Congratulations! You passed!

Grade received 100% To pass 100% or higher

Go to next item

1. 1 / 1 point

Activity overview

The video you just watched showed you how to create a visualization in Tableau. Now, you can use the dataset and instructions in this activity to create the visualization yourself. Feel free to refer back to the previous video if you get stuck.

Earlier in this course, you were introduced to Tableau: a powerful, free-to-access software tool used for visualizing data. In this activity, you will practice the basics for creating and editing charts.

By the time you complete this activity, you will be able to create and customize visualizations in Tableau. This will enable you to share your hard work with others throughout your career as a data analyst.

What you will need

To use the template for the dataset, click the link below and select "Use Template."

Link to dataset: CO2

OR

If you don't have a Google account, you can download the spreadsheet directly from the attachment below.

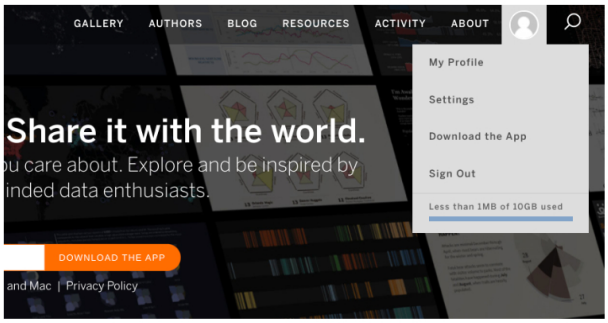
CO2 Dataset
XLSX File

Create a chart

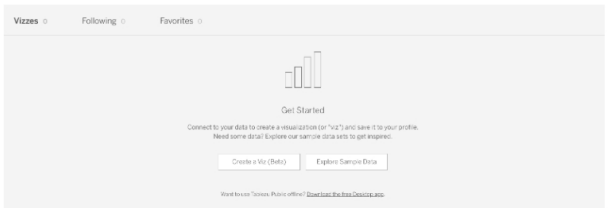
1. Log in to Tableau Public. If you have not created an account yet, refer to the earlier Reading: Logging into Tableau Public.

- **Note:** Tableau frequently updates its user interface. The latest changes may not be reflected in the screenshots presented in this activity, but the principles remain the same. Adapting to changes in software updates is an essential skill for data analysts, and it's helpful for you to practice troubleshooting. You can also reach out to your community of learners on the discussion forum for help.

2. Go to your profile. Hover over the circle in the upper-right corner and click **My Profile**.



3. Under the Getting Started header, click **Create a Viz**.

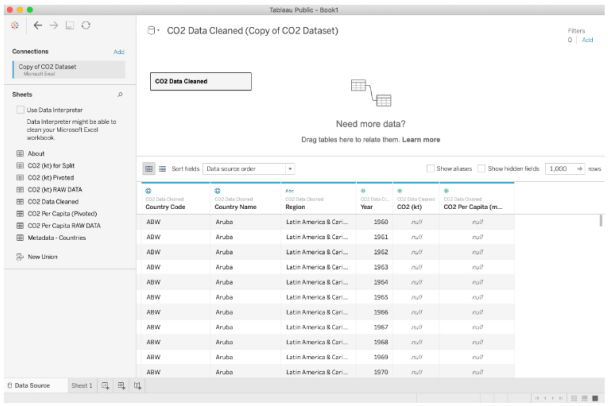


4. This may bring you to the **Connect to Data** window. If so, go to the **Files** tab and open the **CO2 dataset** you downloaded earlier. If not, navigate to the **Data** tab at the top of Tableau Public interface. Under the dropdown, click **New Data Source**. Then open the CO2 dataset.

5. Once you have uploaded the data, you will notice the following display. Locate the sheets contained in the data file on the left side of the screen.

6. Double-click on the sheet **CO2 Data Cleaned** to load that sheet's data into the main part of the screen. You can also drag and drop the sheet into the area where it says **Drag tables here**.

Once this is done, the main display will appear like this:



The data in the table are listed in the bottom portion of the display above. By default, Tableau will only show the first 1000 rows in the table, but you can increase the number of rows in the settings above the data view.

Each row corresponds to a single data point, and each column represents a different feature.

Tableau interprets the type of data in each column. The following icons, which are above in the column name, refer to how Tableau interprets the data type in the column:

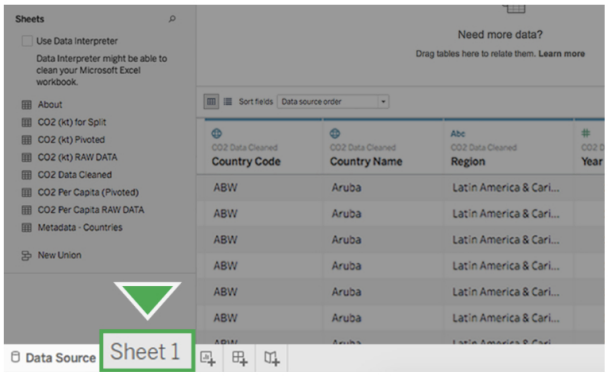
- **#:** Numeric data
- **Abc**: String data
- **Globe:** Geographic data
- **Calendar**: Date data
- **Calendar with a clock:** Date and time data

In the image above, you can see that Tableau has interpreted the first two columns as geographic data, the third column as string data, and the last three columns as numeric data.

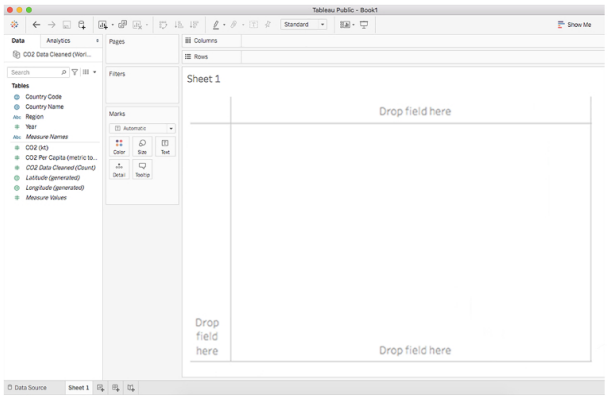
Create a visualization of CO2 emissions

Now that you have all of your data loaded into Tableau, you can use it to make visualizations. Create a visualization in which the CO2 emissions are displayed per country.

To do this, click on the **Sheet1** tab in the lower-left of the display.



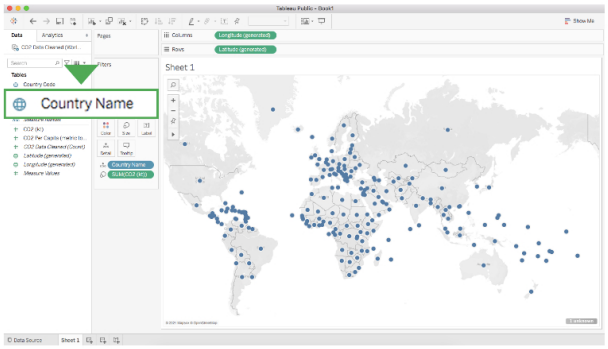
Clicking this tab will change the display to this:



Use dimensions and measures

On the far left of the screen is a banner with column names above a grey line. In Tableau, these are called the **dimensions** of the data. Below this line are the different **measures** that you can track for these dimensions.

Now, create a chart that displays the CO2 emissions per country. Double-click the **Country Name** dimension. The main display will show a map of the countries on the planet with dots indicating which countries are represented in the data.



The dots are all the same size because—with no measure selected—Tableau defaults to scale each country equally. If you want to scale by CO2 emissions, you need to include a specific measure.

Double-click (or drag and drop onto the sheet) the measure **CO2 (kt)**. This will change the size of the dots to be proportional to the amount of CO2 emitted like the example below.

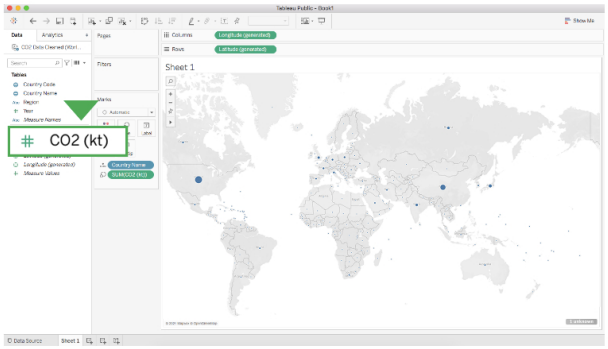
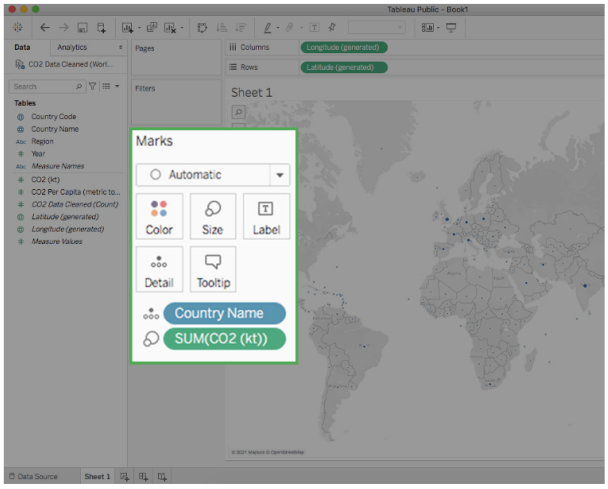


Tableau has a wide selection of options for depicting the measure for a given dimension. Most of these options are contained in the middle column between the main display and the column with dimensions and measures.

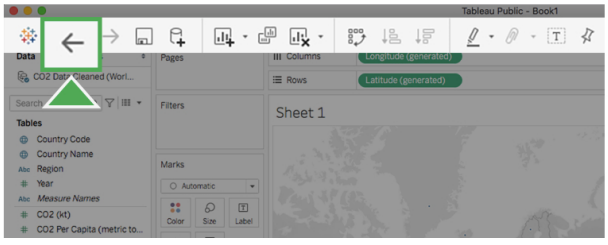


Customize your chart

If you drag and drop a measure on one of the option classes, such as Color, Size, and Label, you can change that aspect of the measure's visualization on the chart.

For example, if you want to change the color of the CO2 measure, drag the measure **CO2 (kt)** to the box with the **Color** label. Then, click on this box to pull up a list of options for the colors you can use.

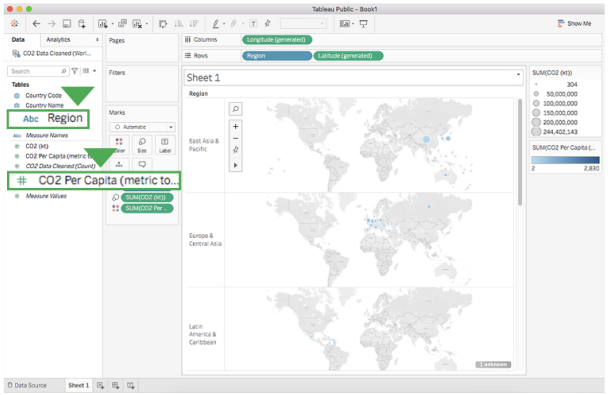
Play around with the different options here to learn what you can do. Don't worry about making a mistake. If you ever want to reverse a change you make to a Tableau sheet, you can hit the **Back arrow** button in the top-left corner of the screen:



There you go! You just created your first chart using Tableau.

Change dimensions and measures

Changing either the dimension or the measure on a chart is very easy to do. Suppose that instead of visualizing the CO2 per country, you want to chart the CO2 per capita per region. To do this, double-click on the dimension **Region** and then do the same for the measure **CO2 Per Capita**. This will result in a new chart like the example below:

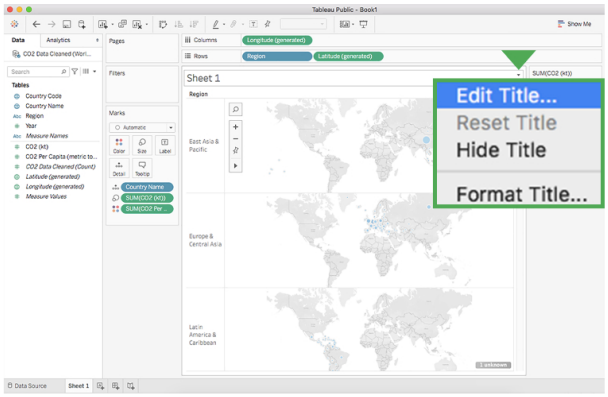


Edit the title

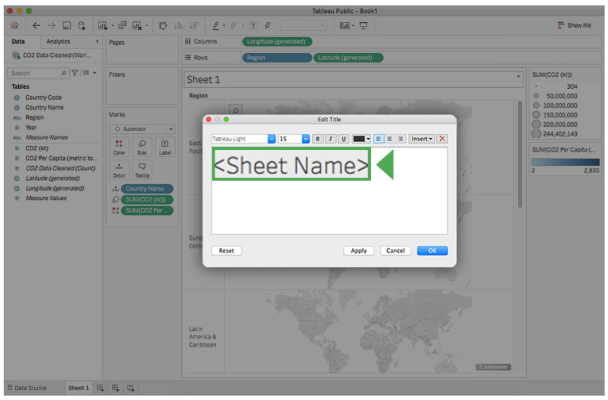
Currently, the title of this chart is **Sheet 1**. To edit the title of the chart:

1. Hover the cursor over the title box. An arrow will show up in the upper-right of the box. If you do not see the arrow on the upper-right of the box, make sure to close any panels on the right of your screen or double-click **Sheet 1** to change the title.

2. Click on this arrow to bring up a drop-down menu. Select **Edit Title.**

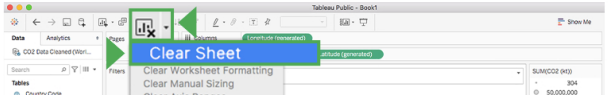


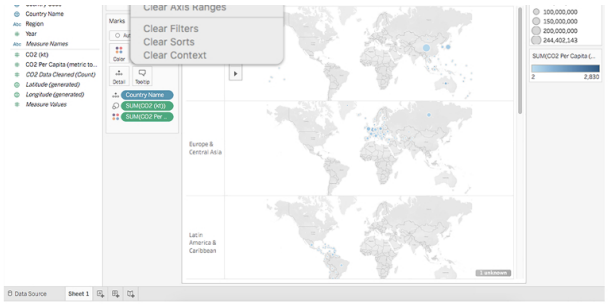
3. Enter any title you wish.



Delete a chart

If you want to delete a chart from the sheet, select the **Clear Sheet** button in the toolbar.

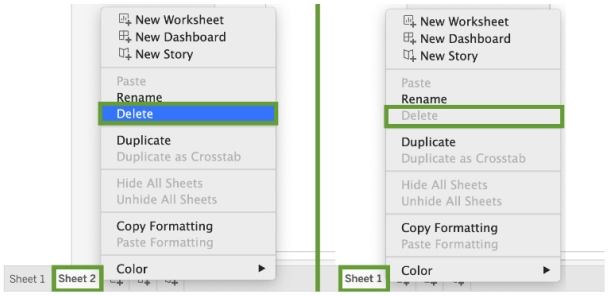




This will completely wipe out the chart and bring you back to an empty sheet. Don't worry if you do this by accident or change your mind. The **Back** button introduced earlier will bring the chart back.

If you want to delete a sheet in its entirety, all you need to do is right-click on the sheet's tab at the bottom of the screen and select **Delete**. Note that you will not be able to delete a sheet if it is the only sheet in your file.

Note: Unlike clearing a sheet, deleting a sheet altogether cannot be reversed!



Congratulations! The skills in this hands-on activity are all you need to get started visualizing your data. This is far from the end of the story, though. In follow-up activities, you will review more advanced tools in Tableau. Until then, this is enough to get you started.

Reflection

In this activity, you used Tableau to create a visualization out of a dataset. In the text box below, write 2-3 sentences (40-60 words) in response to each of the following questions:

- What elements can you change to customize a chart in Tableau?
- What other kinds of visualizations could you create in Tableau?

What elements can you change to customize a chart in Tableau?
Dimensions and measures.
What other kinds of visualizations could you create in Tableau?
All sorts.

Correct

Congratulations on completing this hands-on activity! A good response would include how Tableau allows you to create in-depth visualizations for data and customize the colors, labels, sizing and more.

Moreover, some versions of the program are available at no charge. Because of these advantages, many data analysts use it extensively. With the information in this activity, you can prepare for upcoming activities where you will learn more about what you can do in Tableau.