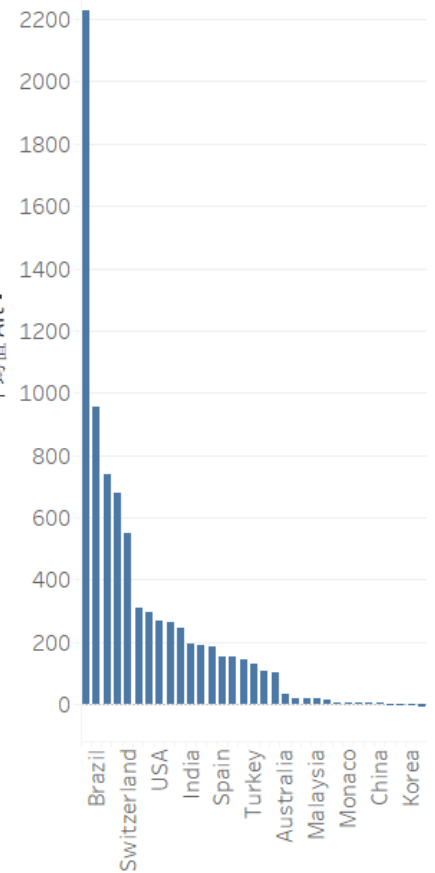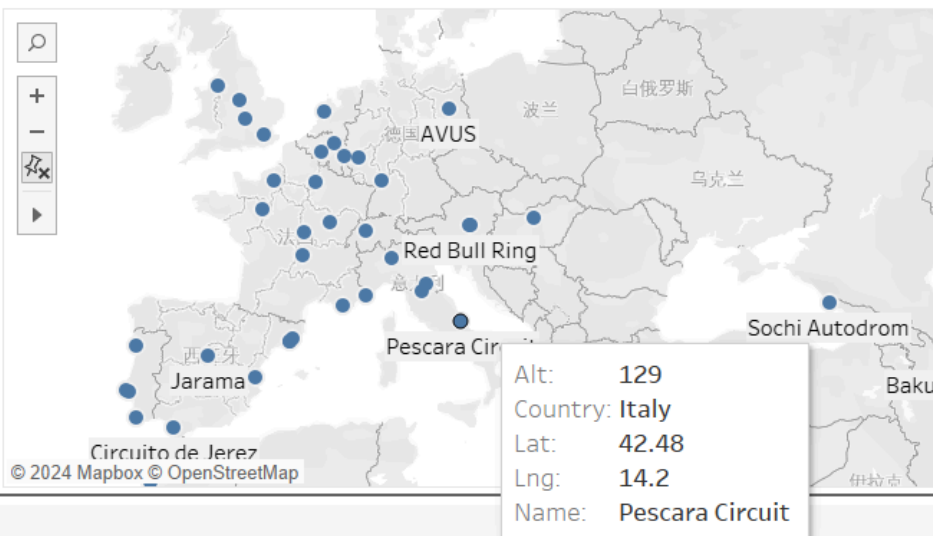© 2024 Mapbox © OpenStreetMap

Number of circuits

1 ▢ 11

Average Circuit Altitude

Country

Detailed Information of Circuits

AVUS

白俄罗斯 波兰

德国AVUS

乌克兰

Red Bull Ring

Pescara Cir

Sochi Autodrom

Jarama

Baku

Circuito de Jerez

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伊拉克

Alt:	129
Country:	Italy
Lat:	42.48
Lng:	14.2
Name:	Pescara Circuit

Hints:

1. **Sheet 1**: Number of Circuits in Each Country
   - Use the `Country` field to create a geographical map.
   - Use the `Circuit ID` field to count the number of circuits in each country.
   - Use the `Circuit ID` field to color the map based on the number of circuits in each country.
2. **Sheet 2**: Detailed Information of Circuits
   - Change the data type of latitude and longitude to `geographical role`.
   - Use latitude and longitude to create a map by placing them on the `rows` and `columns` shelves, and right clicking on the `latitude` and `longitude` fields to change their aggregation to `dimension`.
   - Use the `name` field to display the name of the circuit.
   - Add the `country` field to the `Detail` shelf to display the country name.
   - Add the `alt` field to the `Detail` shelf to display the altitude of the circuit.
3. **Sheet 3**: Average Circuit Altitude
   - Drag the `country` field to the `columns` shelf.

- Drag the `alt` field to the `rows` shelf and change the aggregation to `average` .
- Descending/asceding sort the average altitude of the circuits in each country.

4. **Dashboard**: The workbook should contain a dashboard that combines the three sheets.

5. **Save the workbook**: Save the workbook as a twb file by selecting 'File' -> 'Export As' -> 'Tableau Workbook'.

Note: you should deal with the missing values in the dataset during creating the visualization.