

Data Boot Camp  
Lesson 14.1



# The Big Picture





## **Quick Tip for Success:**

Falling behind? Find some extra time to work on past-due assignments or sign up for tutoring services.

Module 14

# This Week: Tableau

# This Week: Tableau

---

By the end of this week, you'll know how to:

01

Import data into Tableau

02

Create and style worksheets, dashboards, and stories in Tableau

03

Use Tableau worksheets to display data in a professional manner

04

Portray data accurately using Tableau dashboards



## **This Week's Challenge**

Using the skills learned throughout the week, the students will create visualizations to show the differences in bike checkout times throughout the day.



## **Career Connection**

How will you use this module's content in your career?

## Module 14

# How to Succeed This Week





## **Quick Tip for Success:**

Tableau can be really intuitive. Get creative with the way you use it, and don't be afraid to experiment!

Module 14

# Today's Agenda

# Today's Agenda

---

By completing today's activities, you'll learn the following skills:

01

Import data into Tableau

02

Create and customize basic visualizations

03

Create custom calculations



**Make sure you've downloaded  
any relevant class files!**

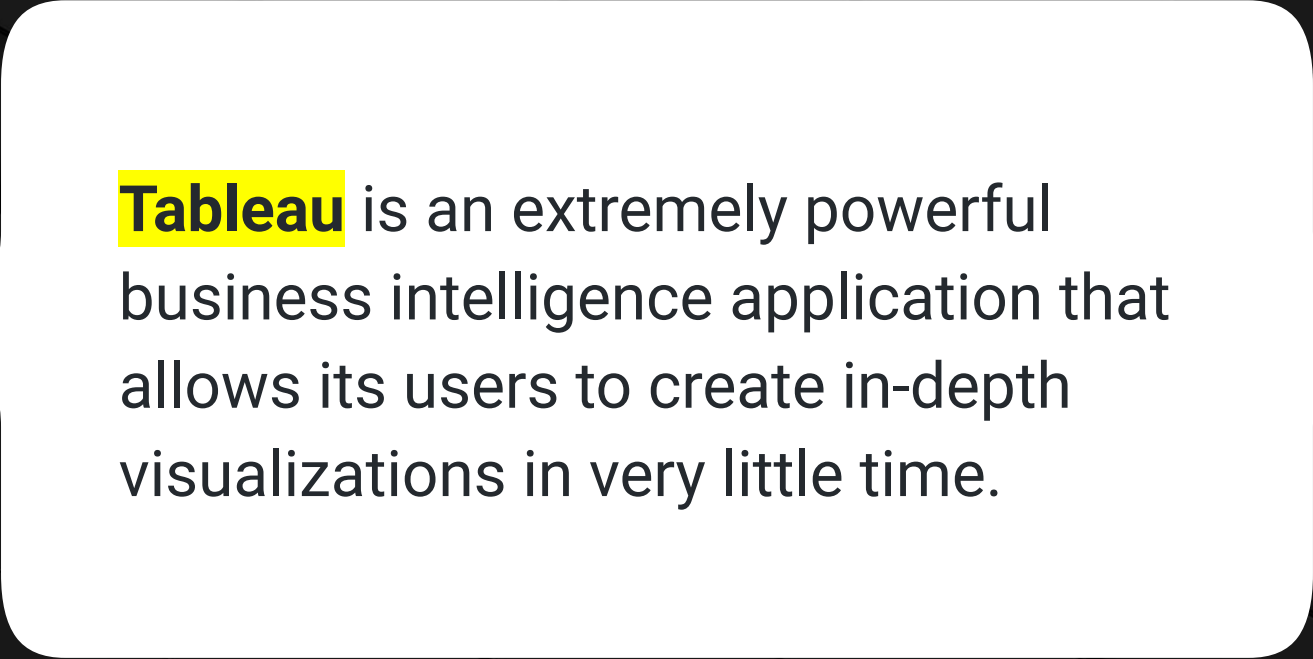
## FIST TO FIVE:

---

How comfortable do you feel with this topic?



# Introduction to +tableau<sup>+</sup><sub>+</sub>public



**Tableau** is an extremely powerful business intelligence application that allows its users to create in-depth visualizations in very little time.

# Tableau

Like Excel, Tableau focuses extensively on allowing users to manipulate tables of data and create visualizations without any additional programming.

**+tableau<sup>+</sup>public**

GALLERY AUTHORS BLOG RESOURCES ACTIVITY ABOUT [SIGN UP](#) [SIGN IN](#)

## Your data has a story. Share it with the world.

Visualize and publish data on topics you care about. Explore and be inspired by creations from like-minded data enthusiasts.

Enter your email address [DOWNLOAD THE APP](#)

Available for Windows and Mac | [Privacy Policy](#)

# Tableau

Tableau also utilizes a drag-and-drop-style interface so that users can easily create tables and charts, and perform analysis without much difficulty.

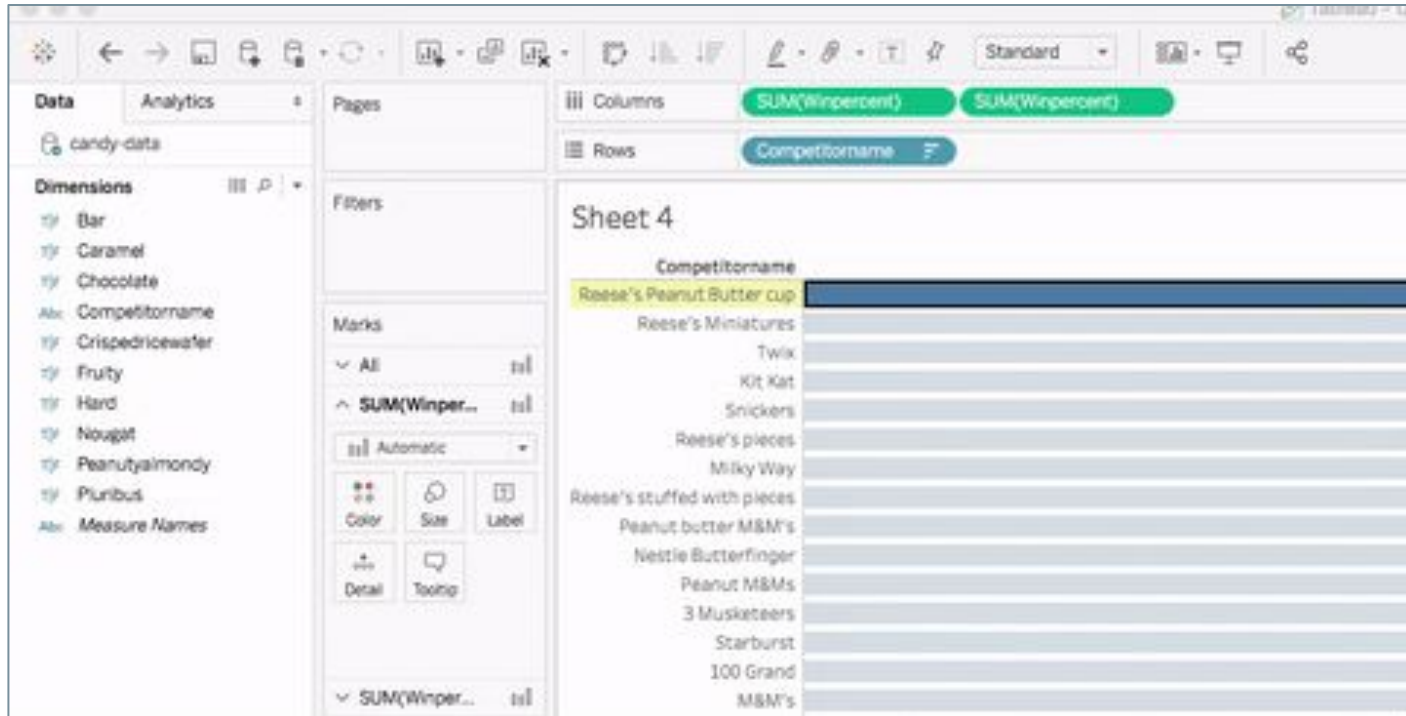




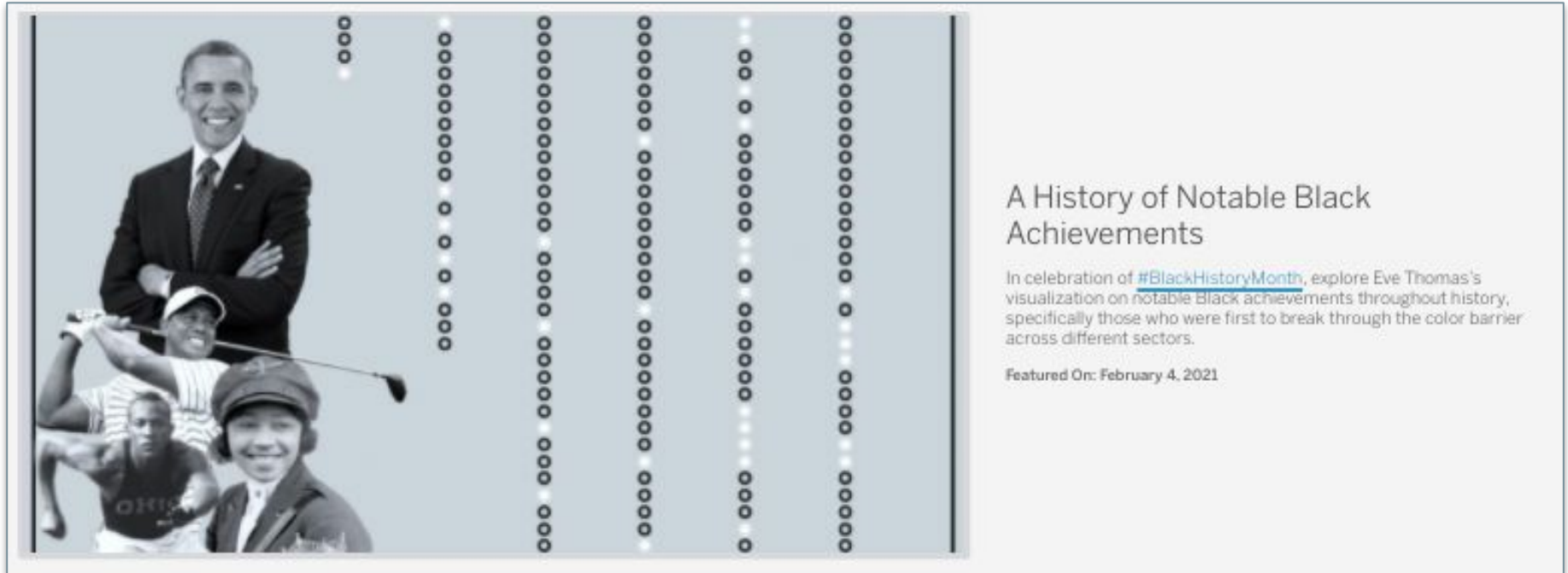


Tableau Public is a **completely free** version of the Tableau software that includes the majority of features included within Tableau Desktop.

# Tableau Public Examples

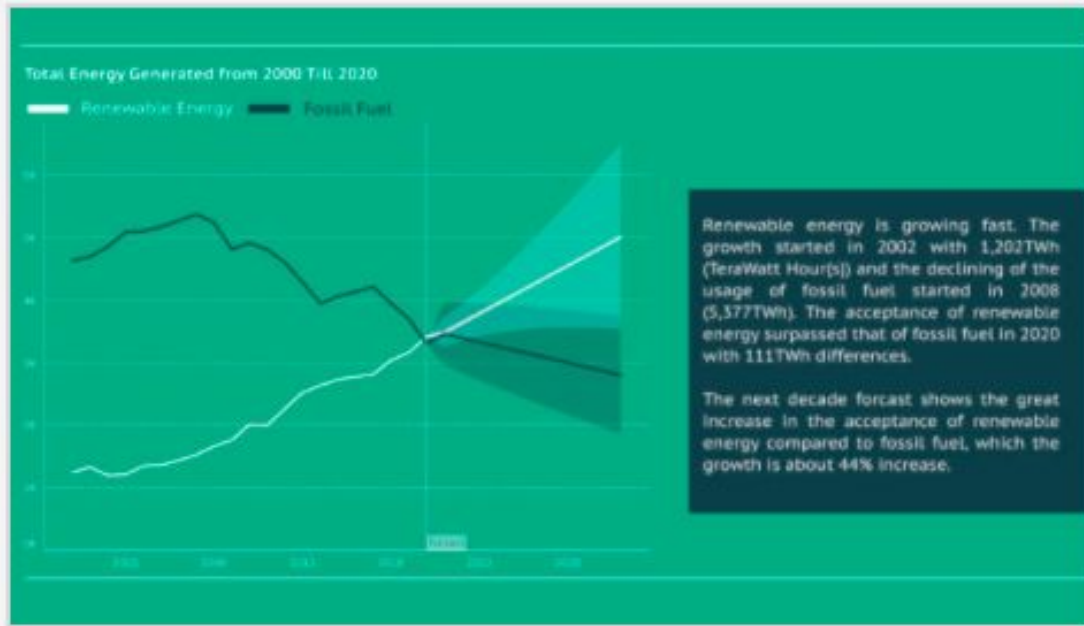
---

One Tableau feature is the ability to share projects and visualizations with your community.



# Tableau Public Examples

Not only can visualizations be shared on the Tableau site, they can also be embedded on webpages.



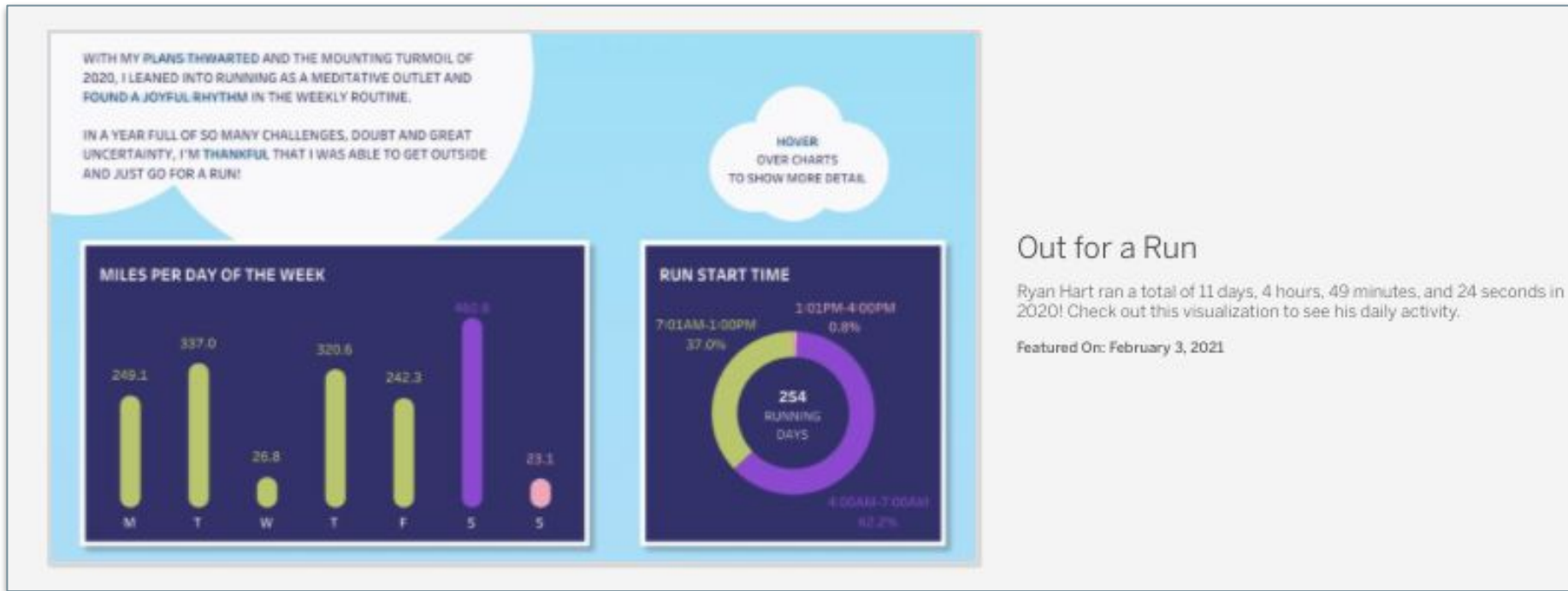
## Renewable Energy and Fossil Fuel Usage in Europe

The acceptance of renewable energy in Europe is expected to increase by about 44% in the next decade. Explore this [#MakeoverMonday](#) visualization by Idris Akilapa to see how these countries are handling the transition from fossil-based systems of energy production to renewable energy sources.

Featured On: February 4, 2021

# Tableau Public Examples

Notice how varied and interesting many of these projects are.



# Tableau Public vs. Desktop

---

The main difference between the two versions:

## Public

Allows you to work with multiple file types, such as .xlsx, .csv, .txt, PDFs, JSON, and others.

## Desktop

Allows you to work with the same files as Tableau Public, but you can also connect to a multitude of servers, like MySQL, Oracle, Amazon Redshift, Google Sheets, and more.



All assignments in this unit can be  
completed with the free version of

+tableau<sup>+</sup><sub>+</sub>public



## **Instructor Demonstration**

---

# Loading and Exploring Data

# Questions?







## **Instructor Demonstration**

---

# Building Basic Visuals



# Time to Code

## Explore Data

---

Suggested Time:

15 minutes



## **Activity:** No-Show Tableau Visualization

In this activity, you will spend some time creating a series of visualizations about what kinds of people are more/less likely to show up to doctor appointments.

**Suggested Time:**  
15 minutes





**Let's Review**

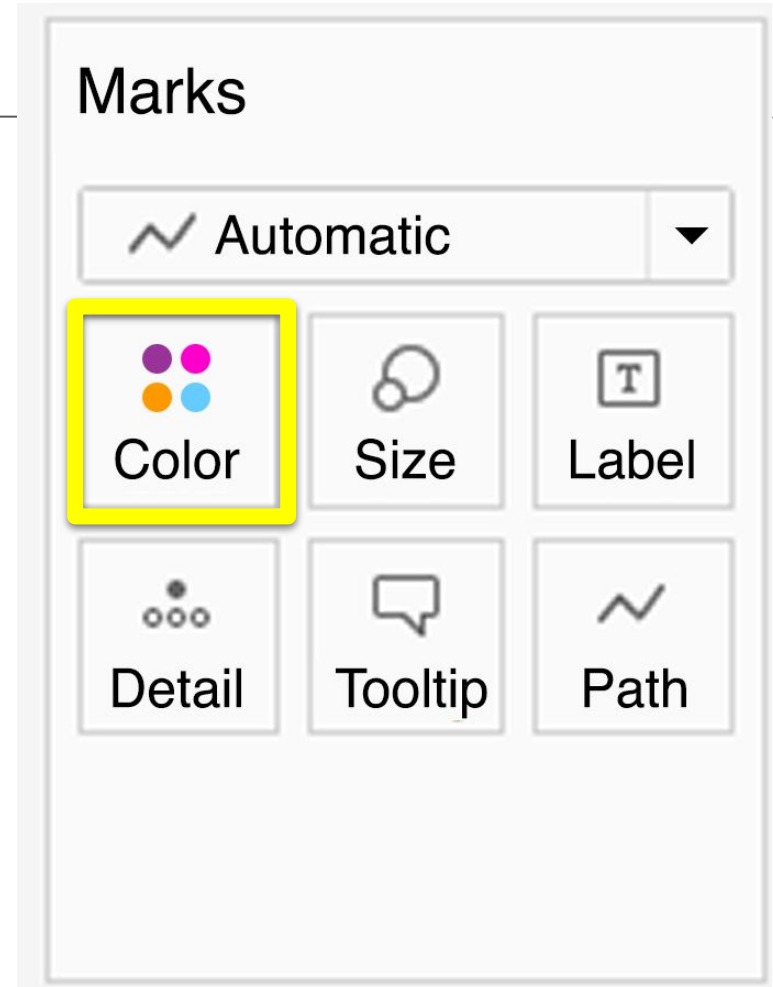
# Questions?



# Sizing, Coloring, and Labels

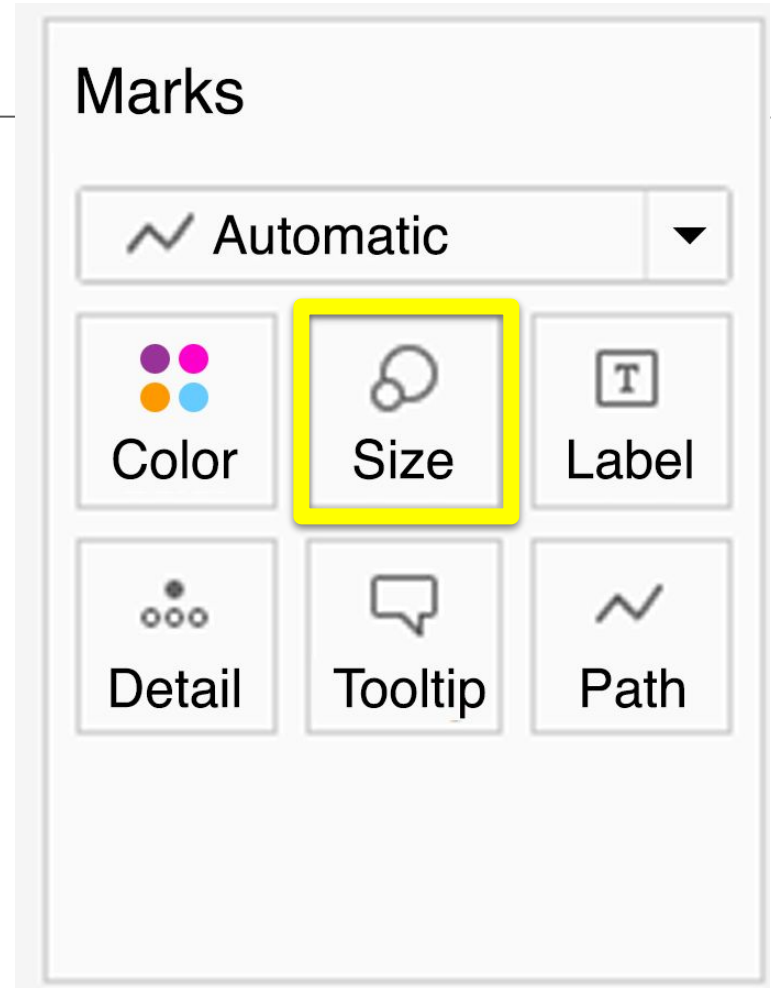
# "Marks" section in Tableau

The **Color** modifies the colors of a chart so that elements are colored according to the values passed.



# "Marks" section in Tableau

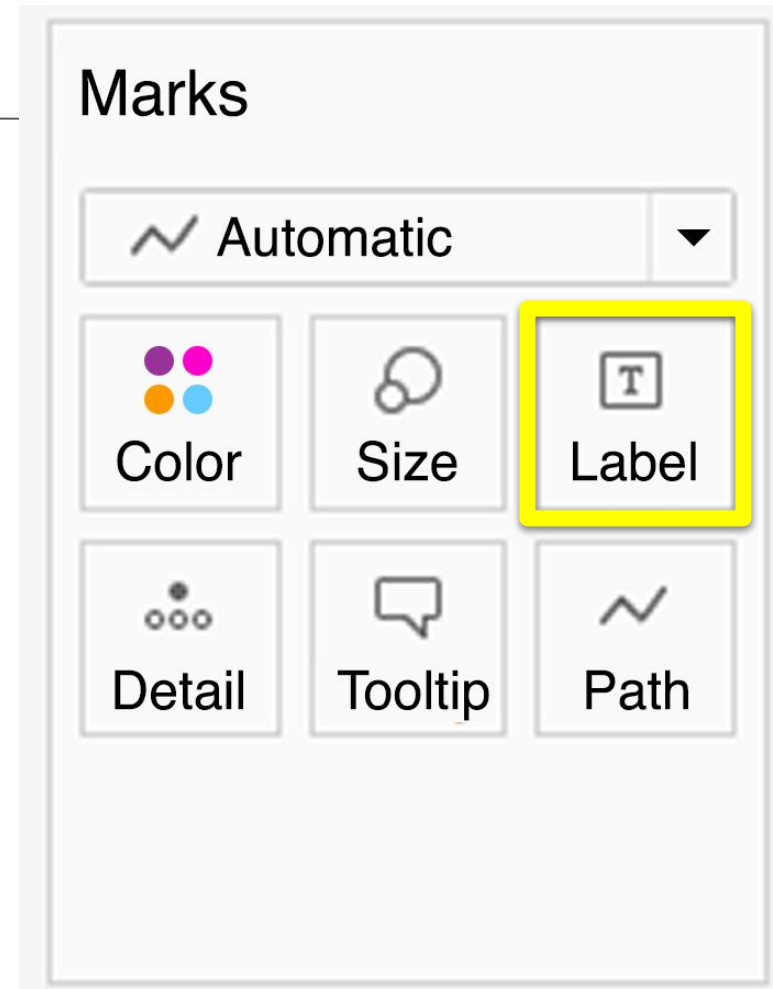
The **Size** modifies the sizing of elements to that they are bigger or smaller depending on the values passed.





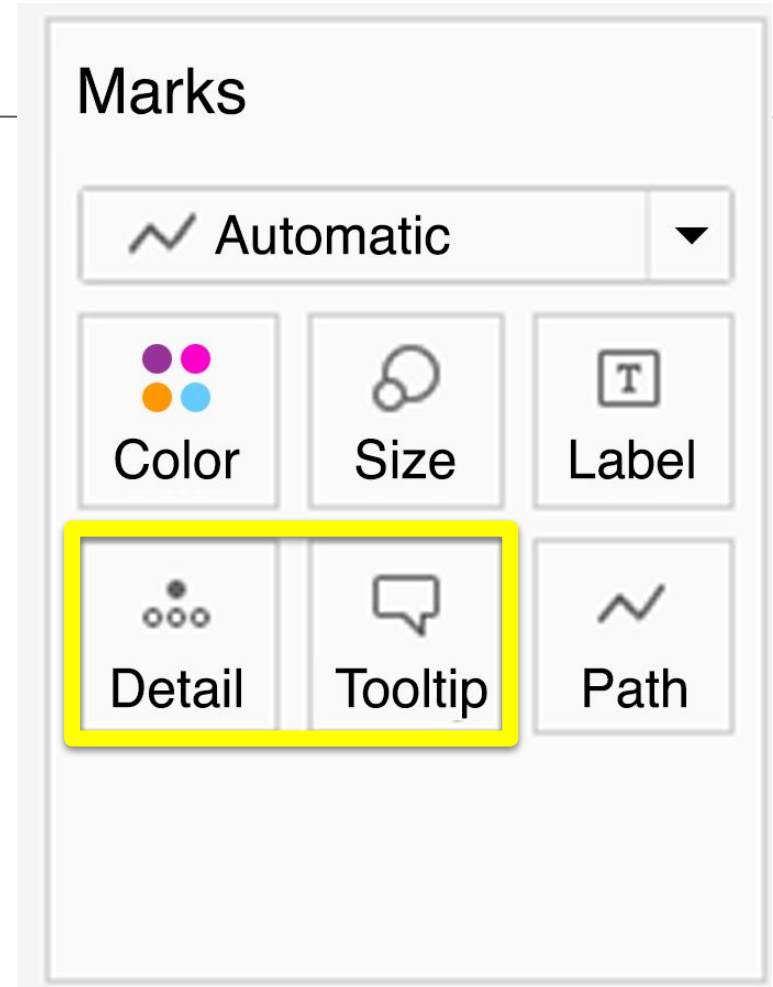
# "Marks" section in Tableau

The **Label** places text next to points on a chart that correspond with the values passed.



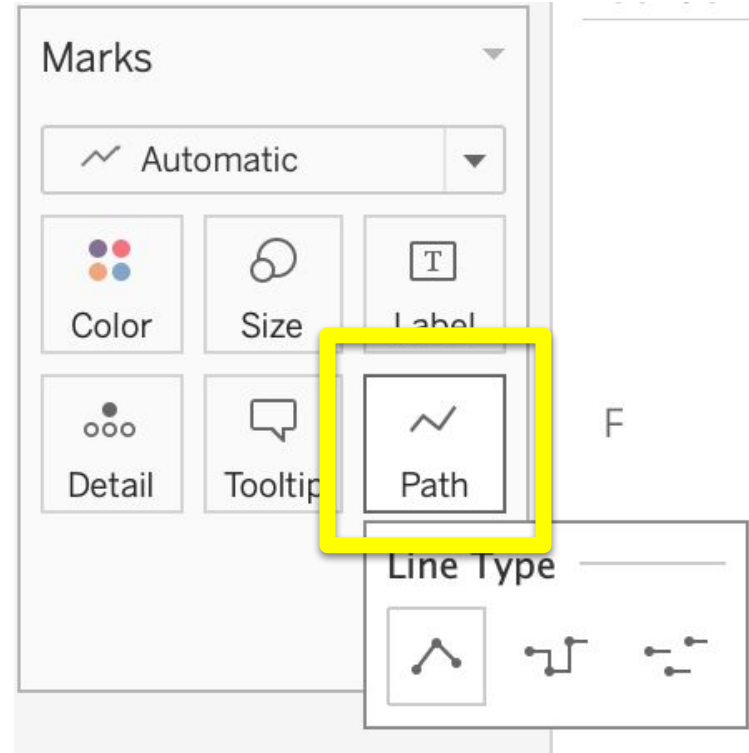
# "Marks" section in Tableau

The **Detail** and **Tooltip** act like labels but only appear when the cursor hovers over the associated point/element on a chart.



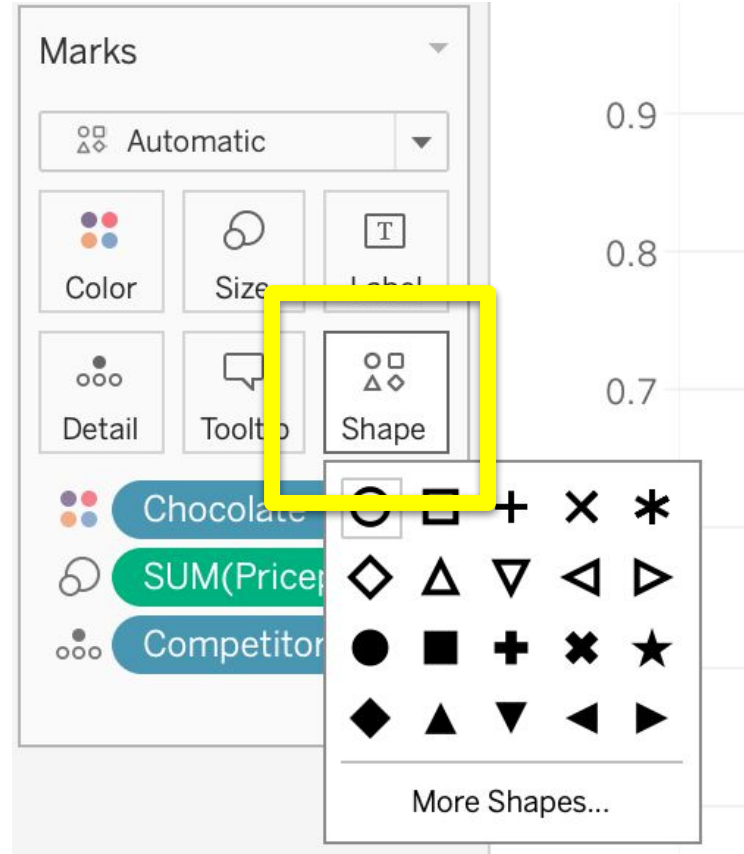
# "Marks" section in Tableau

The **Path** changes the type of line mark, linear, step, or jump of an element/point depending on the values passed. Changing the value of the dropdown will change whether path or shape is displayed.



# "Marks" section in Tableau

The **Shape** changes the shape of the figure based on the values passed. Changing the value of the dropdown will change whether path or shape is displayed.





## **Activity:** The Ultimate Candy

In this activity, you will create charts that compare candies. The charts themselves are quite basic but will be made more complex using marks.

**Suggested Time:**  
15 minutes





**Let's Review**



# Time to Code



## Calculations

Suggested Time:

---

20 minutes

# Questions?

