Activity Overview

In a previous activity, you built a bar graph data visualization in Tableau Public.

In this activity, you will use Tableau Public to design an interactive dashboard. This dashboard will tell a multitude of compelling stories about the data it represents by allowing end users to compare critical data variables in real time. Your interactive dashboard will also help a stakeholder make business decisions based on a business need.

The structure of this activity is designed to emulate the proposals you will likely be assigned in your career as a data professional. Completing this activity will help prepare you for those career moments. Be sure to complete this activity before moving on. At the end of this activity, you will be provided a completed exemplar to compare to your own work. You will not be able to access the exemplar until you have completed this activity.

Scenario

Review the scenario below. Then complete the step-by-step instructions.

Imagine you are again consulting for the transportation department in Seoul, Korea. The director of transportation is curious about the impact of national holidays on bicycle rentals in 2017. The director's instinct is that the total number of bicycles rented on holidays decreased.

The transportation department has sent you a screenshot of an initial data visualization, but they would like you to provide a more dynamic way of presenting the data. In particular, they would like to compare total bike rentals on holidays with adjacent non-holiday days and matching weekdays.

Your task is to create a dynamic dashboard that compares the impacts of a holiday on bike rentals by weekday or adjacent day.

Step-By-Step Instructions

Follow the instructions to complete each step of the activity. Then, answer the three questions at the end of the activity before going to the next course item to compare your work to a completed exemplar.

Step 1: Access supporting materials

To download the data for this course item, click the following link and select *Use Template*.

Link to data: Seoul bicycle rental dataset

OR

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

Seoul bicycle rental dataset
XLSX File

Step 2: Go to Tableau Public

You will need a Tableau Public account to complete this activity. If you haven't created an account yet or need to review how to connect to data, review the reading *How to sign on to Public Tableau*. If you already have a Tableau Public account, log in to your account.

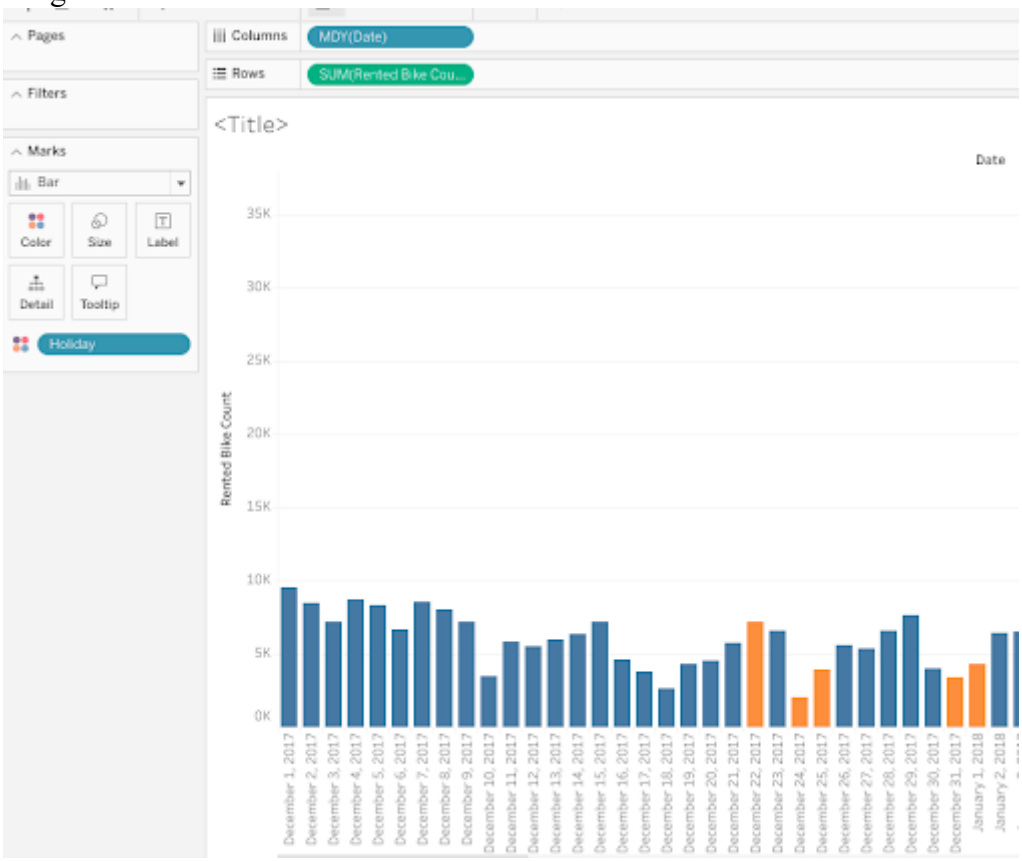
Step 3: Upload your dataset

In your Tableau Public account, go to your profile and select *Create a Viz*. You will be directed to a screen that asks you to connect to data. When prompted, upload the Seoul bicycle rental dataset.

Step 4: Assess the current data

For this activity, the Seoul transportation department has shared a screenshot of a basic data visualization. They provided this to you as a starting point for your work.

n Tableau, you can start by dragging the “Date” variable to the columns shelf and adjusting the limensions to “MDY” (or “M/D/YY,” as it is shown in the dropdown). Then drag “Rented Bike Count” o the row shelf. Lastly, drag “Holiday” to the “Colors” field, ensuring blue is selected for “No” and range for “Yes.”



Step 5: Create an adjacent-day worksheet

ollow these steps:

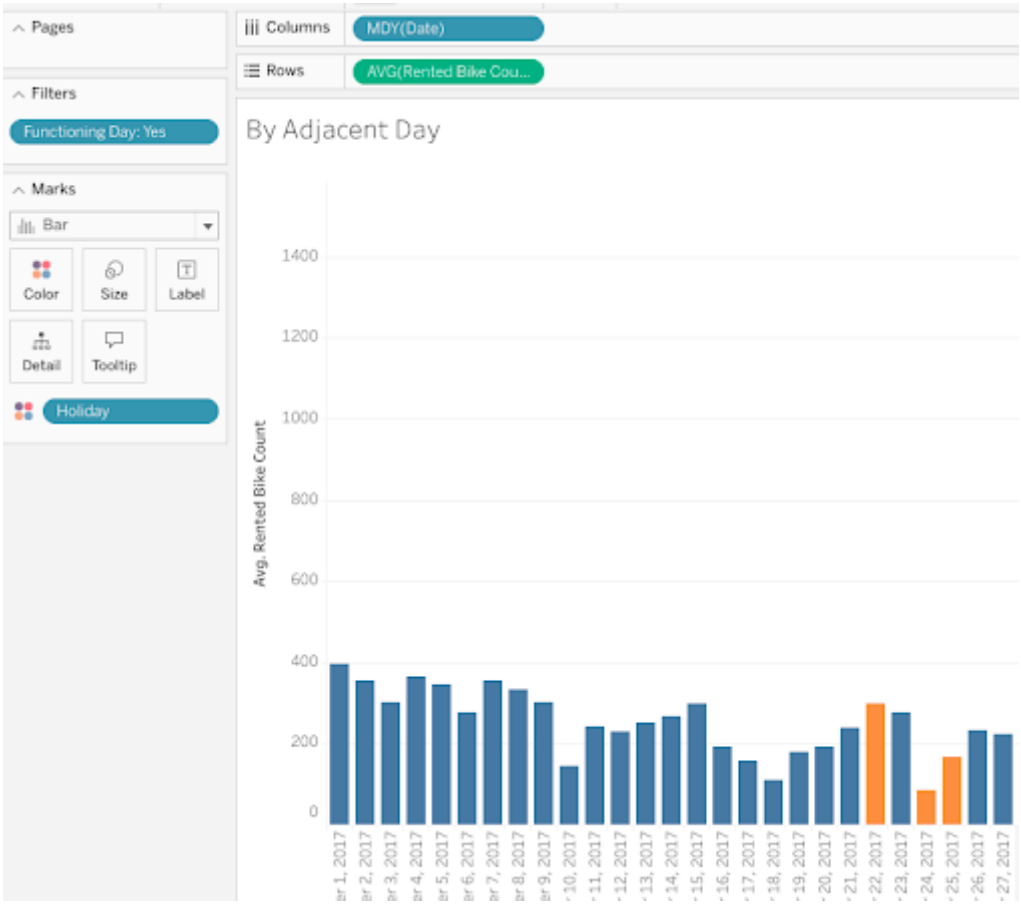
rag Date is in the column shelf (and set to “M/D/YY”)

rag Rented Bike Count to the row shelf and set to “Sum.”

rag Holiday to the Colors field and set as “orange—yes”; “blue—no”

rag Functioning Day to the filters field, ensuring “Yes” checkmarked.

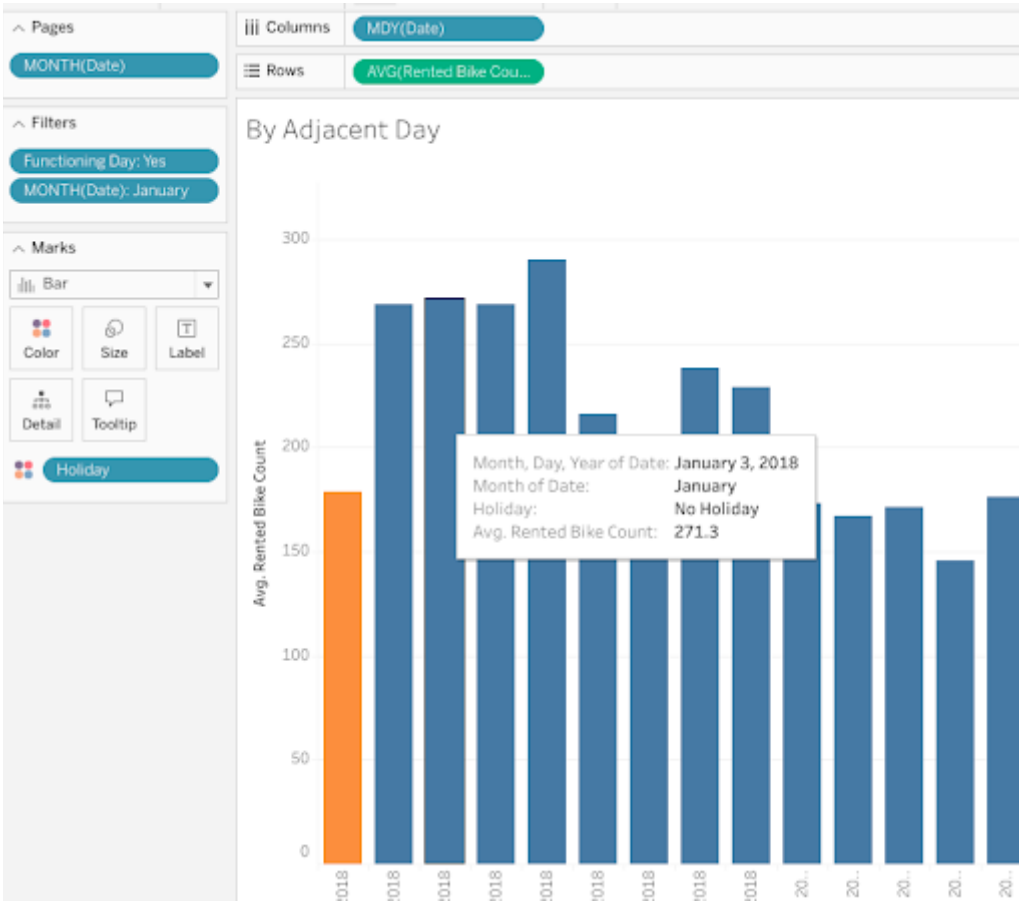
ecause you are creating multiple worksheets, be sure to give each sheet a unique name that is easily iscernible when you get to the dashboard creation step.



Step 6: Update pages and filters for adjacent-day worksheet

Next, drag the “Date” variable one at a time to both the “Filters” and “Pages” fields.

Be sure to set both date variables to “Month” and select the option “Show filter” for both variables.

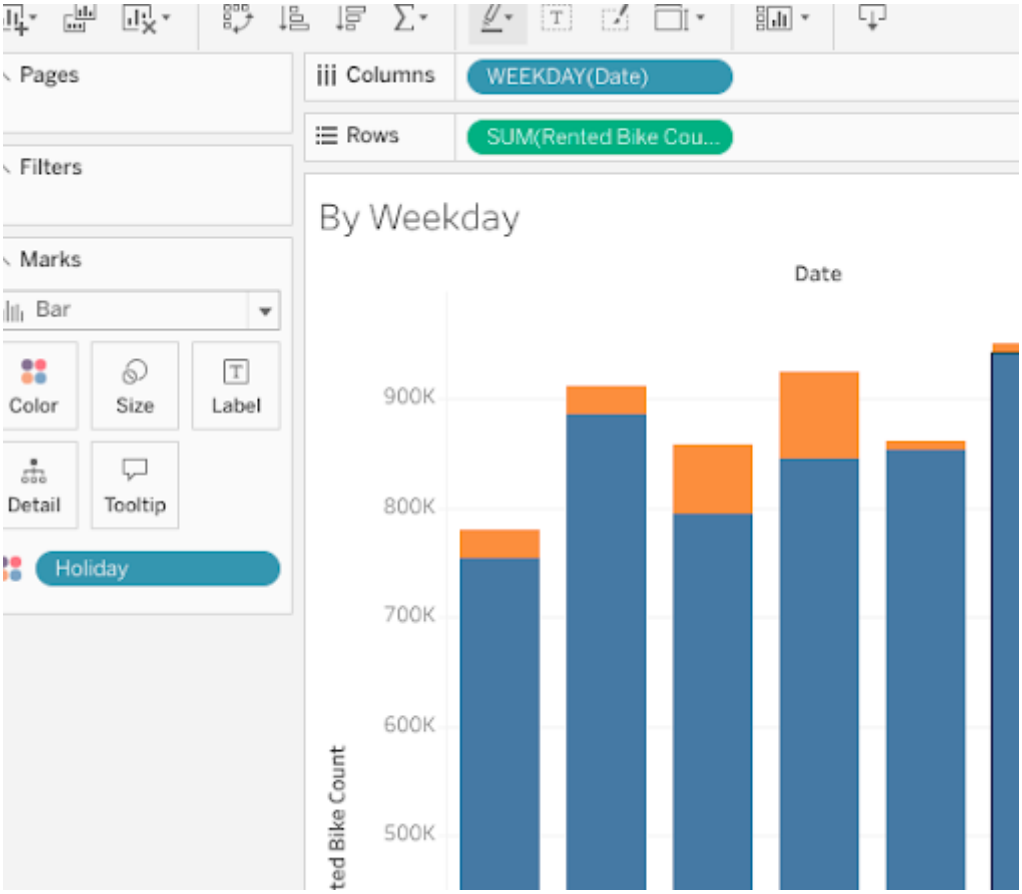


Step 7: Create a weekday worksheet

For the next worksheet you will create, you'll focus on showing bike rentals by weekday. The best way to do this will be a bar chart.

Select "WEEKDAY" for the format of the date variable in the "Columns" shelf.

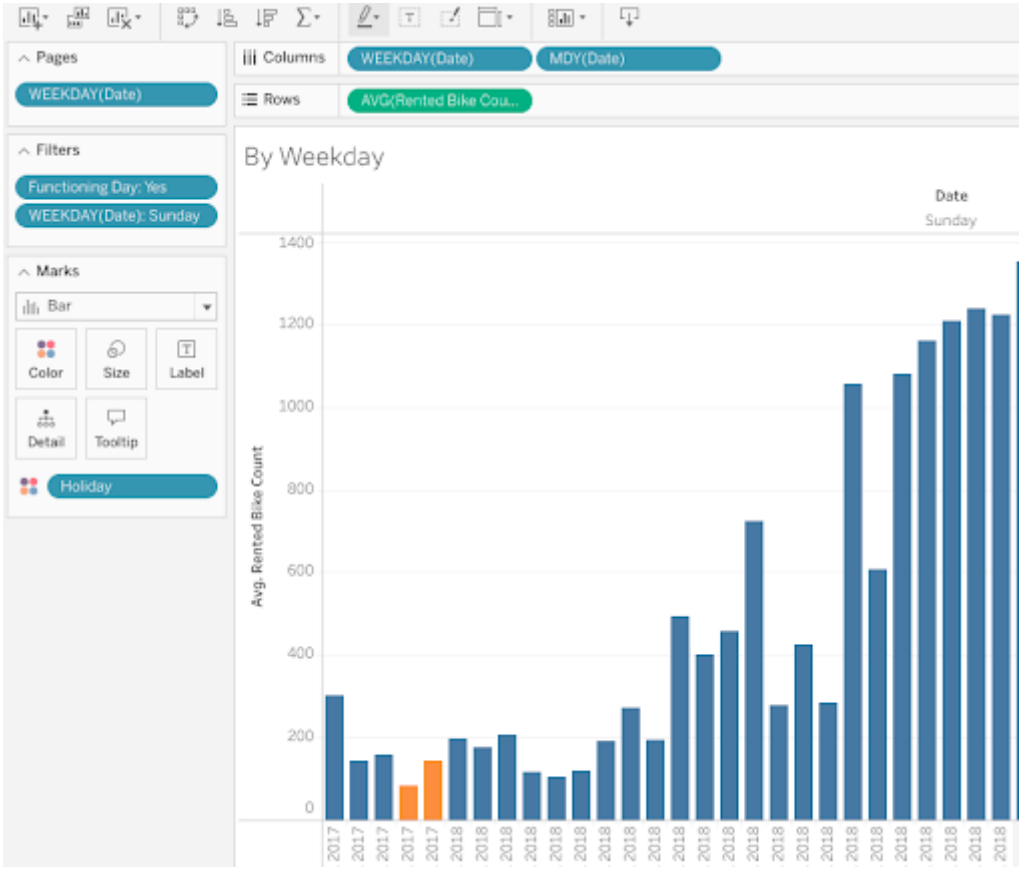
Then, add the "Functioning Day" variable to the "Filters" field, just as you did on the other worksheet.



Step 8: Update pages and filters for weekday worksheet

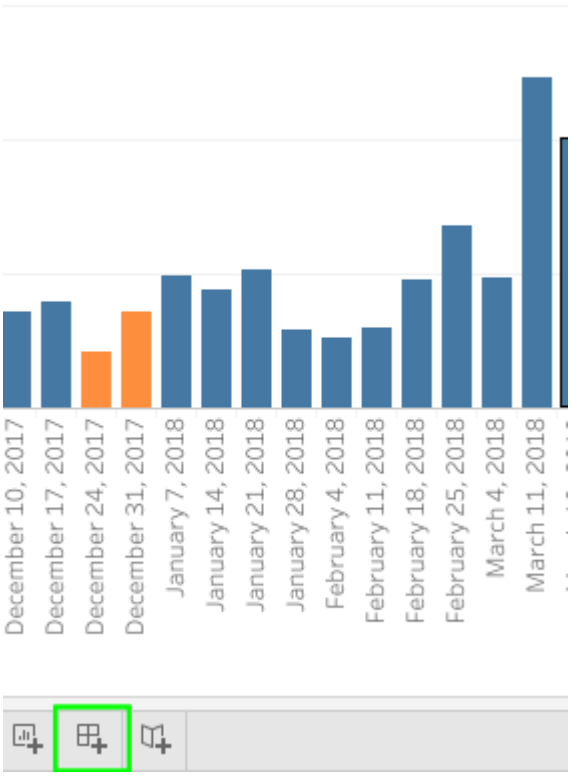
Add a second "Date" variable to the columns shelf and set it to "M/D/YY."

Next, drag the "Date" variable to the "Pages" and "Filters" fields and select "WEEKDAY" for both. Be sure to select the option "Show filter" for both variables.



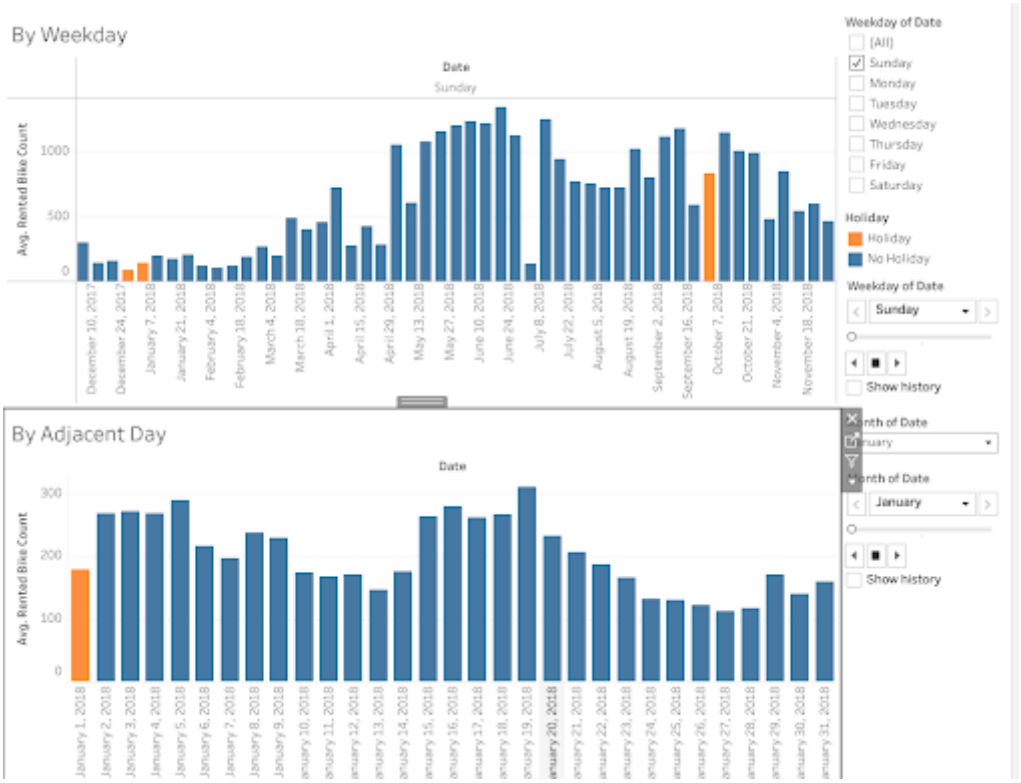
Step 9: Create a new dashboard

You've designed two different worksheets showing the data you want. Now you need to create a dashboard that puts them together. Click on the new dashboard button at the bottom of the screen in Tableau.



Step 10: Drag the worksheets to the dashboard

Drag the two worksheets and their resulting graphs to the dashboard in landscape format, which is the best way to present this type of data.

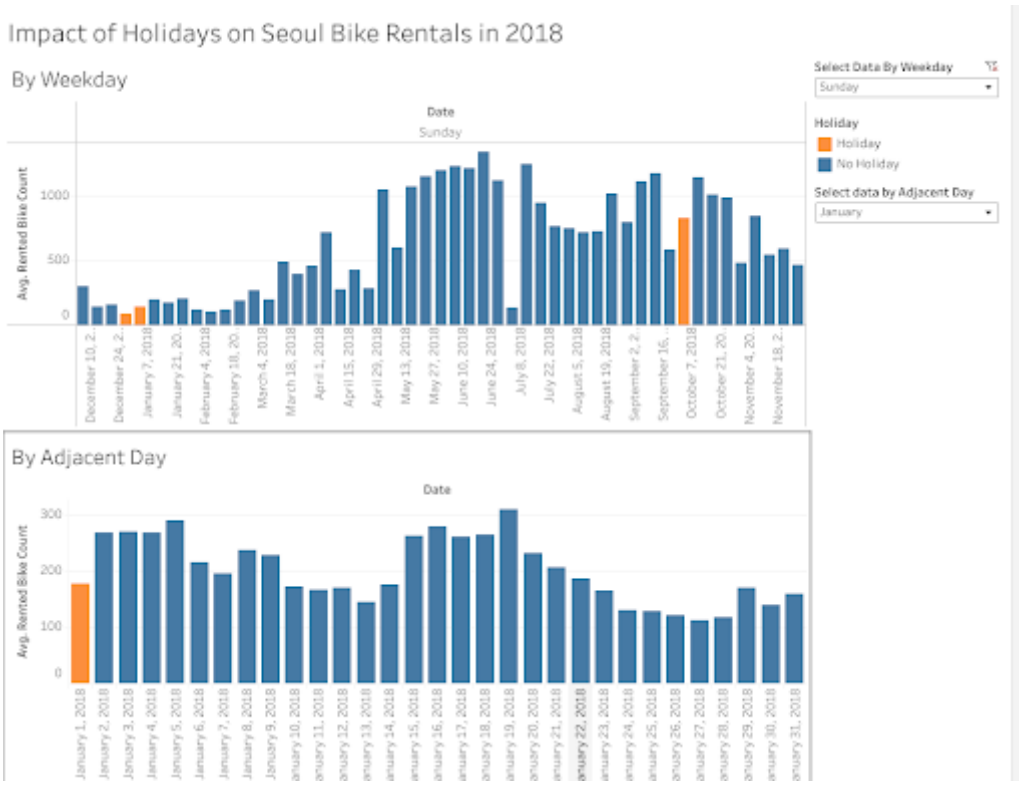


Step 11: Add design elements

Add some of the design elements you've learned about and apply them to your dashboard. Examples include:

Titles: Be sure everything is clearly labeled.

Filters: The dashboard tab can get cluttered with redundant filters. Be sure to create relevant and useful filters in the sidebar.



What to Include in Your Data Visualization

Be sure to address the following elements in your completed activity:

The data dashboard includes two dynamic worksheets.

One worksheet divides data into dates and months.

Another worksheet is divided into dates for each day of the week.

The dashboard and worksheets are properly labeled.

Holidays are shown in a clearly contrasting color.

Filters are added to the dashboard sidebar to filter desired data.

1. Did you complete this activity? 1 / 1 point

- (●) Yes
- ( ) No

Correct
Thank you for completing this activity! Dynamic dashboards in Tableau are valuable for data professionals because they can condense vast amounts of data into easy-to-access pieces. Review the quiz question feedback to find out how you did. Then go to the next course item to compare your work to a completed exemplar.

2. The dashboard you built divides the data into two bar graphs. What do each of the bar graphs illustrate? Select two answers. 0.5 / 1 point

- [x] The data by dates for each holiday

This should not be selected
The Weekday bar graph is divided into dates for each day of the week, and the Adjacent Day bar graph is divided into dates and months.

- [x] The data divided by dates for each day of the week

Correct
The Weekday bar graph is divided into dates for each day of the week, and the Adjacent Day bar graph is divided into dates and months.

- [x] The data divided by dates and months

Correct
The Weekday bar graph is divided into dates for each day of the week, and the Adjacent Day bar graph is divided into dates and months.

- [x] The data by dates for each weekend day

This should not be selected
The Weekday bar graph is divided into dates for each day of the week, and the Adjacent Day bar graph is divided into dates and months.

3. Which design elements help you showcase relevant information in your dashboard? Select all that apply. 0.75 / 1 point

- [x] Portrait format

  ⊗ This should not be selected
  Landscape format is the best way to present this type of data. Giving each worksheet a unique title, creating useful filters, and using contrasting colors can also help identify and highlight relevant information in your dashboard.

- [x] Filters

  ✓ Correct
  Creating relevant and useful filters in the sidebar helps eliminate clutter in the dashboard tab. Giving each worksheet a unique title and using contrasting colors can also help identify and highlight relevant information in your dashboard.

- [x] Contrasting colors

  ✓ Correct
  Using contrasting colors ensures that all members of the audience can still clearly perceive the difference in the bars' contrast. Giving each worksheet a unique title and creating useful filters can also help highlight relevant information in your dashboard.

- [x] Titles

  ✓ Correct
  Titling each worksheet helps ensure that they are easily discernible in the dashboard. Creating useful filters and using contrasting colors can also help highlight relevant information in your dashboard.