

IMAGE ROLE

This feature was introduced in **Tableau Ver 2022.4**

In general images are much better when we need to analyze data. It helps the end-users in better understanding the data insights and the visualizations.

Image Role is a new field semantic that offers a scalable and automated way to bring image assets into Tableau.

We can now add images to links (URLs) in the data and display them as row or column headers.

This image role feature allows better management of image assets within Tableau and optimize the overall size of workbooks.

IMAGE ROLE

Before using the **Image Role**, we need to ensure the data source is in the expected format

Image Role can be assigned to **discrete dimension** fields that contain **URLs** that point to web images.

To prepare the data, we need to ensure that the image fields meet the requirements set by Tableau to be assigned an image role:

- The URLs navigate to image files with .png, .jpeg or jpg extensions
- Verify that each URL begins with http or https. If a transport protocol isn't included, Tableau assumes https
- Optimize the number of images used in the data set (Usually, we can load up to 500 images per field)
- Ensure that each image file is smaller than 128 KB

After we connect to the data source, we can assign an **Image Role** to the **URLs** from either the **Data Source page** or on the **Data pane** in a **worksheet**

STEPS TO ASSIGN THE IMAGE ROLE FROM THE DATA PANE IN A WORKSHEET

Step 1: Locate the discrete dimension that has image URLs e.g: **Flag**

The screenshot shows the Tableau interface. In the 'Data' pane on the left, the 'Flag' field is selected under the 'Country Name' dimension. The 'Columns' shelf contains 'Country Name', 'Proper Country Name', and 'Flag'. The 'Rows' shelf is empty. The 'Marks' shelf is set to 'Automatic'. A preview table is displayed on the right:

Country Name	Proper Country Name	Flag
BRAZIL	Brazil	https://upload.wiki..
GHANA	Ghana	https://upload.wiki..
UNITED KINGDOM	United Kingdom	https://upload.wiki..
UNITED STATES	United States	https://upload.wiki..

The screenshot shows the 'Proper Country Name' calculated field dialog box. The formula entered is `PROPER([Country Name])`. The 'All' dropdown menu is open, showing a list of functions including 'PROPER'. The 'PROPER' function is highlighted. The description for the 'PROPER' function is displayed on the right:

PROPER(string)
Converts a text string to proper title casing by capitalizing the initial letter of each word, while lower-casing all other letters.
Example: `PROPER("dairy PRODUCTS") = "Dairy Products"`

The calculation is valid. [Apply] [OK]

Proper Country Name is a Calculated Field using the **PROPER** string function

STEPS TO ASSIGN THE IMAGE ROLE FROM THE DATA PANE IN A WORKSHEET

Step 2: Right-click (control-click on Mac) on the dimension i.e., **Flag**
Select **Image Role > URL**

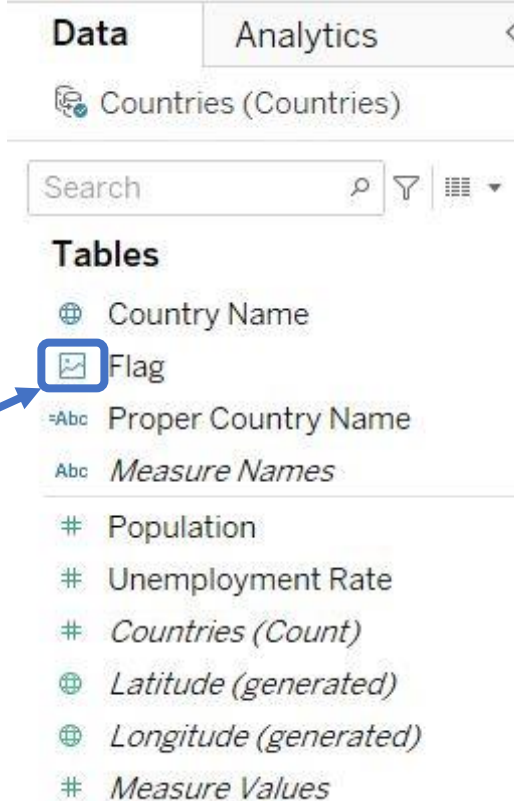
The screenshot shows the Tableau interface. In the 'Data' pane on the left, the 'Flag' dimension is selected. A right-click context menu is open over 'Flag', showing options like 'Add to Sheet', 'Duplicate', 'Rename', 'Hide', 'Aliases...', 'Create', 'Transform', 'Convert to Measure', 'Change Data Type', 'Default Properties', 'Geographic Role', 'Image Role', 'Group by', 'Folders', 'Hierarchy', 'Replace References...', and 'Describe...'. The 'Image Role' option is highlighted, and a sub-menu is open showing 'None' (checked) and 'URL'. The main view displays a table with columns: Country Name, Proper Country Name, and Flag. The data rows are: BRAZIL, GHANA, UNITED KINGDOM, and UNITED STATES.

Country Name	Proper Country Name	Flag
BRAZIL	Brazil	https://upload.wiki..
GHANA	Ghana	https://upload.wiki..
UNITED KINGDOM	United Kingdom	https://upload.wiki..
UNITED STATES	United States	https://upload.wiki..

STEPS TO ASSIGN THE IMAGE ROLE FROM THE DATA PANE IN A WORKSHEET

Step 3: Note that the icon of the dimension is changed to an Image icon

Image Icon



The screenshot shows the 'Data' pane in a worksheet. At the top, there are tabs for 'Data' and 'Analytics'. Below the tabs, the text 'Countries (Countries)' is displayed. A search bar is present with the placeholder text 'Search'. Under the 'Tables' section, a list of dimensions is shown. The 'Flag' dimension is highlighted with a blue box, and its icon is an image of a flag. A blue arrow points from the text 'Image Icon' to the 'Flag' dimension icon. Other dimensions listed include 'Country Name', 'Proper Country Name', 'Measure Names', 'Population', 'Unemployment Rate', 'Countries (Count)', 'Latitude (generated)', 'Longitude (generated)', and 'Measure Values'.

Icon	Dimension Name
🌐	Country Name
🚩	Flag
🔤	Proper Country Name
🔤	Measure Names
#	Population
#	Unemployment Rate
#	Countries (Count)
🌐	Latitude (generated)
🌐	Longitude (generated)
#	Measure Values

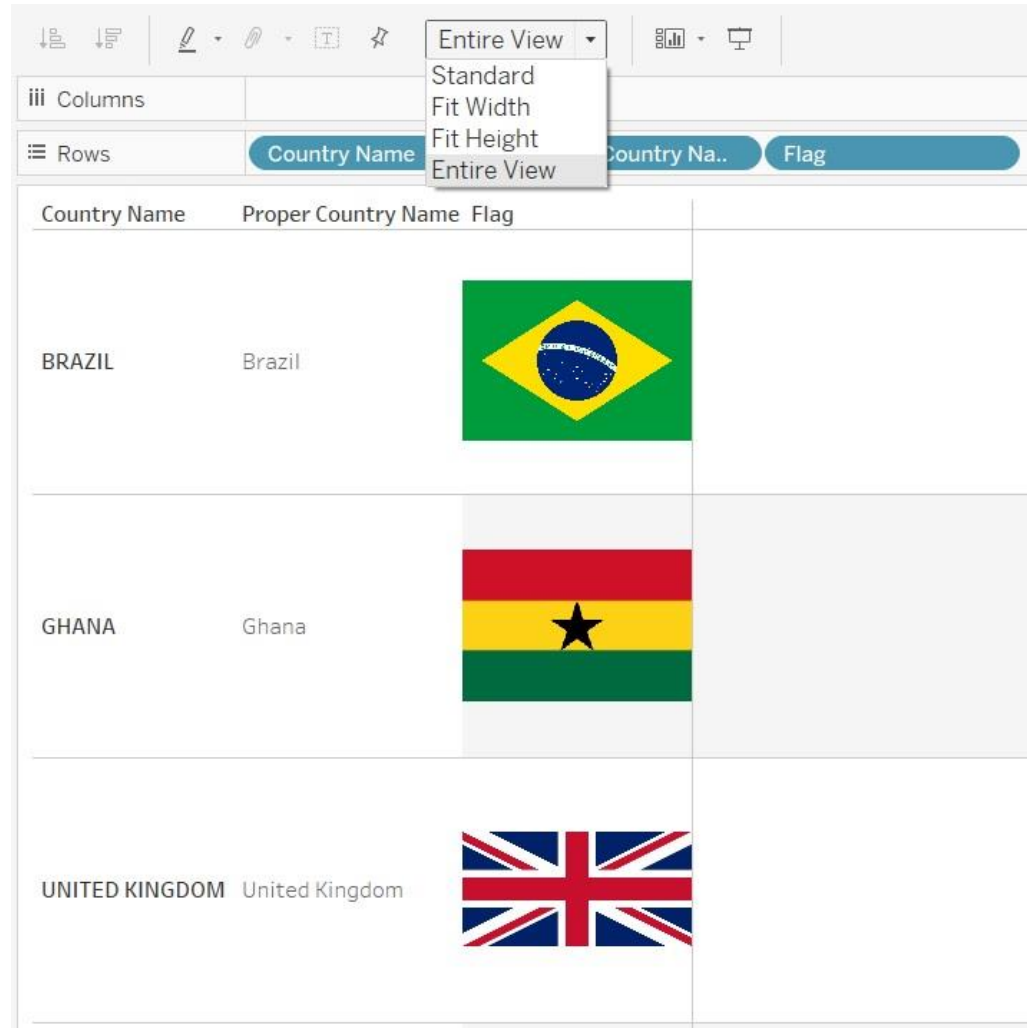
STEPS TO ASSIGN THE IMAGE ROLE FROM THE DATA PANE IN A WORKSHEET

Step 4: If we bring in the Image Role field into the view either in Rows or Columns shelf, we will be able to see the images along with the related data in the viz

iii Columns				
Rows	Country Name	Proper Country Na..	Flag	
Country Name	Proper Country Name	Flag		
BRAZIL	Brazil			Abc
GHANA	Ghana			Abc
UNITED KINGDOM	United Kingdom			Abc
UNITED STATES	United States			Abc

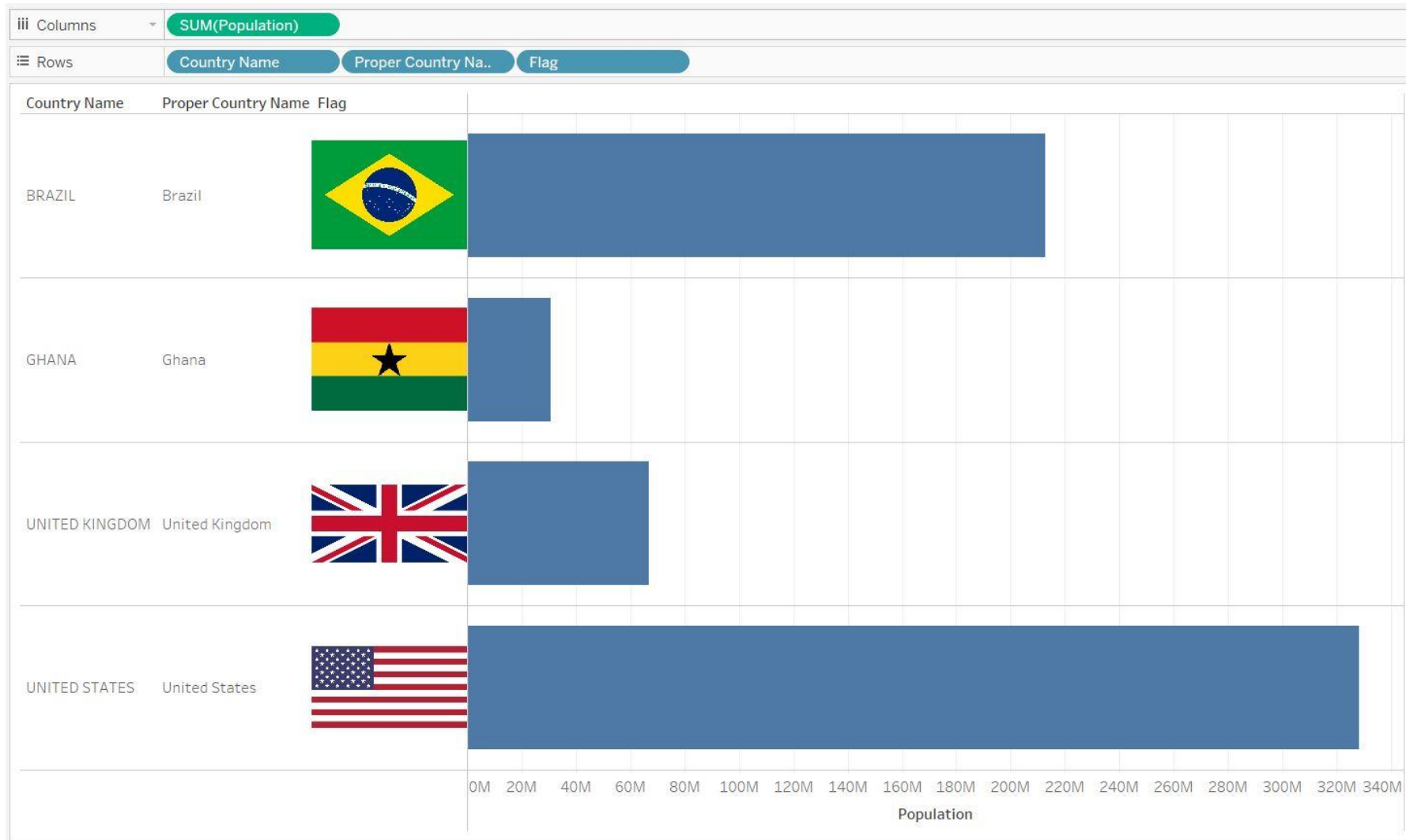
STEPS TO ASSIGN THE IMAGE ROLE FROM THE DATA PANE IN A WORKSHEET

Step 5: If required we can select **Entire View**



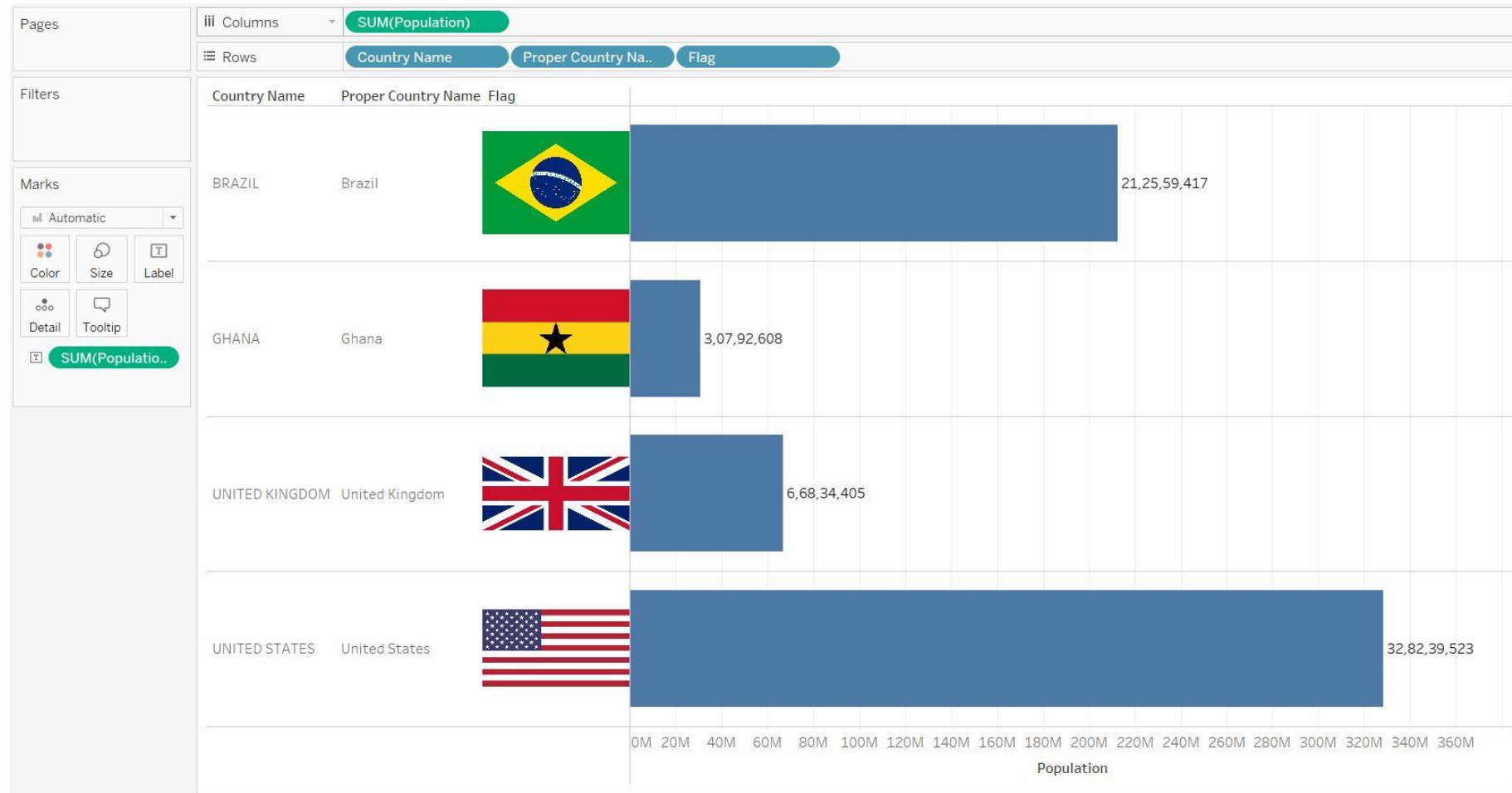
STEPS TO ASSIGN THE IMAGE ROLE FROM THE DATA PANE IN A WORKSHEET

Step 6: If required we can drag a measure into the **Columns** shelf e.g: **Population**



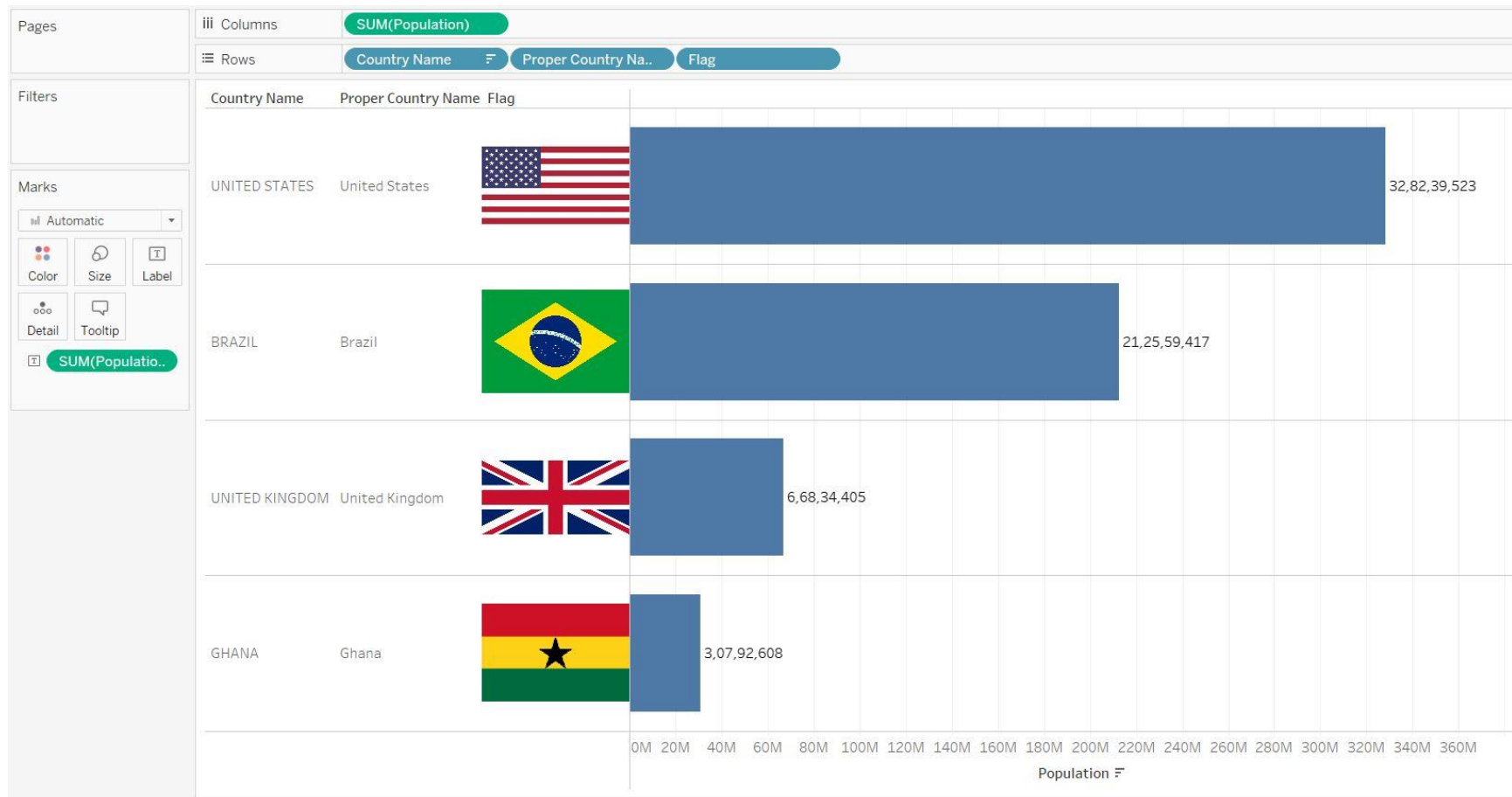
STEPS TO ASSIGN THE IMAGE ROLE FROM THE DATA PANE IN A WORKSHEET

Step 7: If required we can drag and drop the same measure to **Label** of **Marks** card



STEPS TO ASSIGN THE IMAGE ROLE FROM THE DATA PANE IN A WORKSHEET

Step 8: If required we can sort the view as per our requirement. This is the final view of Population per Country with the Flags of each country visible in the viz due to the **Image Role** feature



STEPS TO ASSIGN THE IMAGE ROLE FROM THE DATA SOURCE PAGE

Step 1: Right-click (control-click on Mac) on the **Data Icon** on the top left side of the related column/ dimension i.e., **Flag**
Select **Image Role > URL**

Countries

▼

5 fields 4 rows

>

Table Details

<div><div>🌐</div><div>Countries</div></div>	<div><div>#</div><div>Countries</div></div>	<div><div>#</div><div>Countries</div></div>	<div><div>Abc</div><div>Countries</div></div>	
Country Name	Population	Unemployment Rate	Flag	
BRAZIL	212,559,417	0.120830	http	
UNITED STATES	328,239,523	0.147000	http	
UNITED KINGDOM	66,834,405	0.038510	http	
GHANA	30,792,608	0.043310	http	

Number (decimal)

Number (whole)

Date & Time

Date

✓ String

Spatial

Boolean

✓ Default

Geographic Role

Image Role






✓ None

URL

STEPS TO ASSIGN THE IMAGE ROLE FROM THE DATA SOURCE PAGE

Step 2: Note that the icon of the dimension is changed to an Image icon

Image Icon

Countries 5 fields 4 rows					
Table Details	 Countries	 Countries	 Countries	 Countries	 Calculation
	Country Name	Population	Unemployment Rate	Flag	Proper Country Name
	BRAZIL	212,559,417	0.120830	https://upload.wikimedia.org...	Brazil
	UNITED STATES	328,239,523	0.147000	https://upload.wikimedia.org...	United States
	UNITED KINGDOM	66,834,405	0.038510	https://upload.wikimedia.org...	United Kingdom
	GHANA	30,792,608	0.043310	https://upload.wikimedia.org...	Ghana

The further steps are like the steps carried out when assigning the image role from the Data Pane in a worksheet