Introduction

INTRODUCTION TO TABLEAU

Hadrien Lacroix
Content Developer at DataCamp

What is Tableau

- Visualization tool
- VizQL
- Easy
- Beautiful
- Interactive

Why use Tableau

Traditional photography

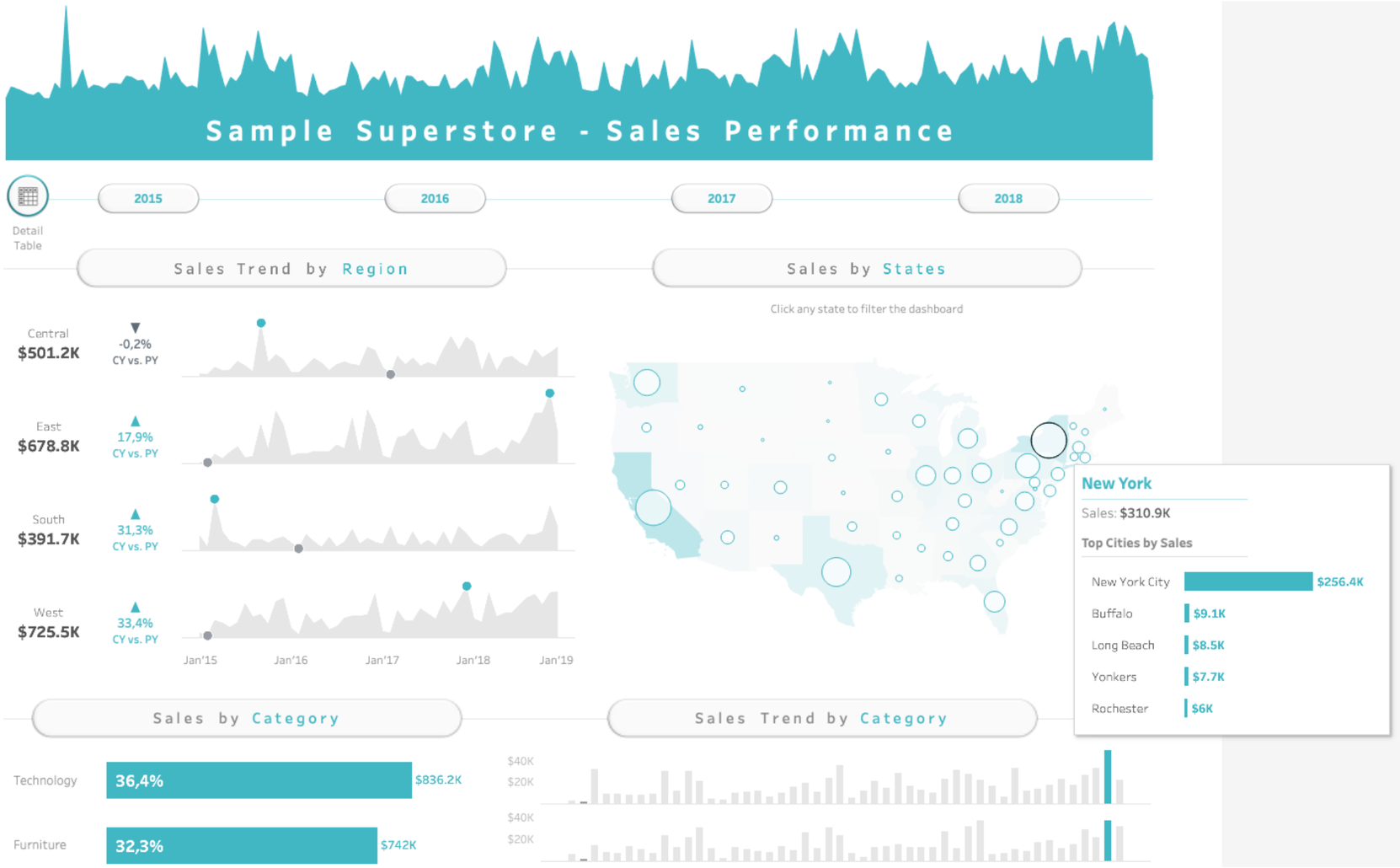
Digital photography

Why use Tableau

- Accessible but complete
- Flexible
- Intuitive
- Quick and robust prototyping

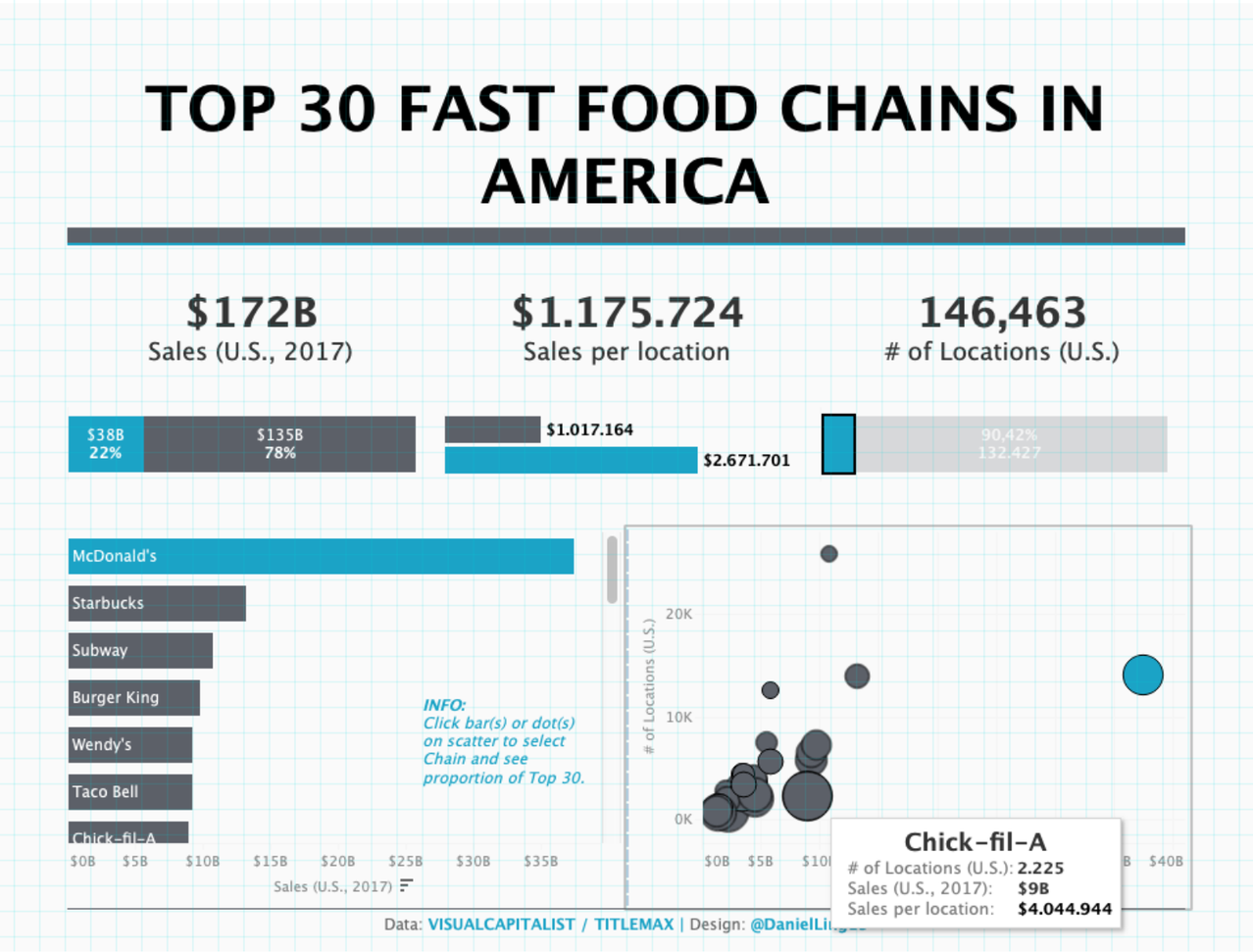
- Frame business questions
- Import and clean data
- Analyze and visualize data
- Drive business decisions
- Present insights

Why use Tableau - Monitoring performance



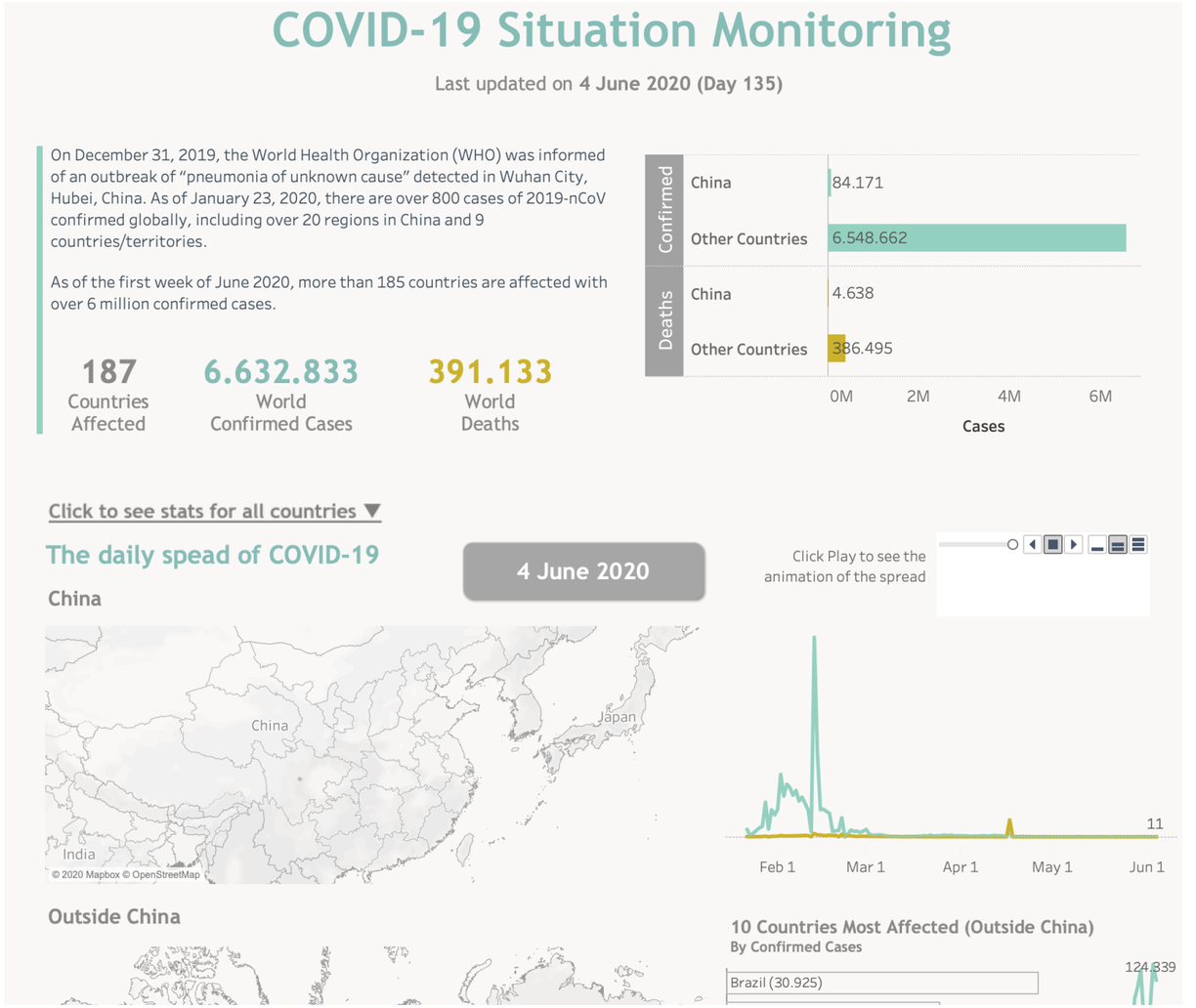
[1] Author: Pradeep Kumar G. Originally published on: Tableau Public

Why use Tableau - Competitive analysis



[1] Author: Daniel Ling. Originally published on: Tableau Public.

Why use Tableau - Tracking outbreaks



[1] Author: Thi Ho. Originally published on: Tableau Public

Who uses Tableau

Roles

- Data analyst
- Business analyst
- Quantitative analyst

Who uses Tableau

[1] https://enlyft.com/tech/products/tableau

Tableau versions

Tableau Public

- Free
- Create beautiful visualizations
- Only CSV, Excel and text files
- Save online
- 15 millions rows of data
- Public reports

Tableau Desktop

- Paid
- Create beautiful visualizations
- All listed data sources
- Save locally
- Unlimited rows of data

Let's practice!

INTRODUCTION TO TABLEAU

Connecting to data

INTRODUCTION TO TABLEAU

Hadrien Lacroix
Content Developer at DataCamp

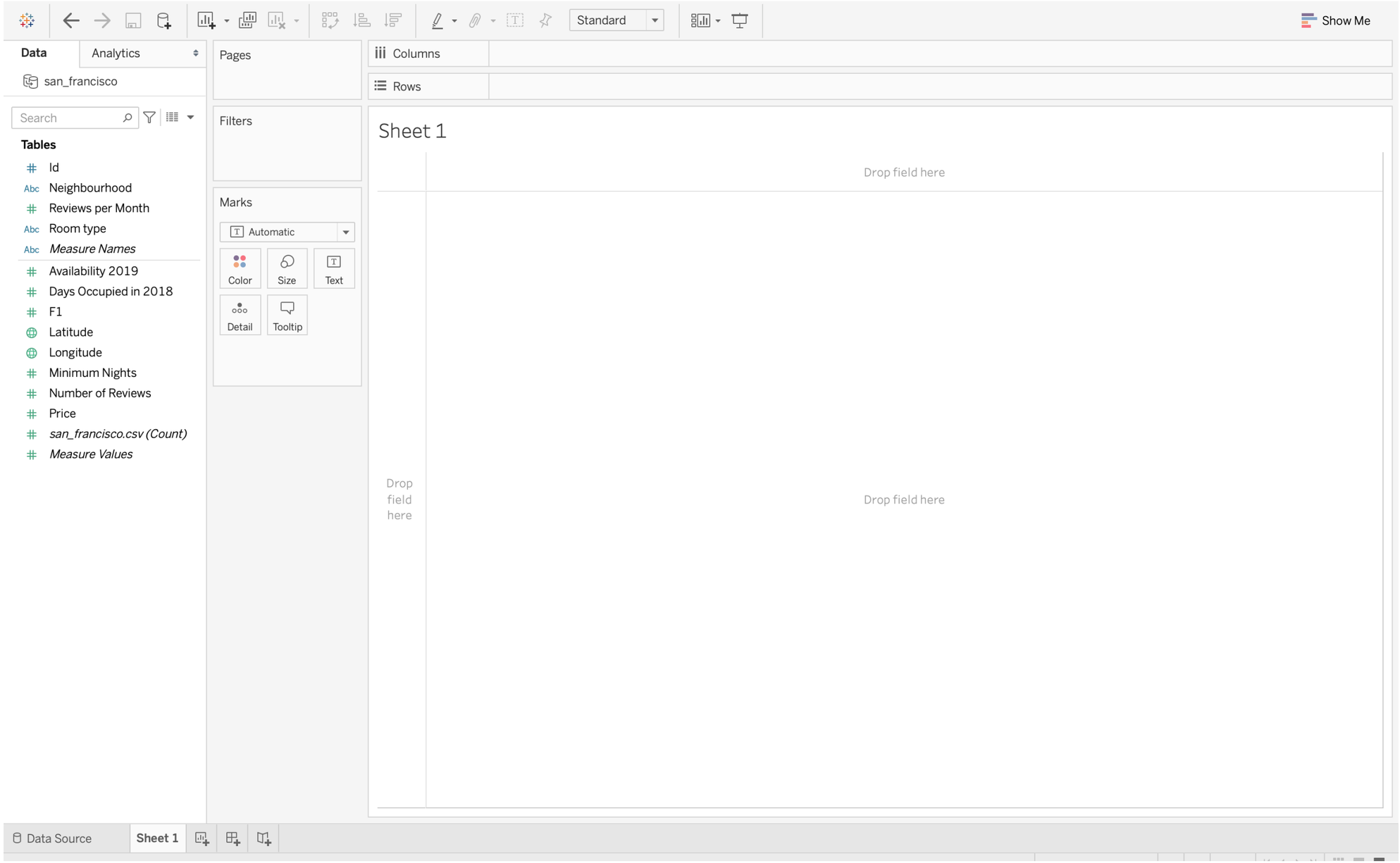
Let's practice!

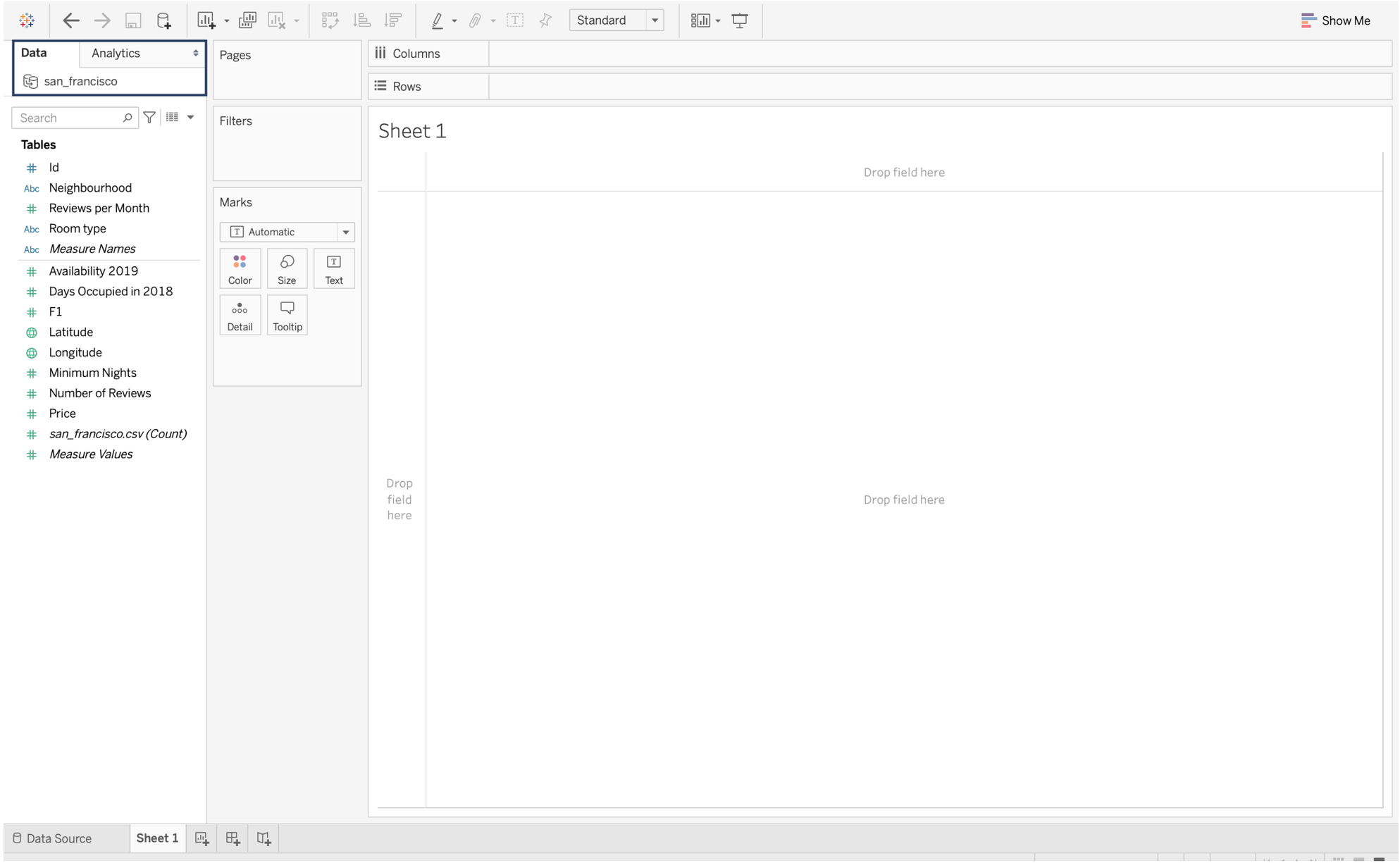
INTRODUCTION TO TABLEAU

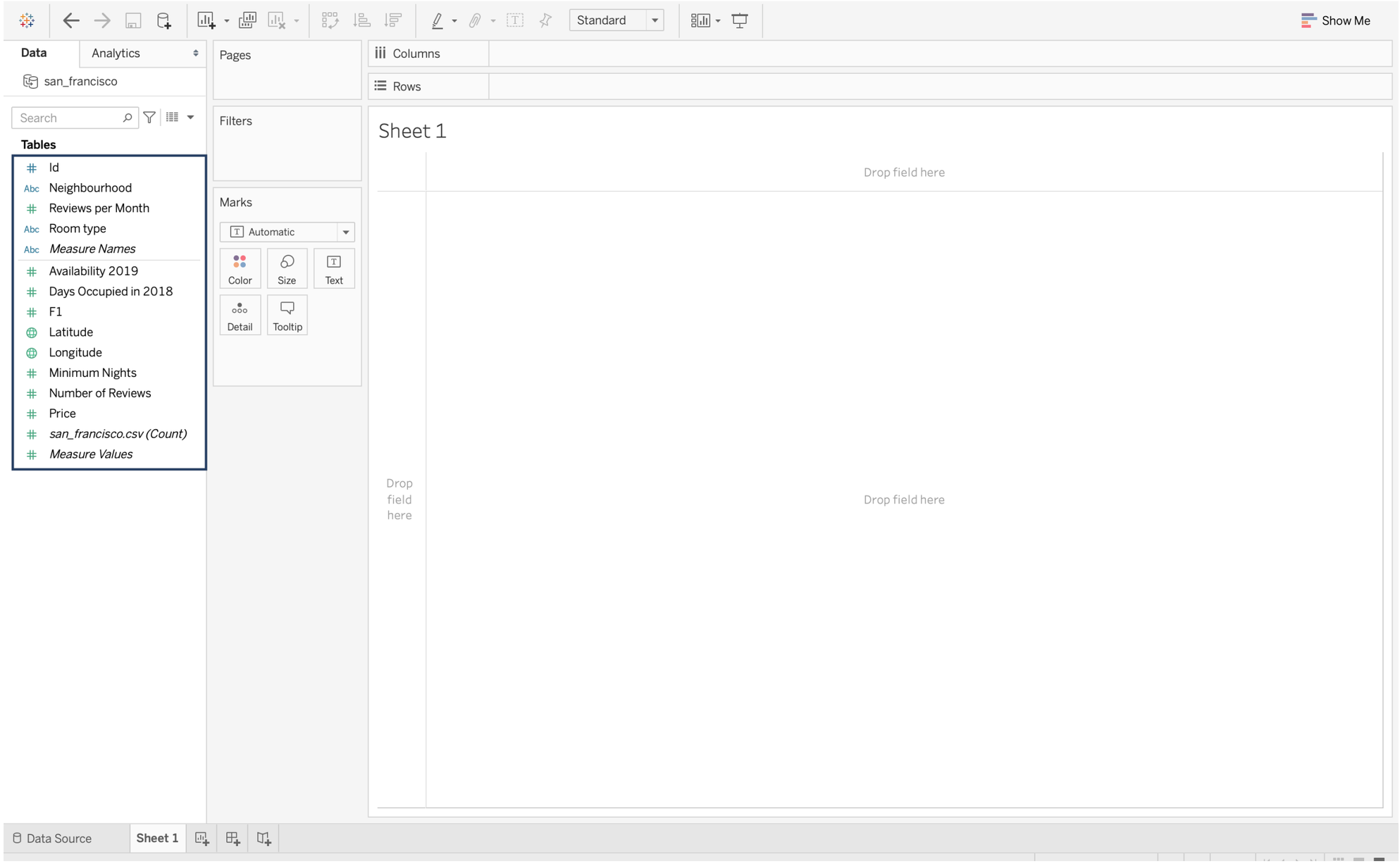
Navigating Tableau

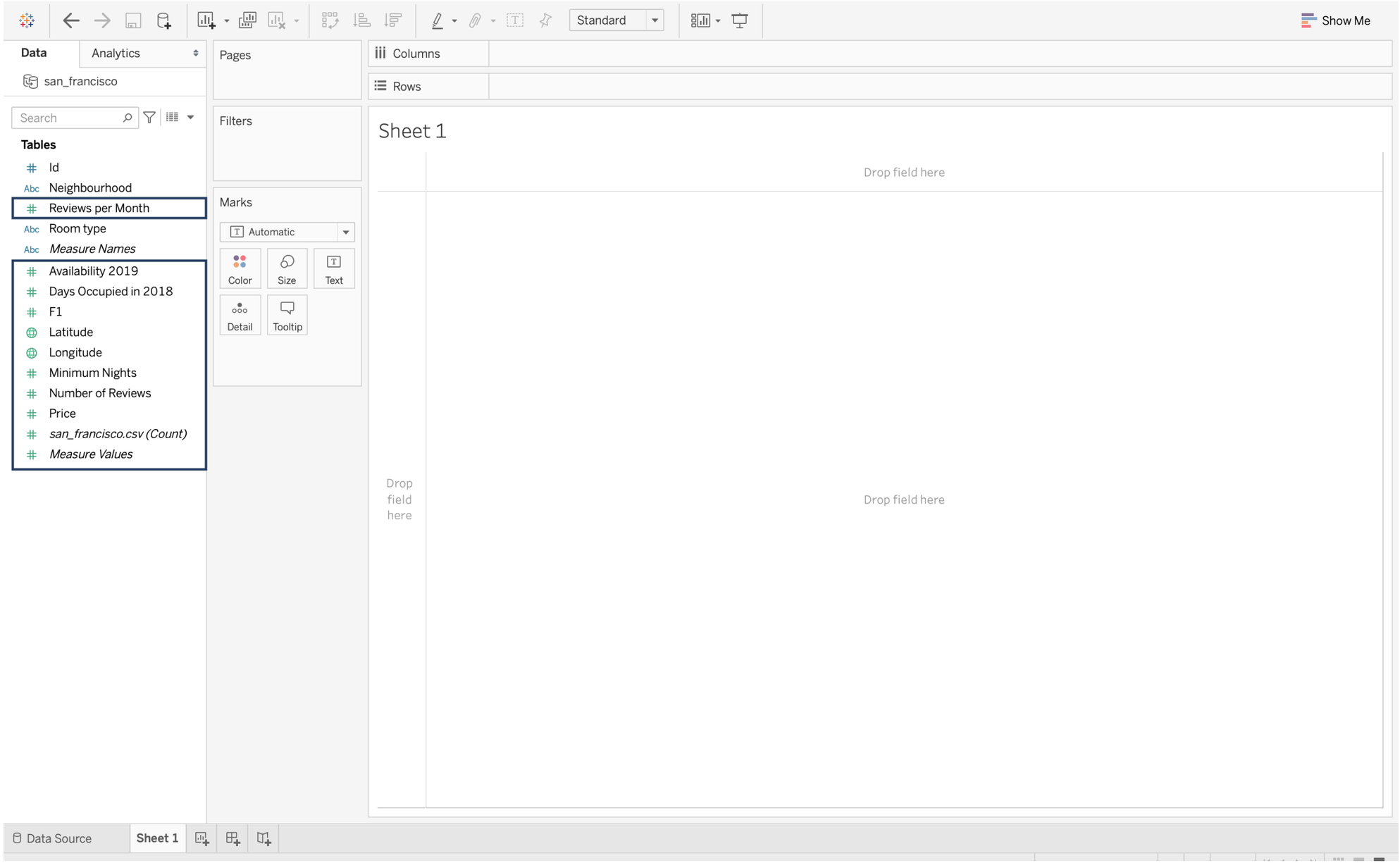
INTRODUCTION TO TABLEAU

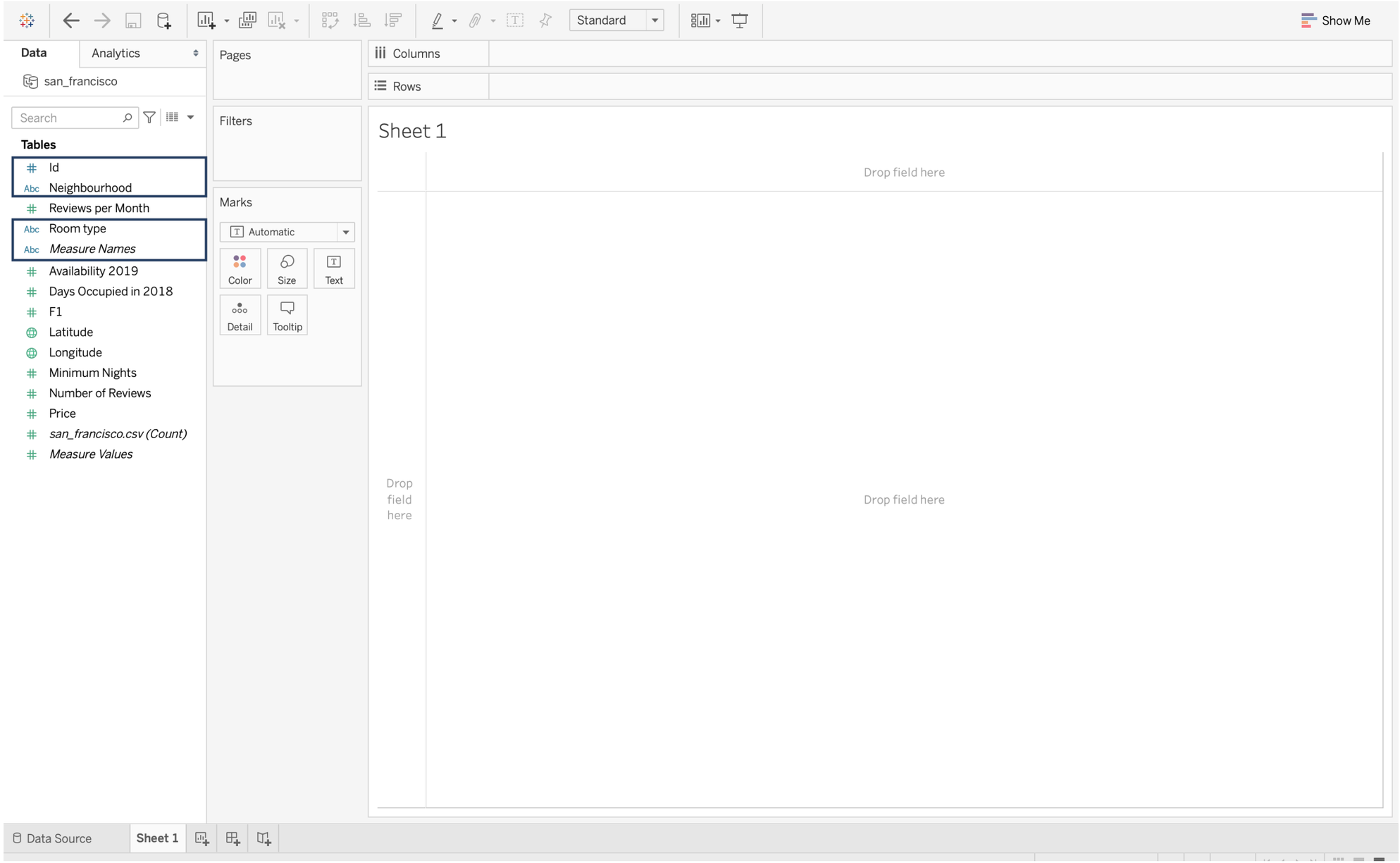
Hadrien Lacroix
Content Developer at DataCamp

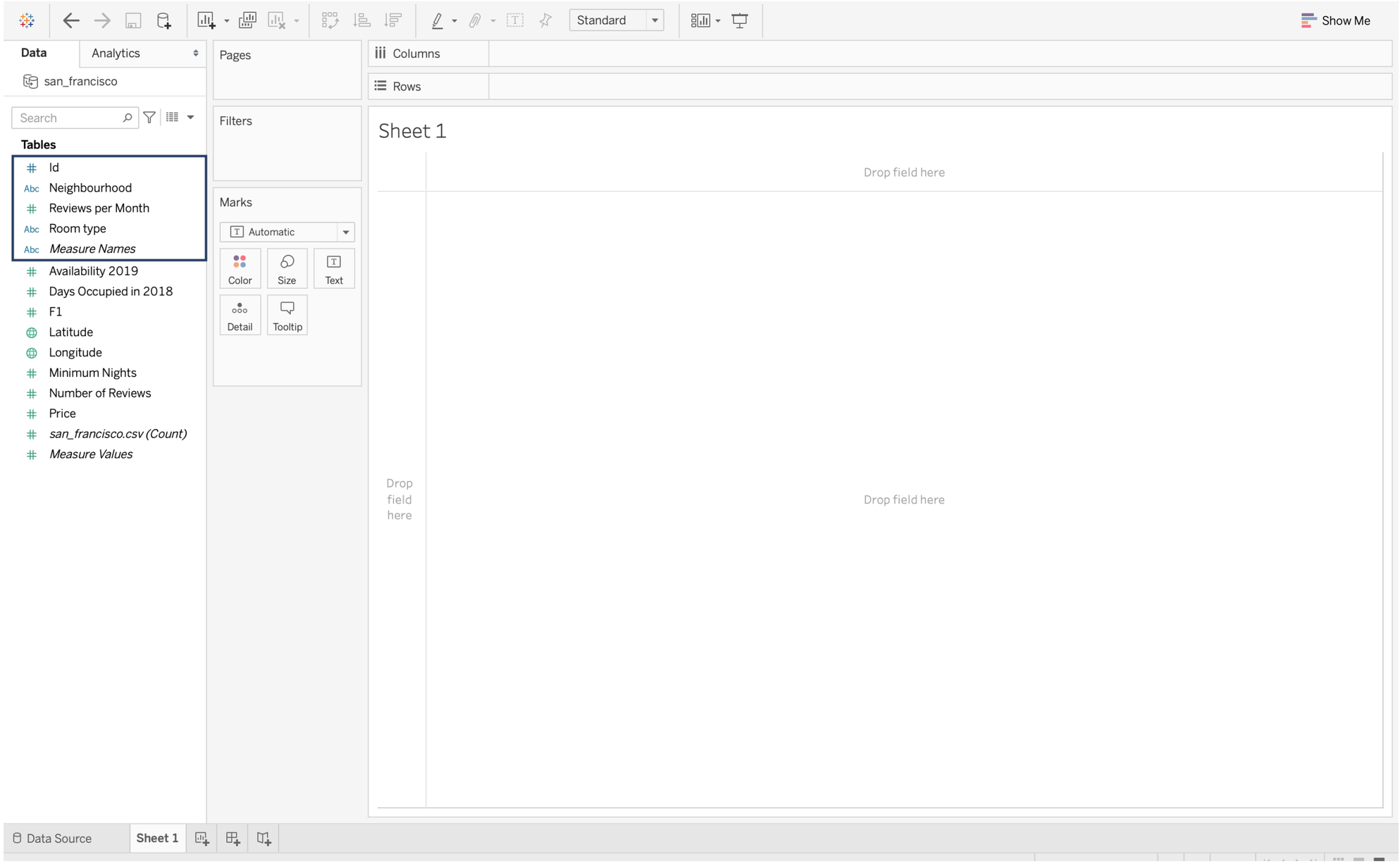

Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
Columns
Rows
Sheet 1
Drop field here
Drop field here
Drop field here
Data Source
Sheet 1

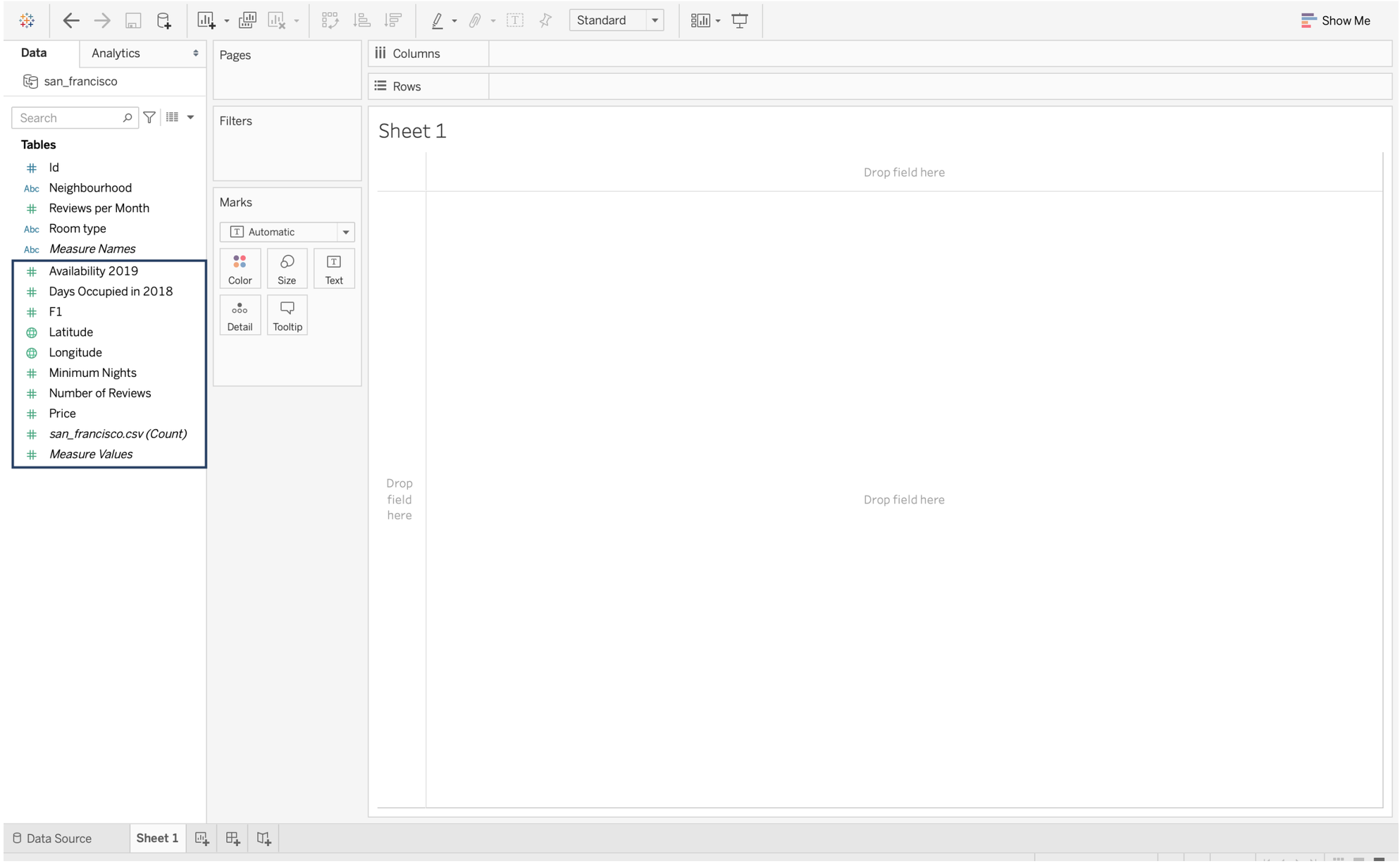

Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
Columns
Rows
Sheet 1
Drop field here
Drop field here
Drop field here
Data Source
Sheet 1


Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
Columns
Rows
Sheet 1
Drop field here
Drop field here
Drop field here
Data Source
Sheet 1


Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
Columns
Rows
Sheet 1
Drop field here
Drop field here
Drop field here
Data Source
Sheet 1

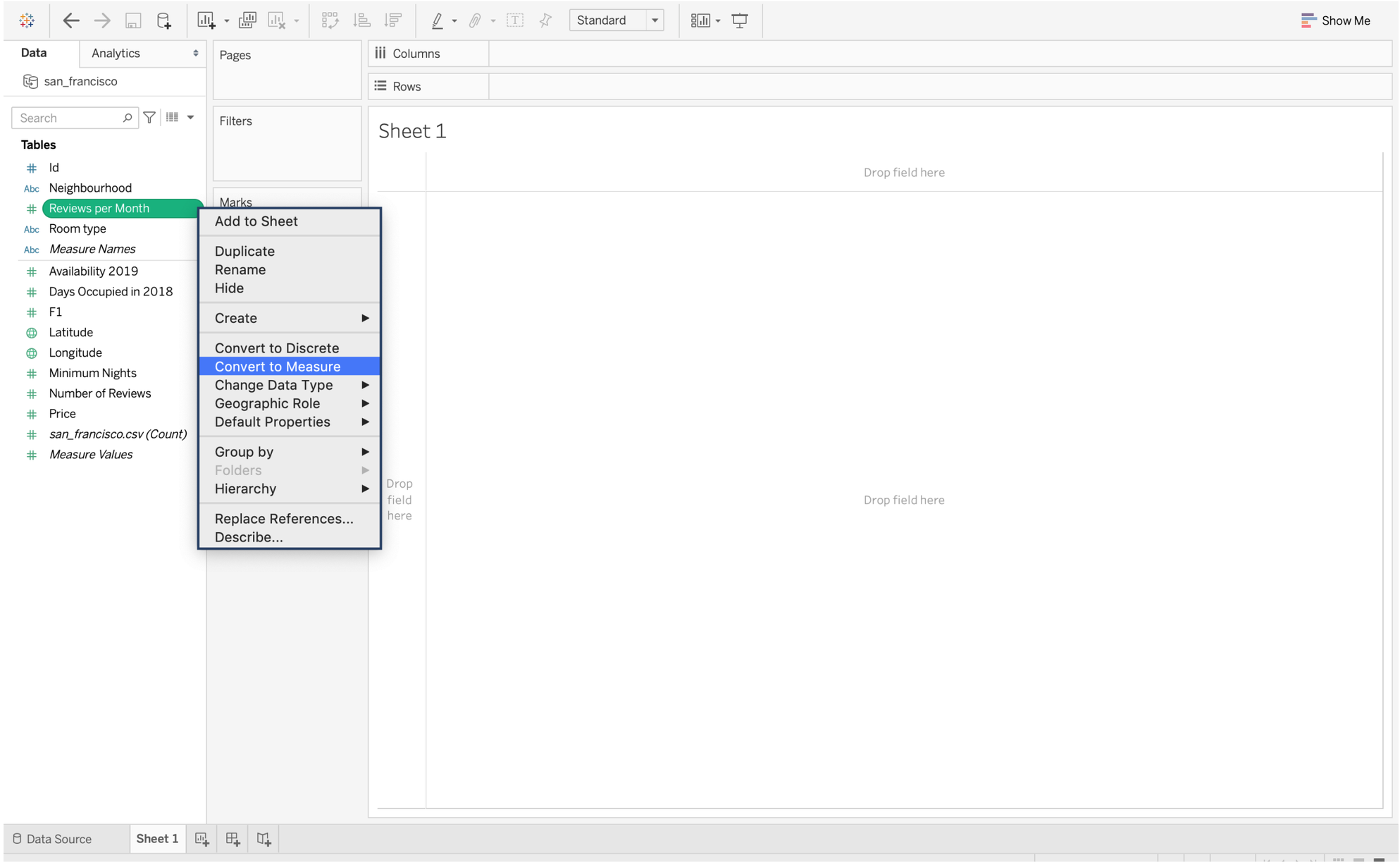

Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
Columns
Rows
Sheet 1
Drop field here
Drop field here
Drop field here
Data Source
Sheet 1

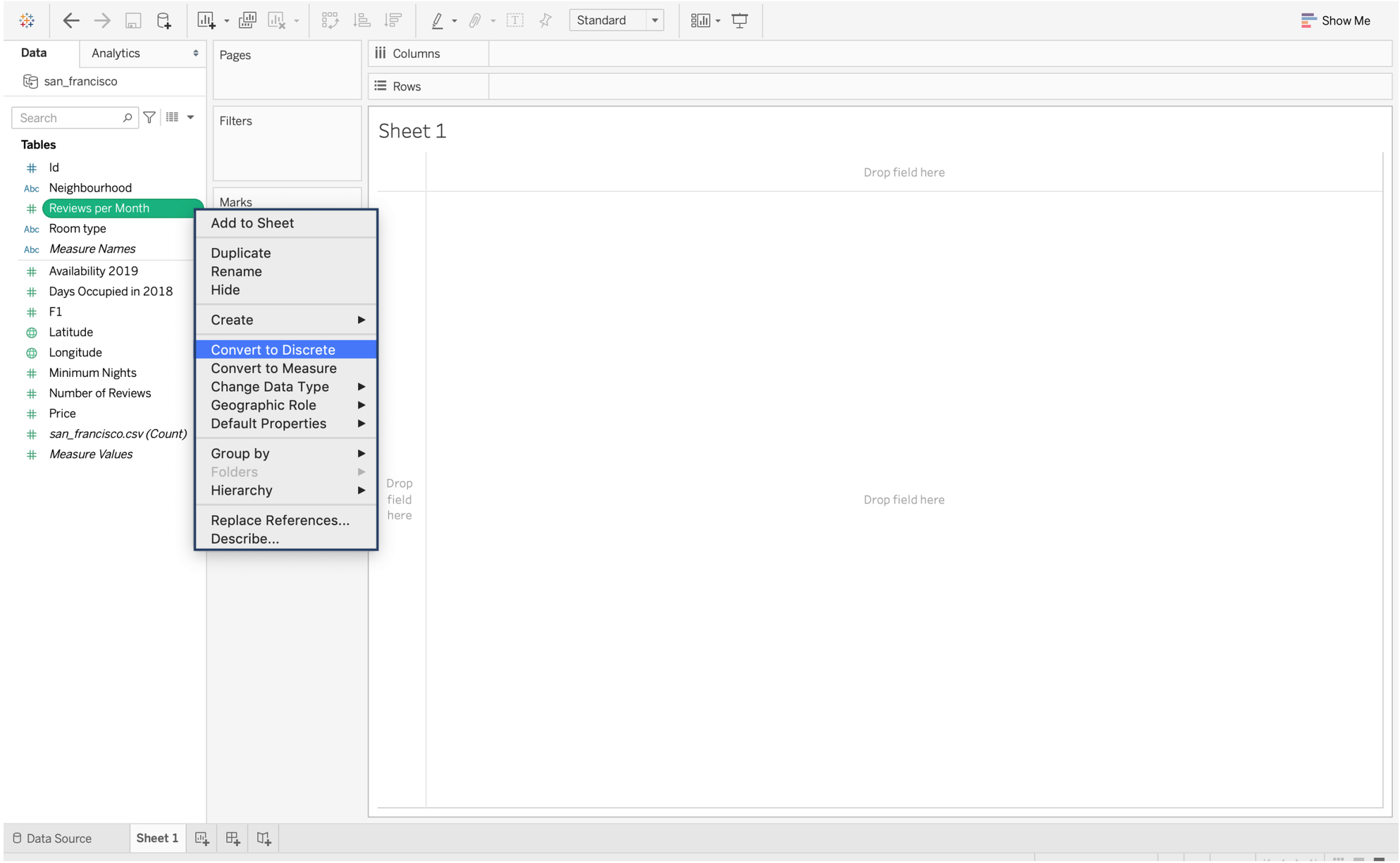

Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
Columns
Rows
Sheet 1
Drop field here
Drop field here
Drop field here
Data Source
Sheet 1

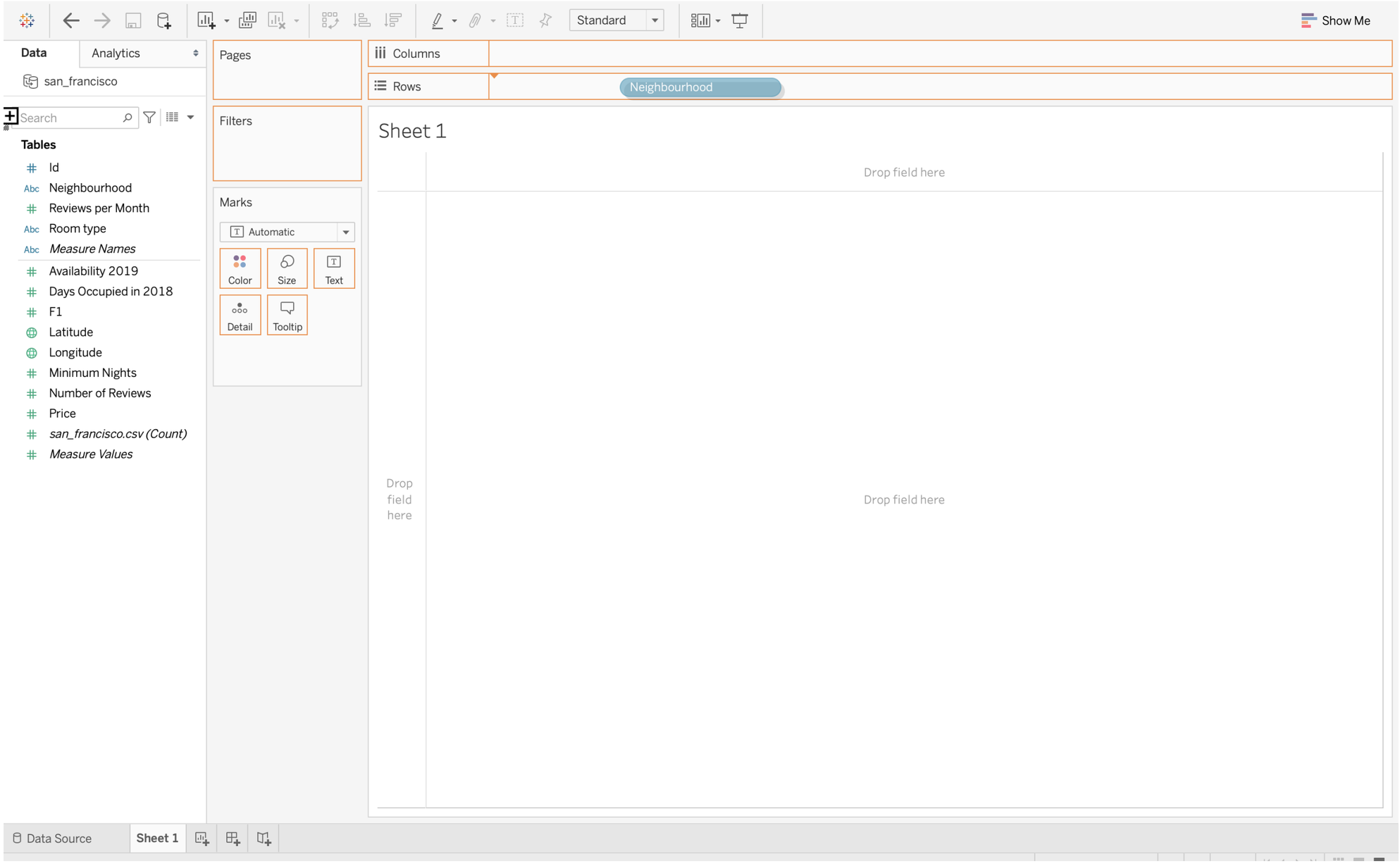

Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
Columns
Rows
Sheet 1
Drop field here
Drop field here
Drop field here
Data Source
Sheet 1

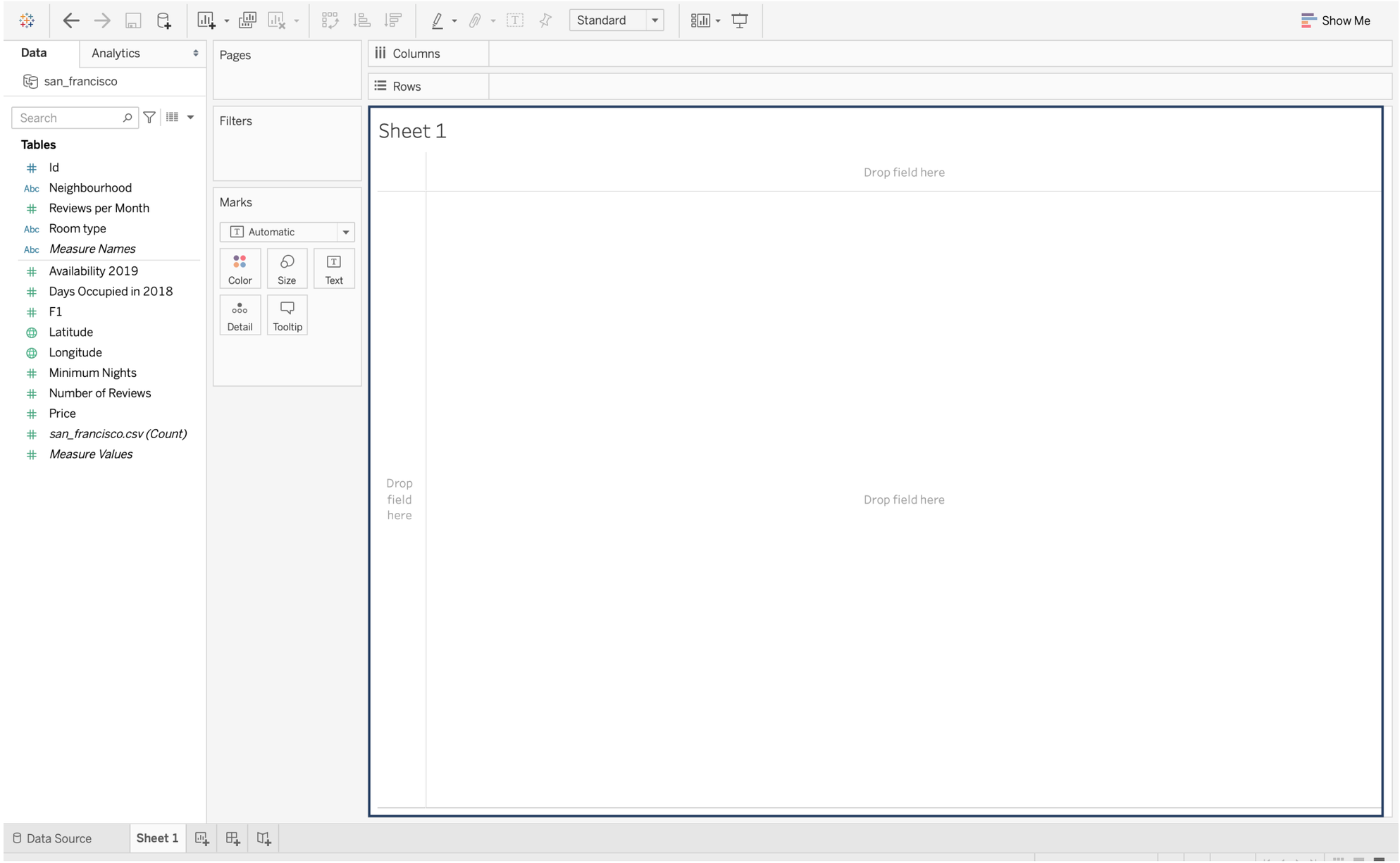
Segmenting with dimensions

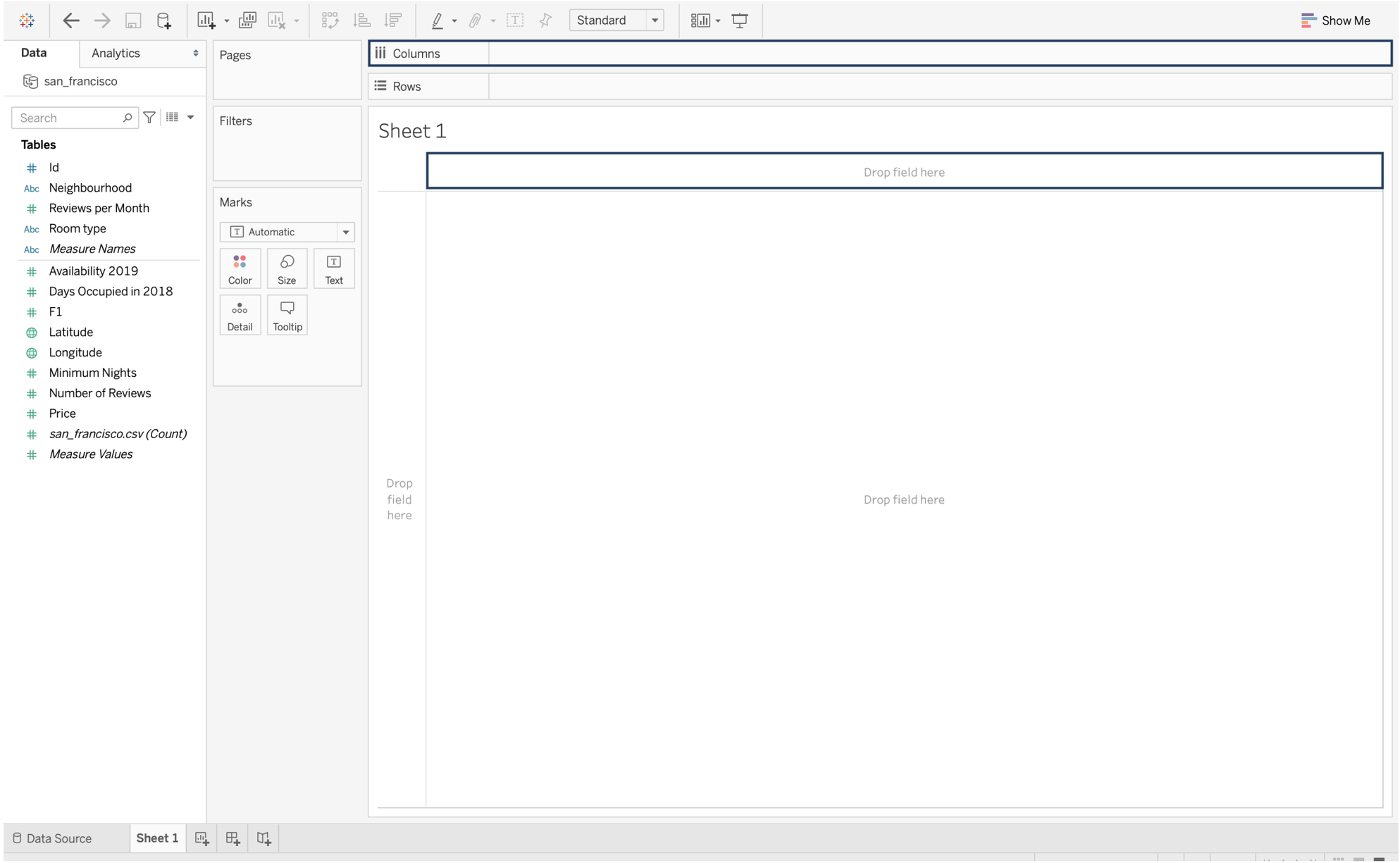
- Dimensions and measures affect visualizations differently:
  - Dimensions are used to **segment** data
  - Measures can be aggregated
- **Segmenting** = grouping similar data together
- For example: price per neighborhood, days occupied by room type

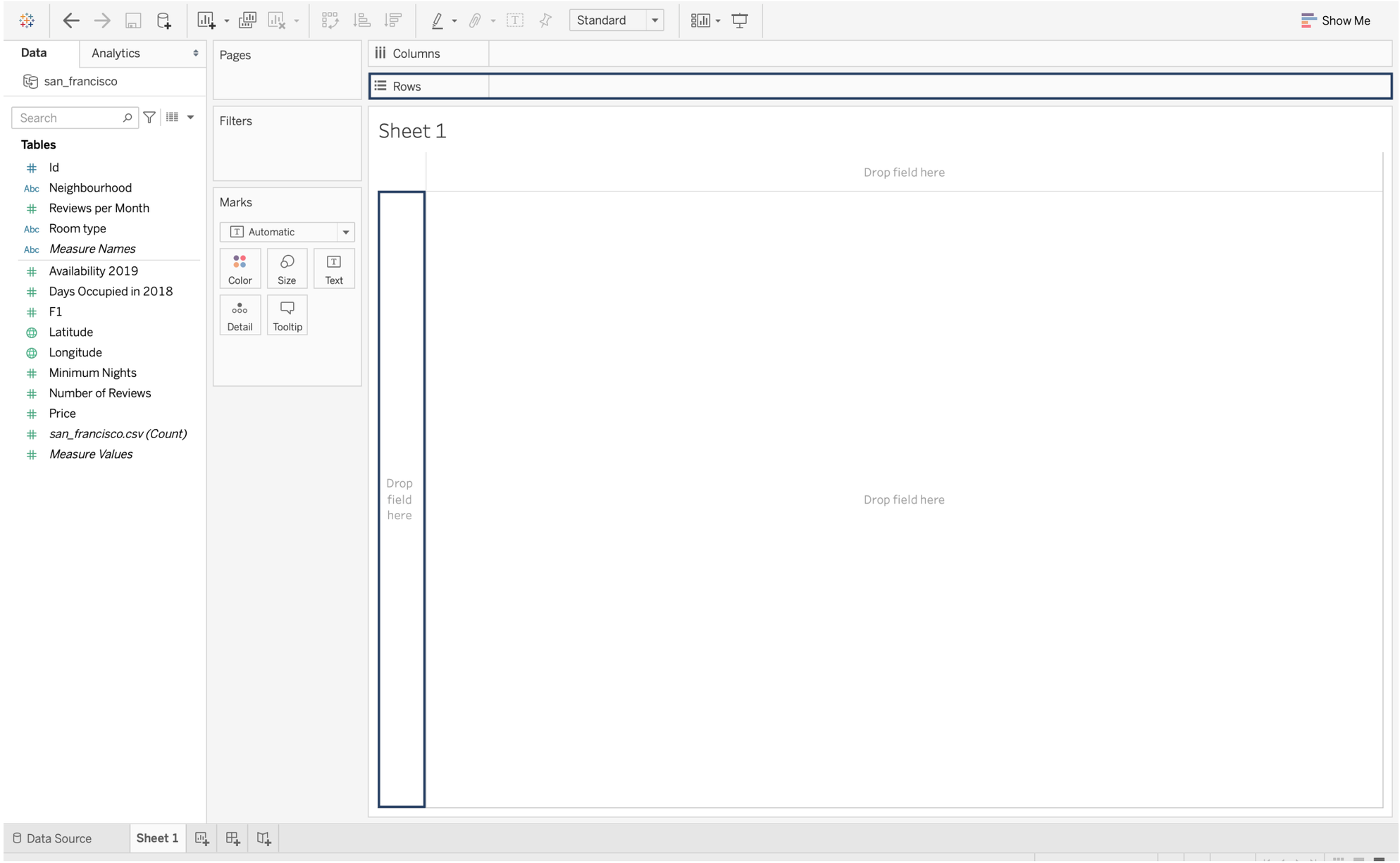

Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Columns
Rows
Sheet 1
Drop field here
Drop field here
Drop field here
Add to Sheet
Duplicate
Rename
Hide
Create
Convert to Discrete
Convert to Measure
Change Data Type
Geographic Role
Default Properties
Group by
Folders
Hierarchy
Replace References...
Describe...
Data Source
Sheet 1

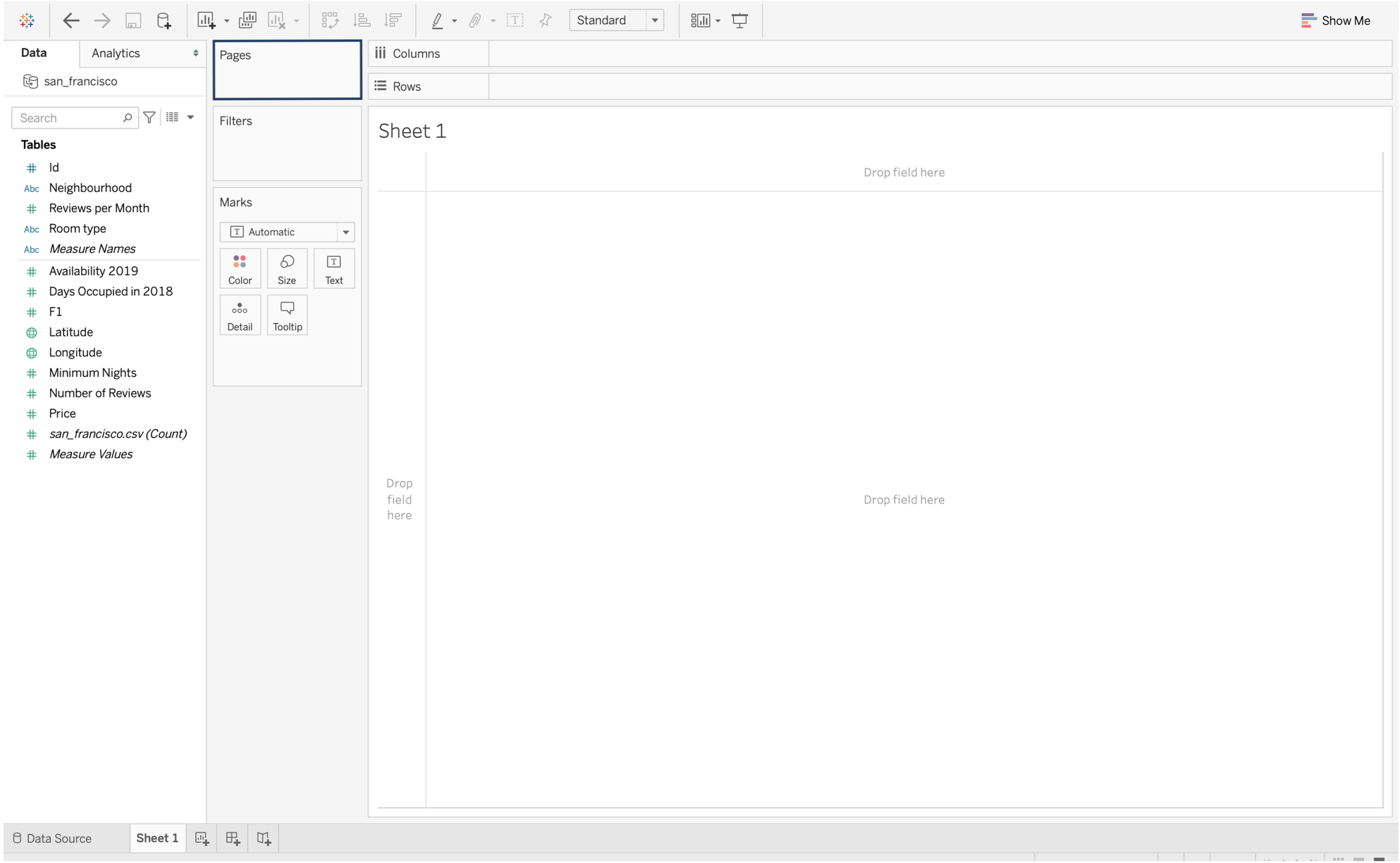

Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Columns
Rows
Sheet 1
Drop field here
Drop field here
Drop field here
Add to Sheet
Duplicate
Rename
Hide
Create
Convert to Discrete
Convert to Measure
Change Data Type
Geographic Role
Default Properties
Group by
Folders
Hierarchy
Replace References...
Describe...
Data Source
Sheet 1

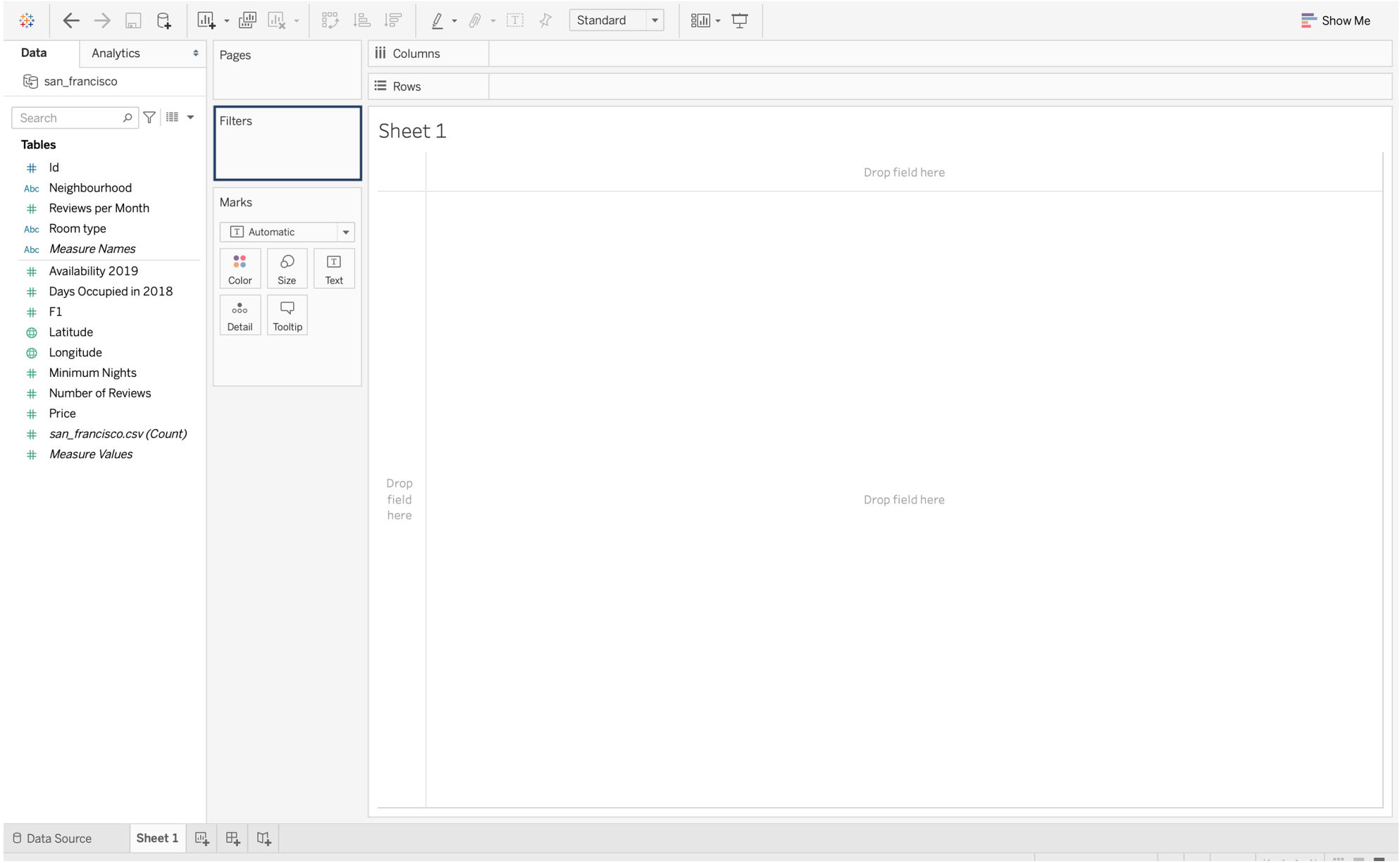

Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
Columns
Rows
Neighbourhood
Sheet 1
Drop field here
Drop field here
Drop field here
Data Source
Sheet 1

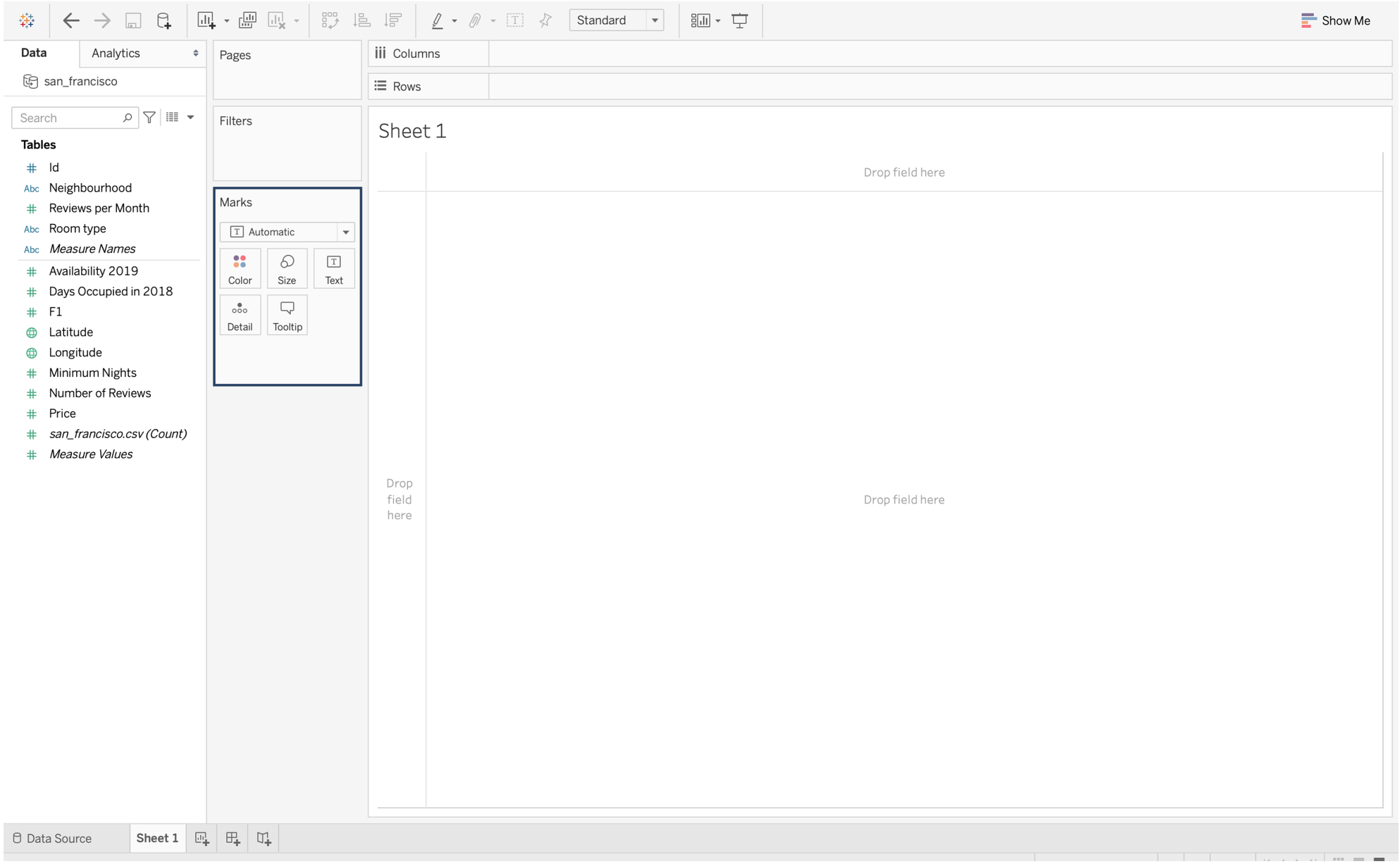

Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
Columns
Rows
Sheet 1
Drop field here
Drop field here
Drop field here
Data Source
Sheet 1

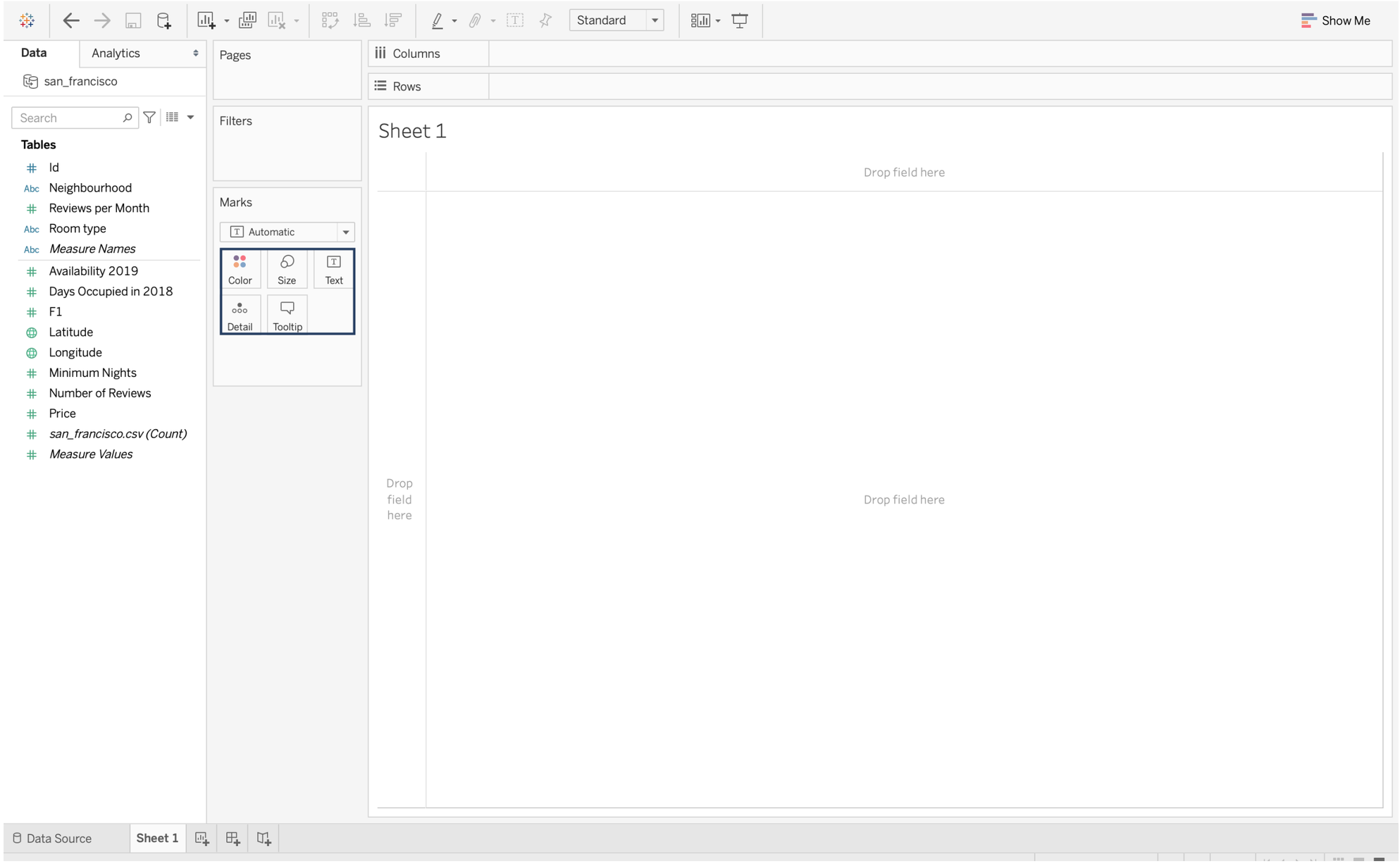

Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
Columns
Rows
Sheet 1
Drop field here
Drop field here
Drop field here
Data Source
Sheet 1

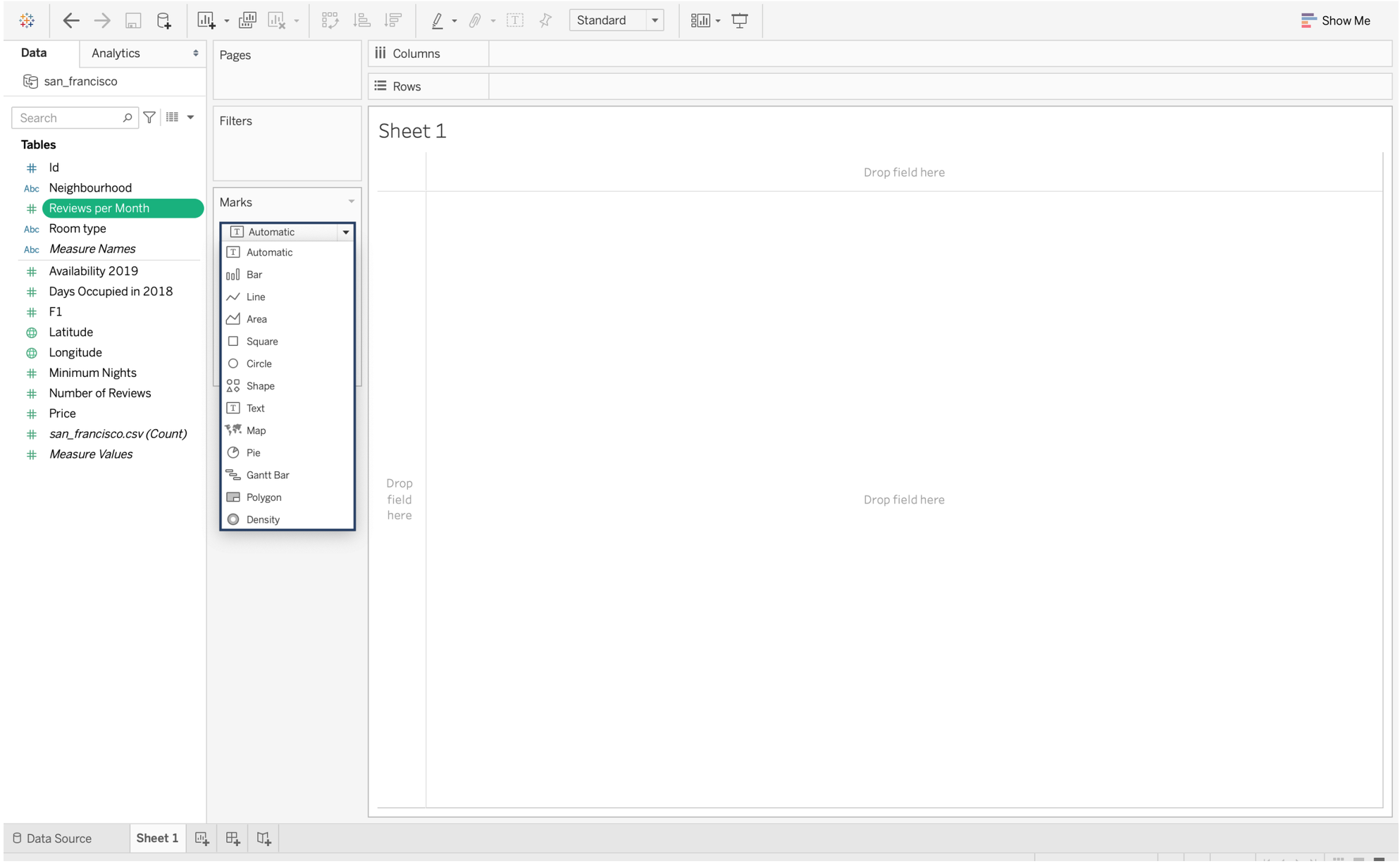

Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
Columns
Rows
Sheet 1
Drop field here
Drop field here
Drop field here
Data Source
Sheet 1

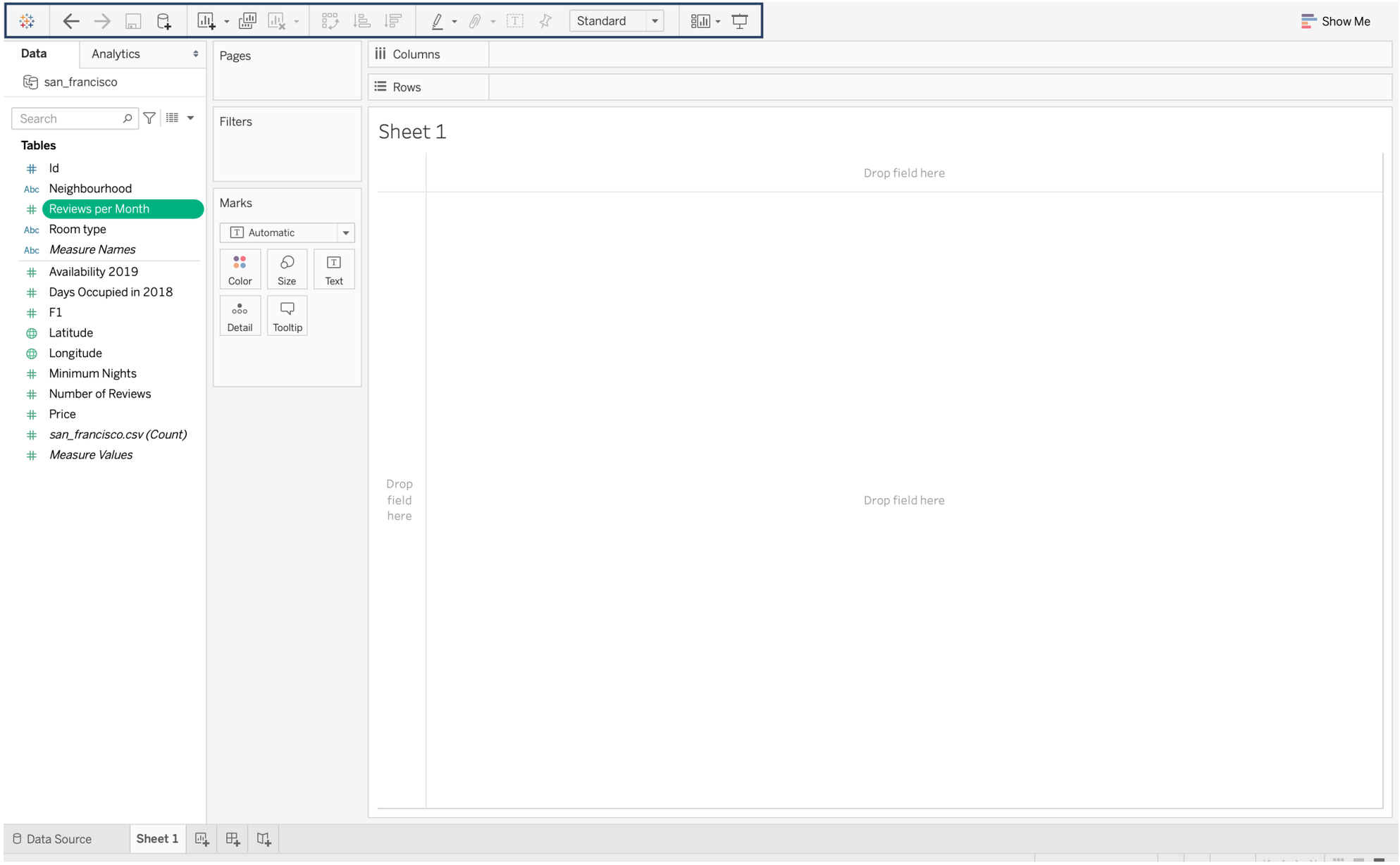

Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
Columns
Rows
Sheet 1
Drop field here
Drop field here
Drop field here
Data Source
Sheet 1


Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
Columns
Rows
Sheet 1
Drop field here
Drop field here
Drop field here
Data Source
Sheet 1


Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
Columns
Rows
Sheet 1
Drop field here
Drop field here
Drop field here
Data Source
Sheet 1


Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
Columns
Rows
Sheet 1
Drop field here
Drop field here
Drop field here
Data Source
Sheet 1


Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Automatic
Bar
Line
Area
Square
Circle
Shape
Text
Map
Pie
Gantt Bar
Polygon
Density
Columns
Rows
Sheet 1
Drop field here
Drop field here
Drop field here
Data Source
Sheet 1


Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
Columns
Rows
Sheet 1
Drop field here
Drop field here
Drop field here
Data Source
Sheet 1

Our business question

Which neighborhood and room type has the highest price on Airbnb listings?

Let's practice!

INTRODUCTION TO TABLEAU

A tour of the interface

INTRODUCTION TO TABLEAU

Hadrien Lacroix
Content Developer at DataCamp

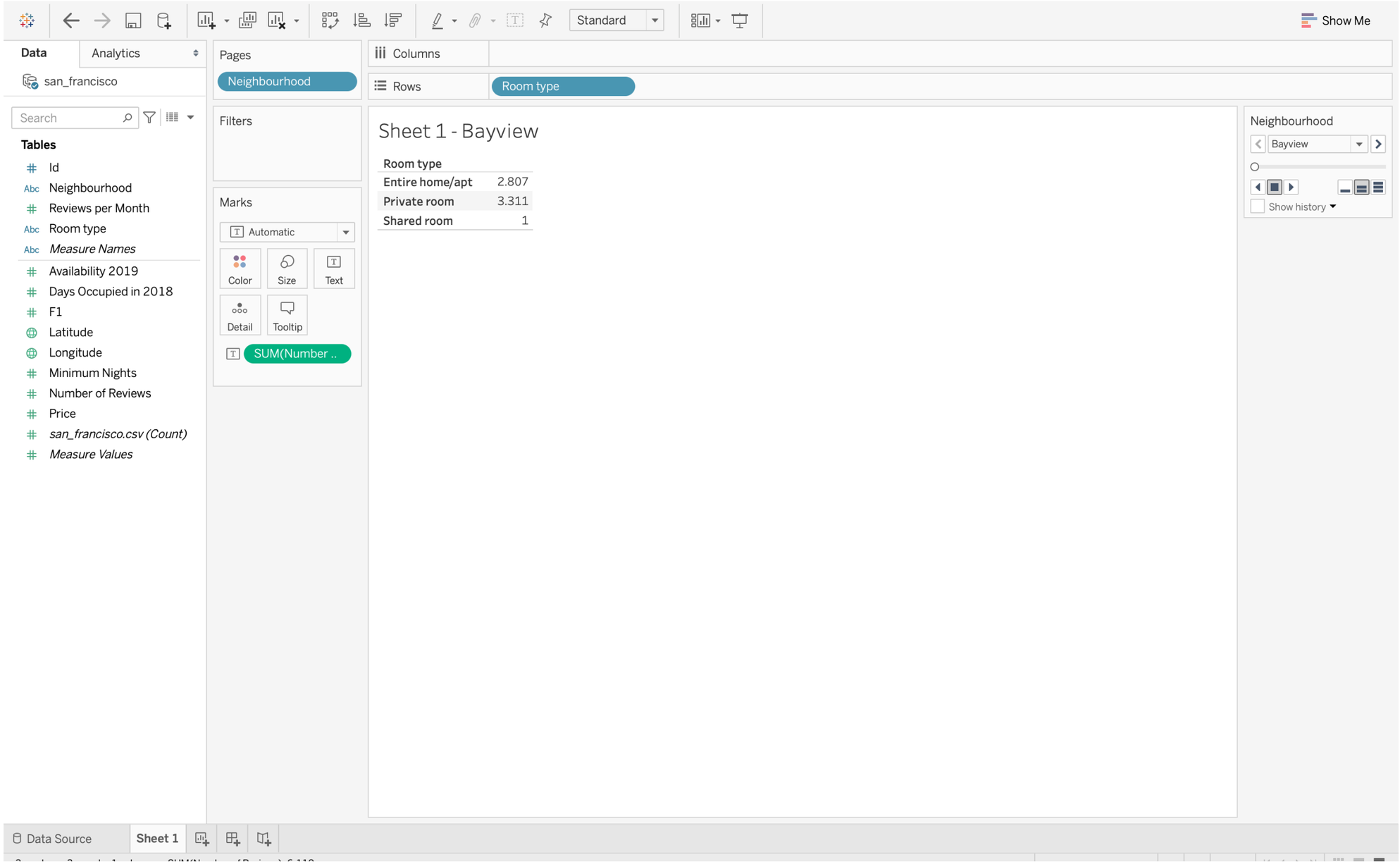
Let's practice!

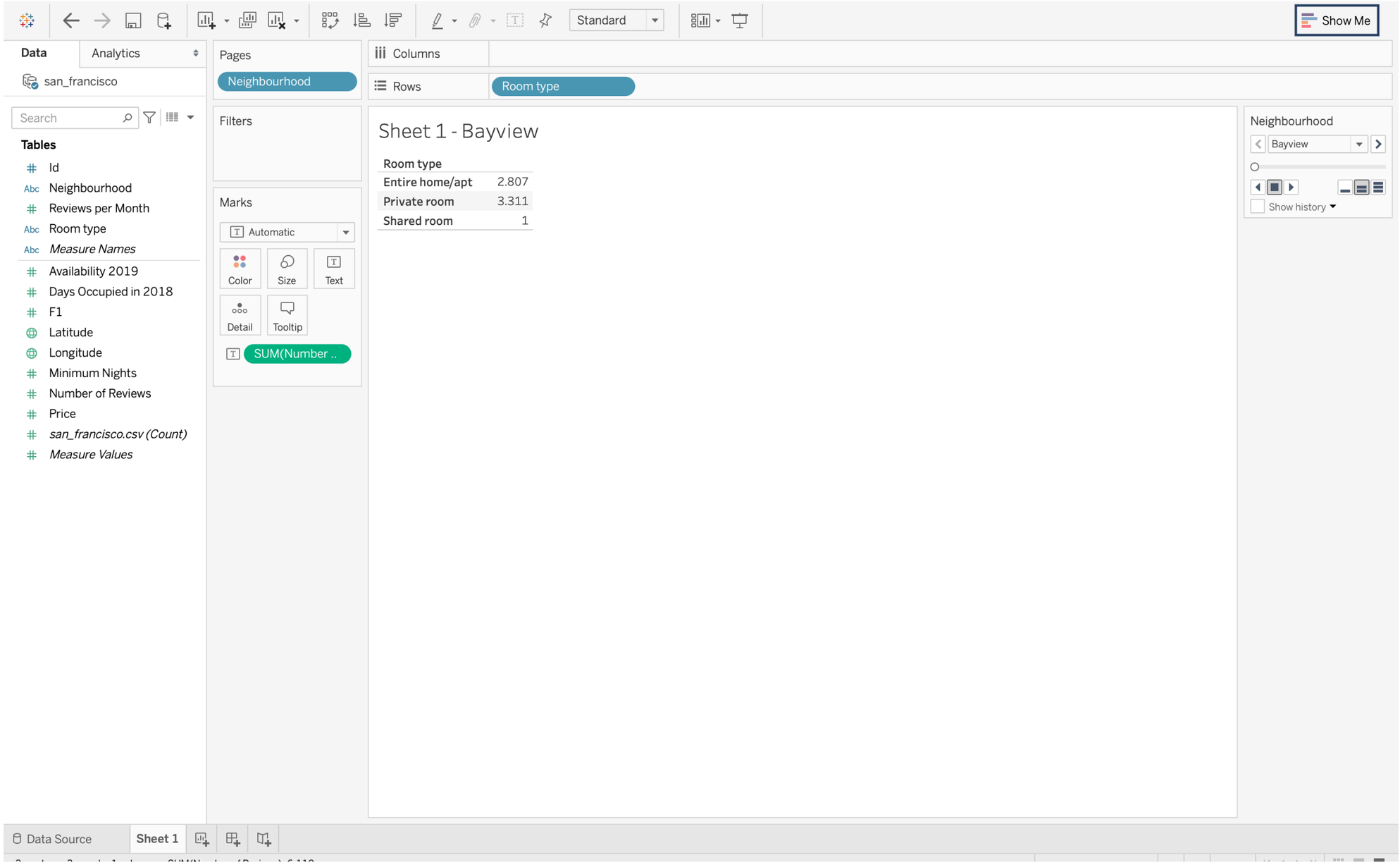
INTRODUCTION TO TABLEAU

Your first visualization

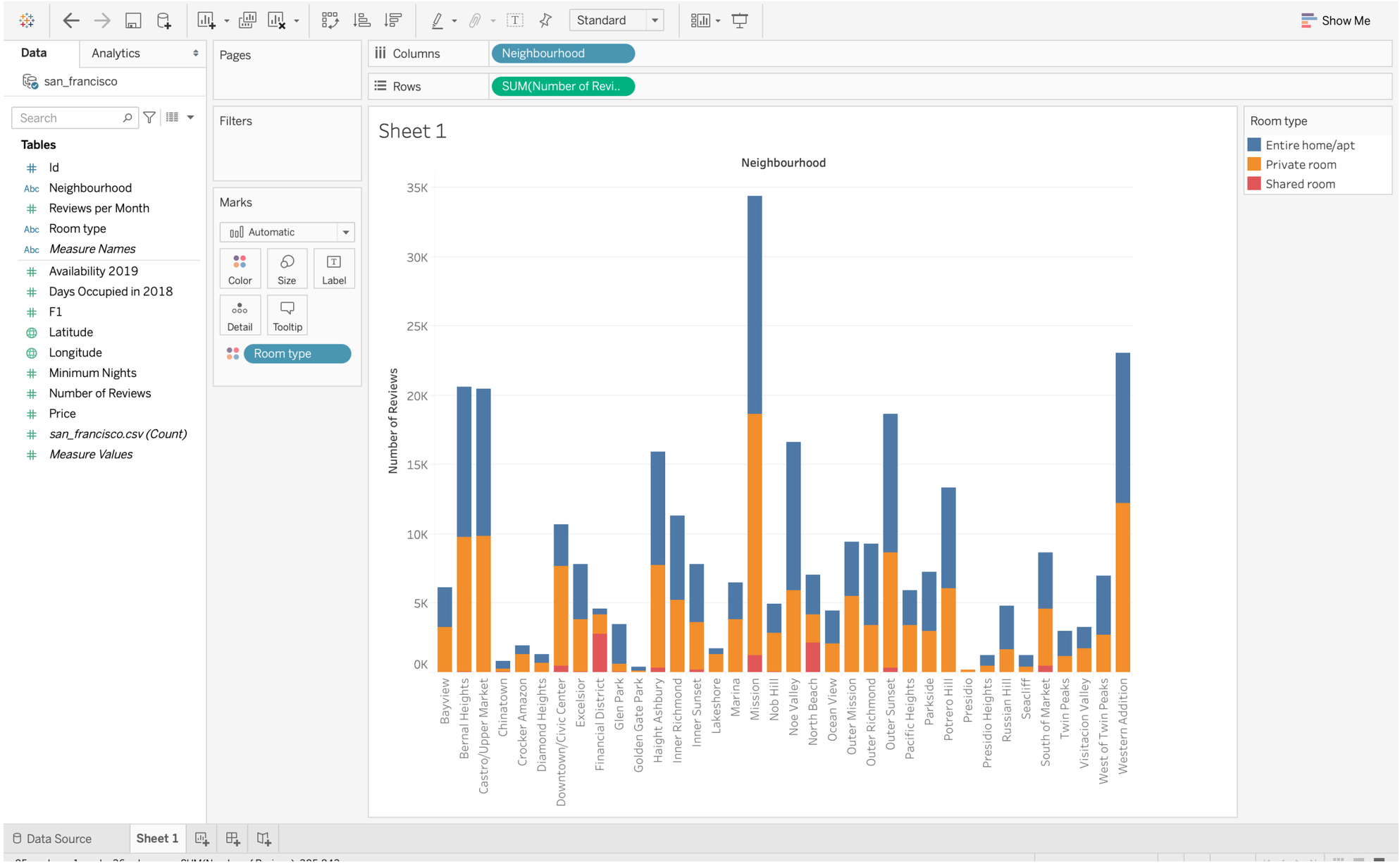
INTRODUCTION TO TABLEAU

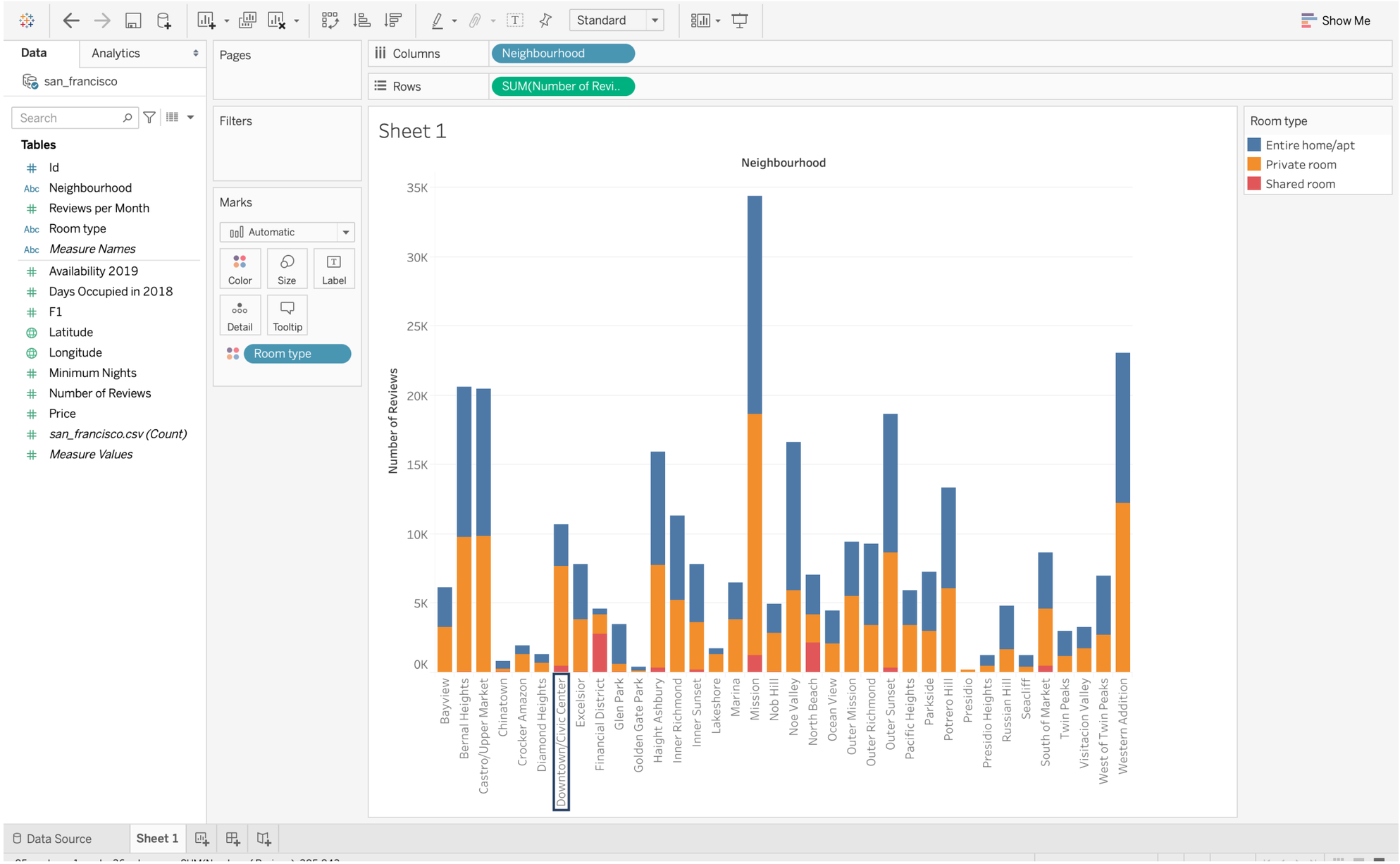
Hadrien Lacroix
Content Developer at DataCamp

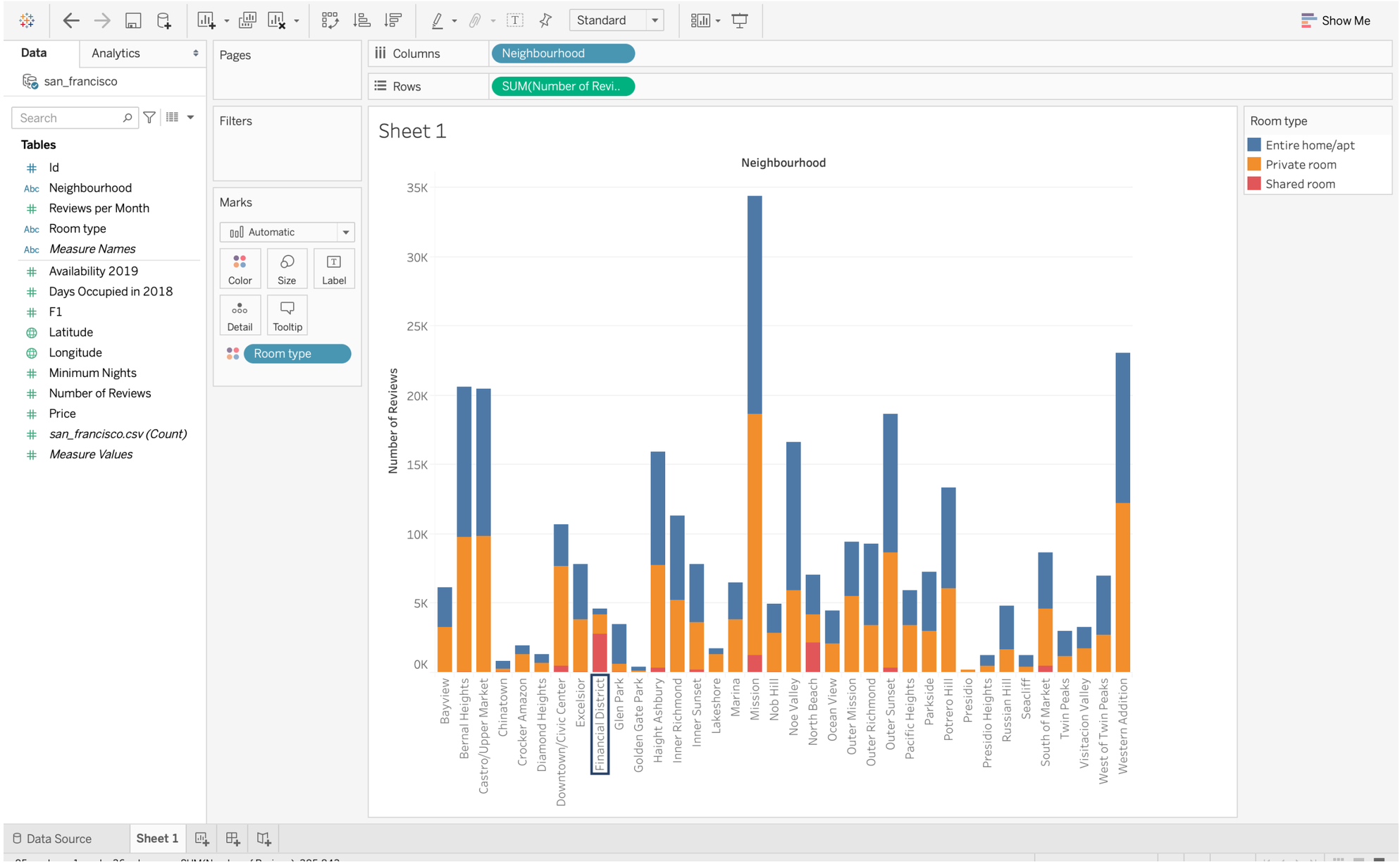

Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Neighbourhood
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
SUM(Number ..
Columns
Rows
Room type
Sheet 1 - Bayview
Room type
Entire home/apt 2.807
Private room 3.311
Shared room 1
Neighbourhood
Bayview
Show history
Data Source
Sheet 1

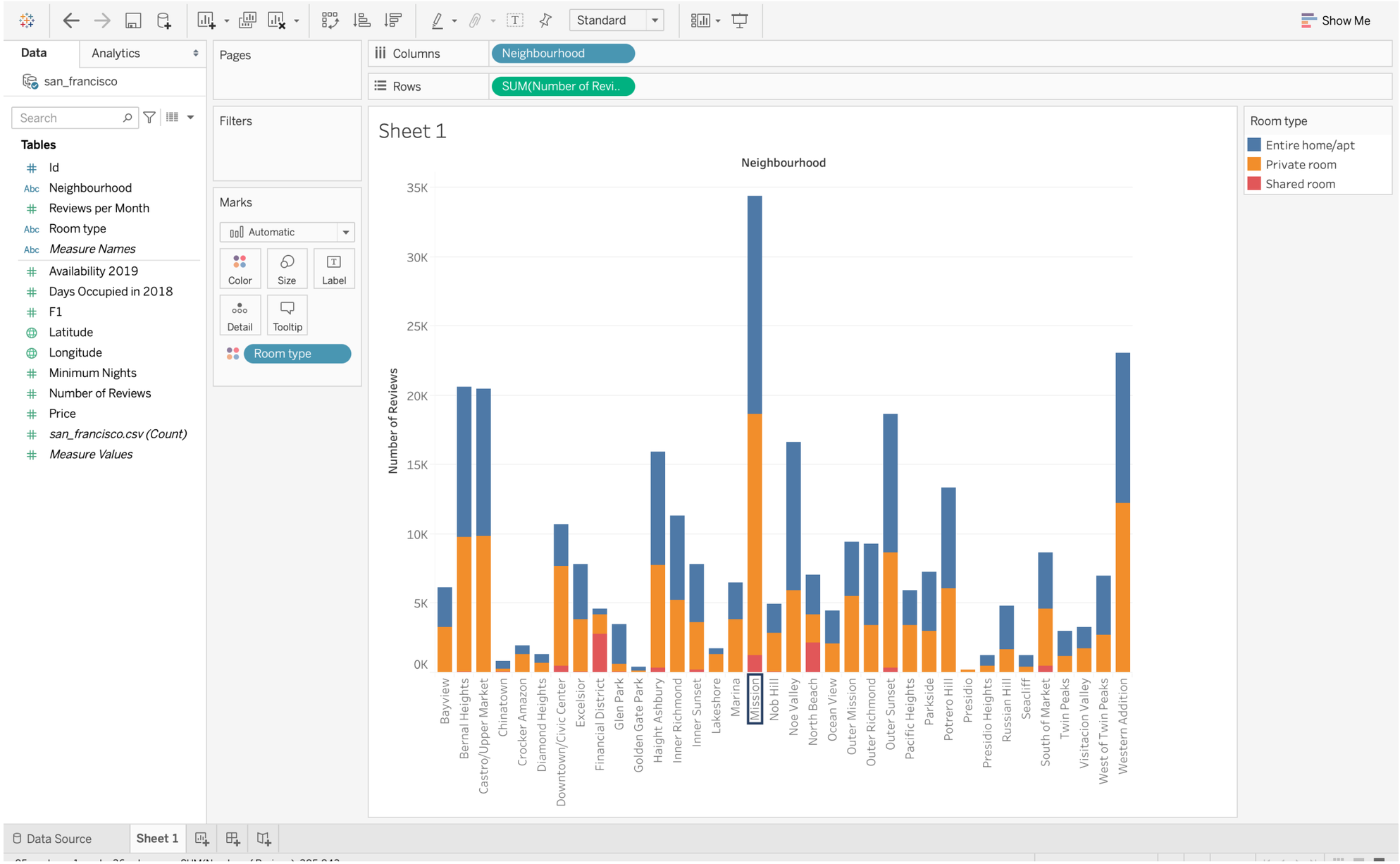

Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Neighbourhood
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
SUM(Number ..
Columns
Rows
Room type
Sheet 1 - Bayview
Room type
Entire home/apt 2.807
Private room 3.311
Shared room 1
Neighbourhood
Bayview
Show history
Data Source
Sheet 1


Show Me
For **horizontal bars** try
0 or more Dimensions
1 or more Measures


Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Label
Detail
Tooltip
Room type
Columns
Neighbourhood
Rows
SUM(Number of Revi..
Sheet 1
Neighbourhood
Number of Reviews
35K
30K
25K
20K
15K
10K
5K
0K
Bayview
Bernal Heights
Castro/Upper Market
Chinatown
Crocker Amazon
Diamond Heights
Downtown/Civic Center
Excelsior
Financial District
Glen Park
Golden Gate Park
Haight Ashbury
Inner Richmond
Inner Sunset
Lakeshore
Marina
Mission
Nob Hill
Noe Valley
North Beach
Ocean View
Outer Mission
Outer Richmond
Outer Sunset
Pacific Heights
Parkside
Potrero Hill
Presidio
Presidio Heights
Russian Hill
Seacliff
South of Market
Twin Peaks
Visitacion Valley
West of Twin Peaks
Western Addition
Room type
Entire home/apt
Private room
Shared room
Data Source
Sheet 1


Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Label
Detail
Tooltip
Room type
Columns
Neighbourhood
Rows
SUM(Number of Revi..
Sheet 1
Neighbourhood
Number of Reviews
35K
30K
25K
20K
15K
10K
5K
0K
Bayview
Bernal Heights
Castro/Upper Market
Chinatown
Crocker Amazon
Diamond Heights
Downtown/Civic Center
Excelsior
Financial District
Glen Park
Golden Gate Park
Haight Ashbury
Inner Richmond
Inner Sunset
Lakeshore
Marina
Mission
Nob Hill
Noe Valley
North Beach
Ocean View
Outer Mission
Outer Richmond
Outer Sunset
Pacific Heights
Parkside
Potrero Hill
Presidio
Presidio Heights
Russian Hill
Seacliff
South of Market
Twin Peaks
Visitacion Valley
West of Twin Peaks
Western Addition
Room type
Entire home/apt
Private room
Shared room
Data Source
Sheet 1


Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Label
Detail
Tooltip
Room type
Columns
Neighbourhood
Rows
SUM(Number of Revi..
Sheet 1
Neighbourhood
Number of Reviews
35K
30K
25K
20K
15K
10K
5K
0K
Bayview
Bernal Heights
Castro/Upper Market
Chinatown
Crocker Amazon
Diamond Heights
Downtown/Civic Center
Excelsior
Financial District
Glen Park
Golden Gate Park
Haight Ashbury
Inner Richmond
Inner Sunset
Lakeshore
Marina
Mission
Nob Hill
Noe Valley
North Beach
Ocean View
Outer Mission
Outer Richmond
Outer Sunset
Pacific Heights
Parkside
Potrero Hill
Presidio
Presidio Heights
Russian Hill
Seacliff
South of Market
Twin Peaks
Visitacion Valley
West of Twin Peaks
Western Addition
Room type
Entire home/apt
Private room
Shared room
Data Source
Sheet 1


Standard
Show Me
Data
Analytics
san_francisco
Search
Tables
Id
Neighbourhood
Reviews per Month
Room type
Measure Names
Availability 2019
Days Occupied in 2018
F1
Latitude
Longitude
Minimum Nights
Number of Reviews
Price
san_francisco.csv (Count)
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Label
Detail
Tooltip
Room type
Columns
Neighbourhood
Rows
SUM(Number of Revi..
Sheet 1
Neighbourhood
Number of Reviews
35K
30K
25K
20K
15K
10K
5K
0K
Bayview
Bernal Heights
Castro/Upper Market
Chinatown
Crocker Amazon
Diamond Heights
Downtown/Civic Center
Excelsior
Financial District
Glen Park
Golden Gate Park
Haight Ashbury
Inner Richmond
Inner Sunset
Lakeshore
Marina
Mission
Nob Hill
Noe Valley
North Beach
Ocean View
Outer Mission
Outer Richmond
Outer Sunset
Pacific Heights
Parkside
Potrero Hill
Presidio
Presidio Heights
Russian Hill
Seacliff
South of Market
Twin Peaks
Visitacion Valley
West of Twin Peaks
Western Addition
Room type
Entire home/apt
Private room
Shared room
Data Source
Sheet 1

Let's practice!

INTRODUCTION TO TABLEAU

Building and improving visualizations

INTRODUCTION TO TABLEAU

Hadrien Lacroix
Content Developer at DataCamp

Let's practice!

INTRODUCTION TO TABLEAU