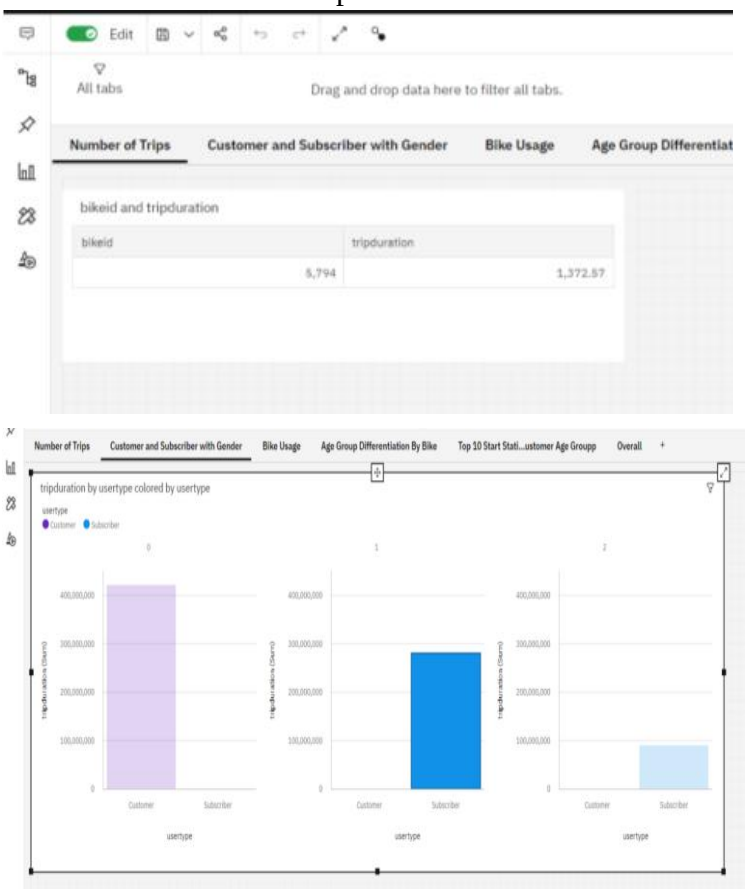
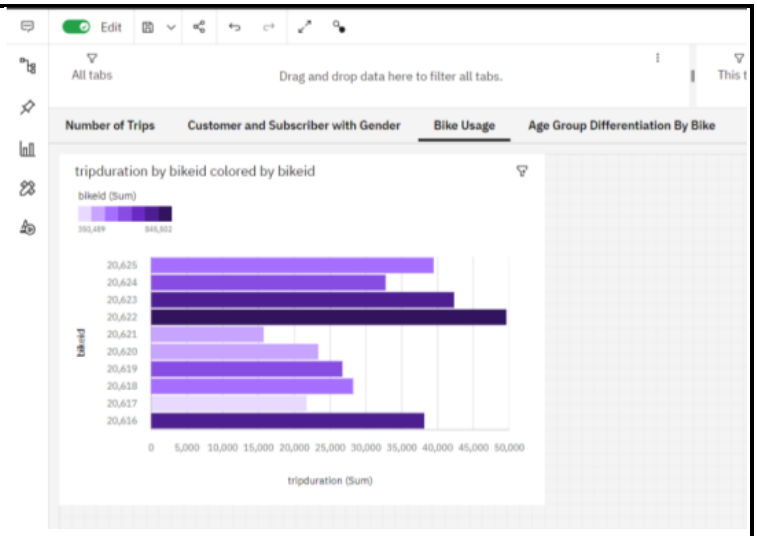
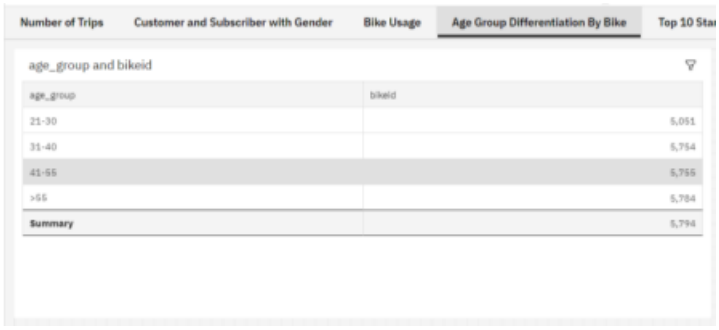
Project Development Phase
Model Performance Test

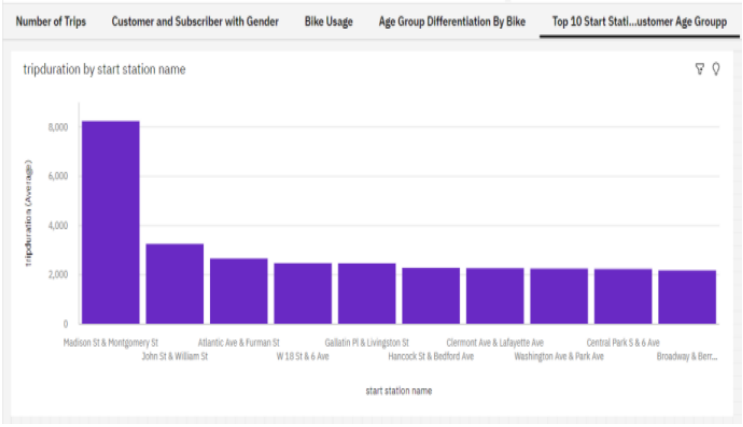
Date	10 November 2022
Team ID	PNT2022TMID22565
Project Name	A New hint to transportation - Analysis of the NYC bike share system
Team Lead	Mahesh S M
Team Members	Pranav M Kabilraj S Robert Samuel J
Maximum Marks	10 Marks

Model Performance Testing:

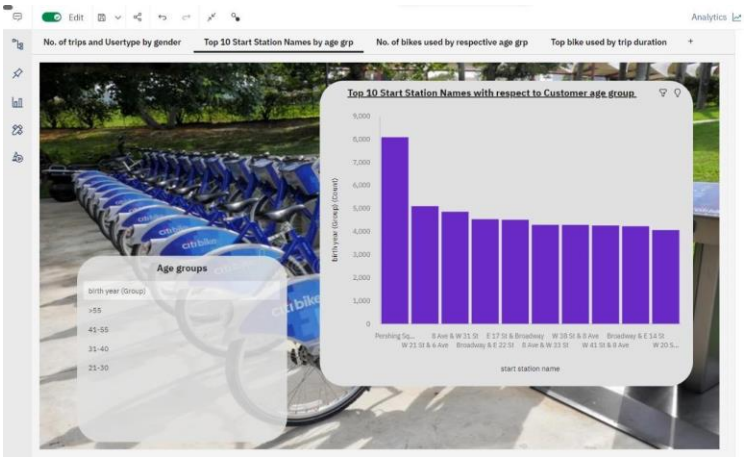
S.No.	Parameter	Screenshot / Values
1.	Dashboard design	No of Visualizations / Graphs - 5 and 1 Dashboard 


Edit
All tabs
Drag and drop data here to filter all tabs.
Number of Trips
Customer and Subscriber with Gender
Bike Usage
Age Group Differentiation By Bike
tripduration by bikeid colored by bikeid
bikeid (Sum)
360,489
849,802
20,625
20,624
20,623
20,622
20,621
20,620
20,619
20,618
20,617
20,616
bikeid
0
5,000
10,000
15,000
20,000
25,000
30,000
35,000
40,000
45,000
50,000
tripduration (Sum)

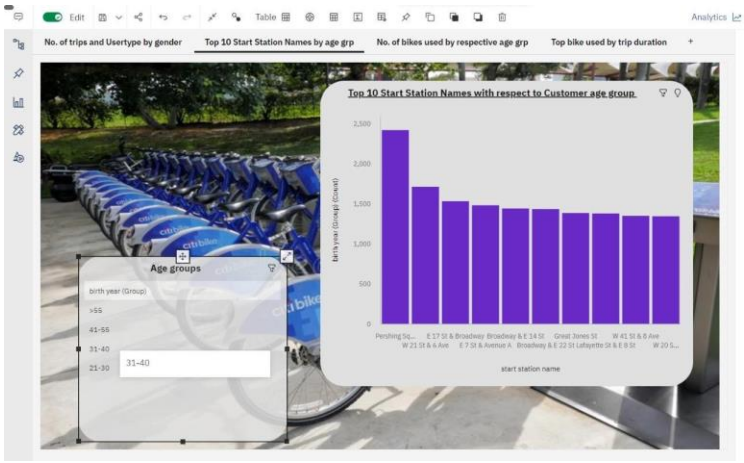

Number of Trips
Customer and Subscriber with Gender
Bike Usage
Age Group Differentiation By Bike
Top 10 Sta
age_group and bikeid
age_group
bikeid
21-30
5,051
31-40
5,754
41-55
5,755
>55
5,784
Summary
5,794

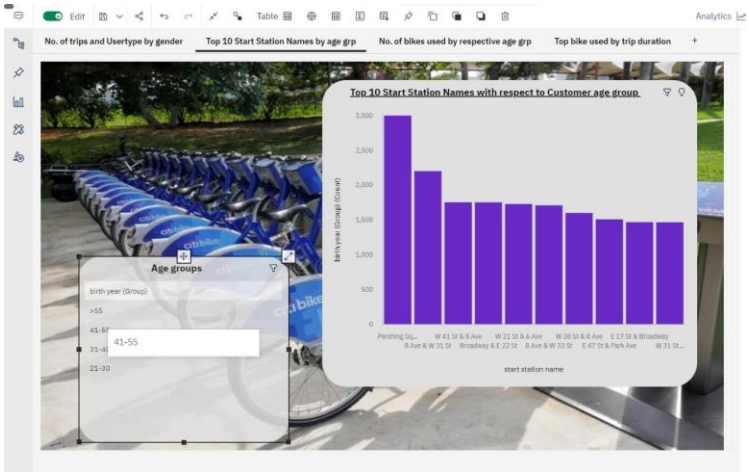

Number of Trips
Customer and Subscriber with Gender
Bike Usage
Age Group Differentiation By Bike
Top 10 Start Stati...ustomer Age Groupp
tripduration by start station name
8,000
6,000
4,000
2,000
0
tripduration (Average)
Madison St & Montgomery St
John St & William St
Atlantic Ave & Furman St
W 18 St & 6 Ave
Gallatin Pl & Livingston St
Hancock St & Bedford Ave
Clermont Ave & Lafayette Ave
Washington Ave & Park Ave
Central Park S & 6 Ave
Broadway & Berr...
start station name

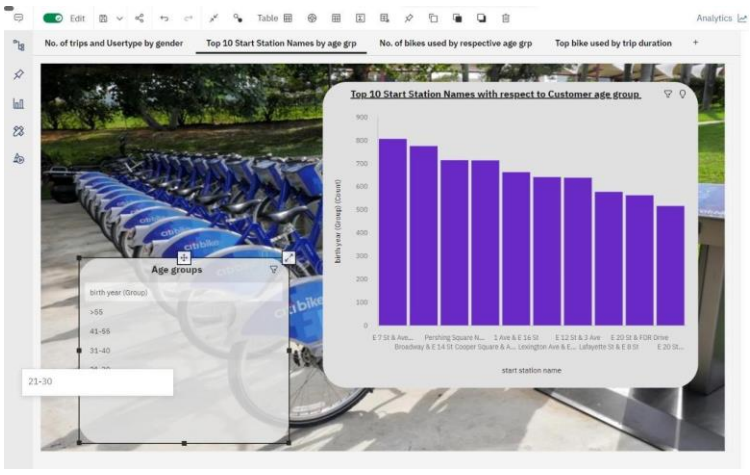
2.	Data Responsiveness	Yes. It is responsive. It can tackle changing needs, preferences and behavior, reduces risk and can scale on-demand. data we're working with and give a brief overview of what each feature represents or should represent 1. Trip Duration (seconds) — How long a trip lasted 2. Start Time and Date 3. Stop Time and Date 4. Start Station Name 5. End Station Name 6. Station ID - Unique identifier for each station 7. Station Lat/Long - Coordinates 8. Bike ID - unique identifier for each bike 9. User Type (Customer = 24-hour pass or 3-day pass user; Subscriber = Annual Member) - Customers are usually tourists, subscribers are usually NYC residents 10. Gender (Zero=unknown; 1=male; 2=female) - Usually unknown for customers since they often sign up at a kiosk 11. Year of Birth - Self-entered, not validated by an ID. 12. An interactive dashboard, story, and report is created in the end
3.	Amount Data to Rendered (DB2 Metrics)	718994 rows of data is used

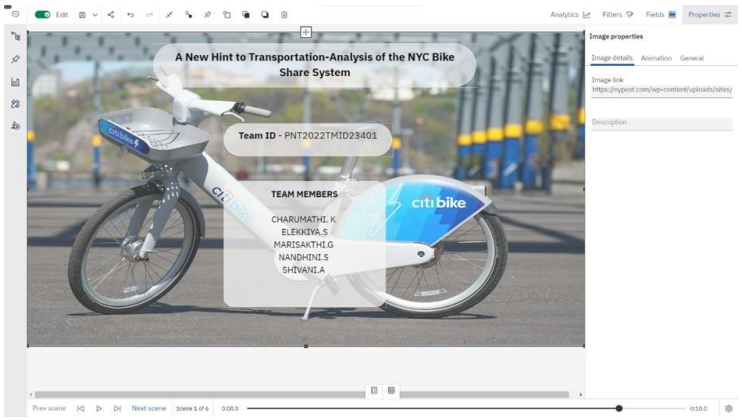
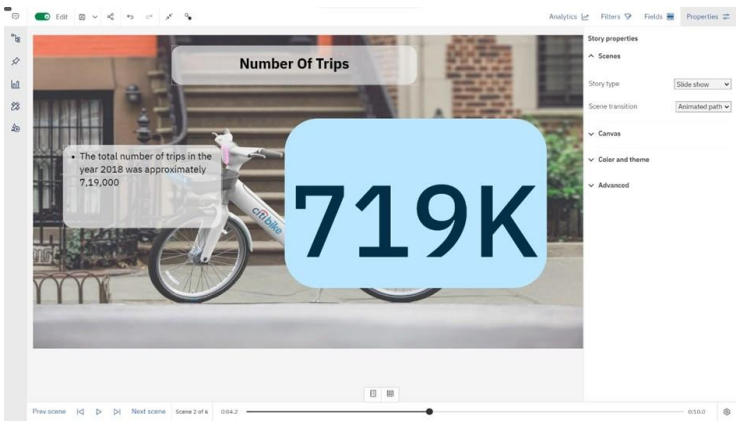
4.	Utilization of Data Filters	**Without age group filter:** 

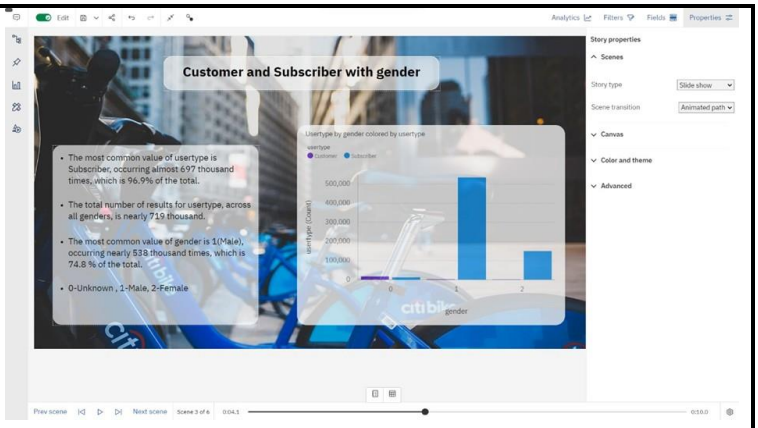
With age group filter:

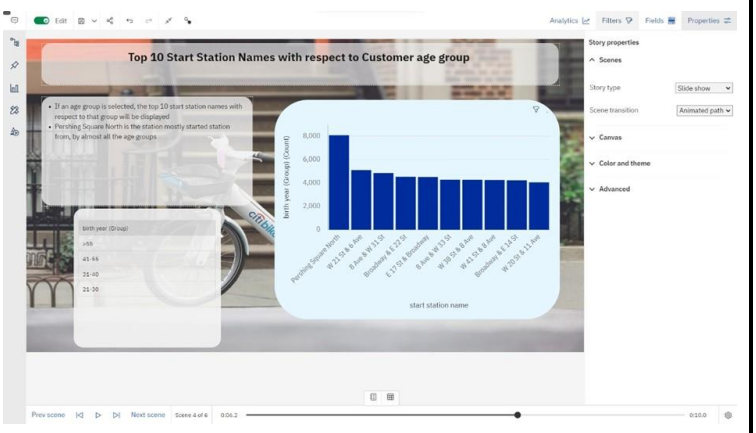


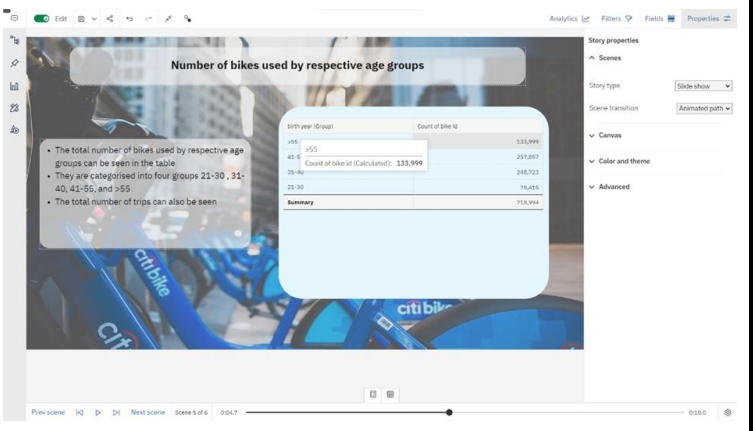


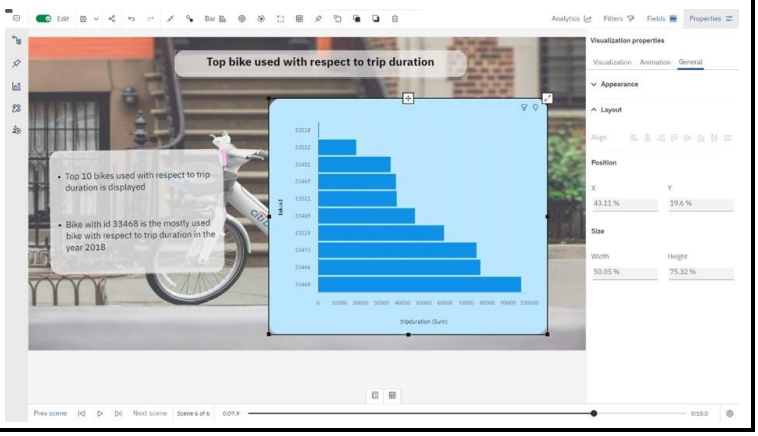


		 Sorting by ascending, descending, top or bottom etc. and other data filters were also used
5.	Effective User Story	No of Scenes Added - 6  

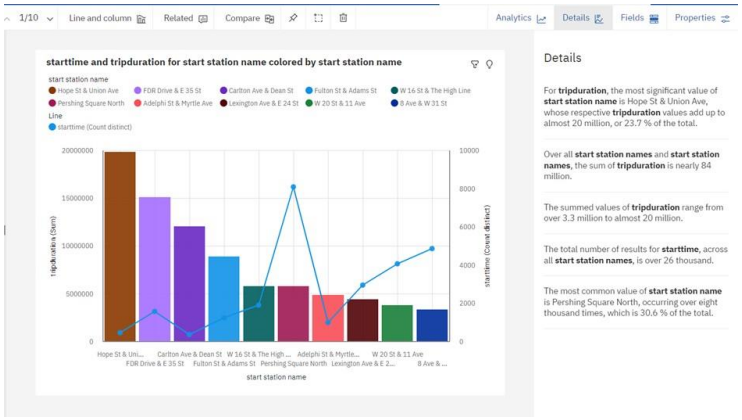

Customer and Subscriber with gender
The most common value of usertype is Subscriber, occurring almost 697 thousand times, which is 96.9% of the total.
The total number of results for usertype, across all genders, is nearly 719 thousand.
The most common value of gender is 1(Male), occurring nearly 538 thousand times, which is 74.8 % of the total.
0-Unknown , 1-Male, 2-Female
Usertype by gender colored by usertype
usertype
Customer
Subscriber
usertype (Count)
gender
Story properties
Scenes
Story type
Slide show
Scene transition
Animated path
Canvas
Color and theme
Advanced
Prev scene
Next scene
Scene 3 of 6

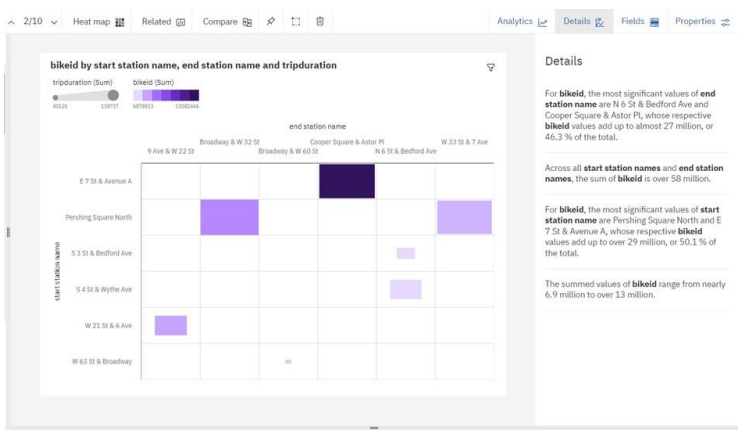

Top 10 Start Station Names with respect to Customer age group
If an age group is selected, the top 10 start station names with respect to that group will be displayed
Pershing Square North is the station mostly started station from, by almost all the age groups
birth year (Group)
>55
41-55
31-40
21-30
birth year (Group) (Count)
start station name
Story properties
Scenes
Story type
Slide show
Scene transition
Animated path
Canvas
Color and theme
Advanced
Prev scene
Next scene
Scene 4 of 6

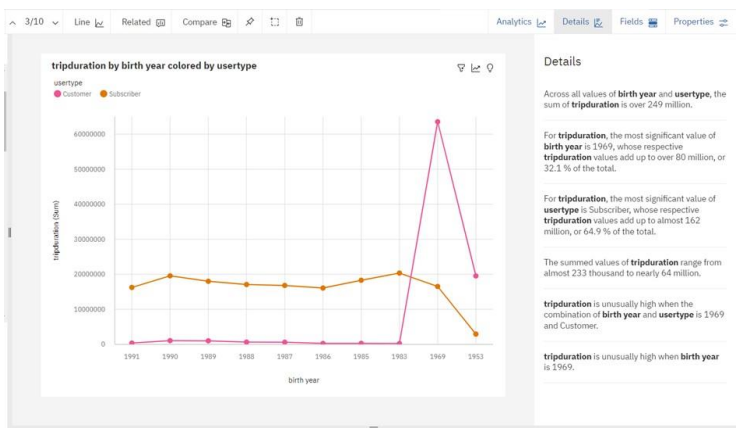

Number of bikes used by respective age groups
The total number of bikes used by respective age groups can be seen in the table
They are categorised into four groups 21-30 , 31-40, 41-55, and >55
The total number of trips can also be seen
birth year (Group)
Count of bike id
>55
133,999
Count of bike id (Calculated): 133,999
257,857
248,723
21-30
78,415
Summary
718,994
Story properties
Scenes
Story type
Slide show
Scene transition
Animated path
Canvas
Color and theme
Advanced
Prev scene
Next scene
Scene 5 of 6

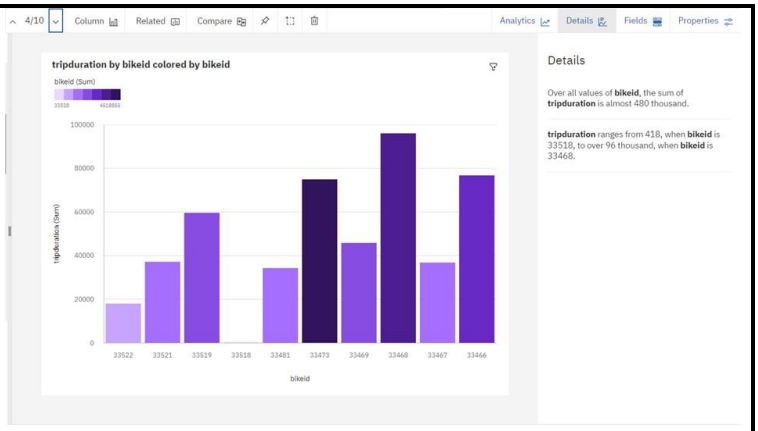

Top bike used with respect to trip duration
Top 10 bikes used with respect to trip duration is displayed
Bike with id 33468 is the mostly used bike with respect to trip duration in the year 2018
bikeid
tripduration (Sum)
Visualization properties
Visualization
Animation
General
Appearance
Layout
Align
Position
X
43.11 %
Y
19.6 %
Size
Width
50.05 %
Height
75.32 %
Prev scene
Next scene
Scene 6 of 6

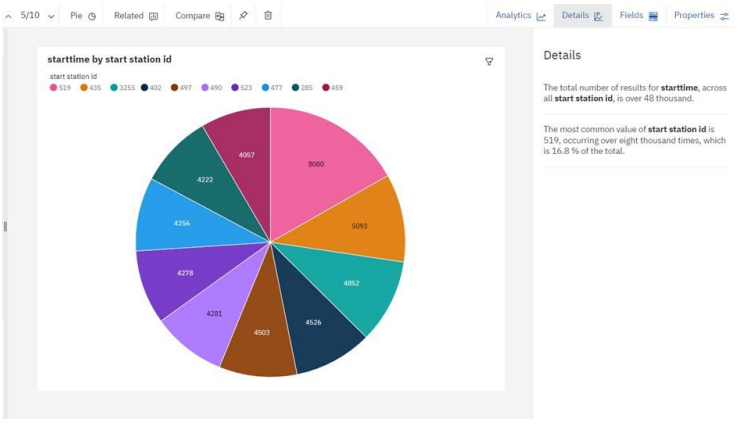
6.	Descriptive Reports	No of Visualizations / Graphs - 10

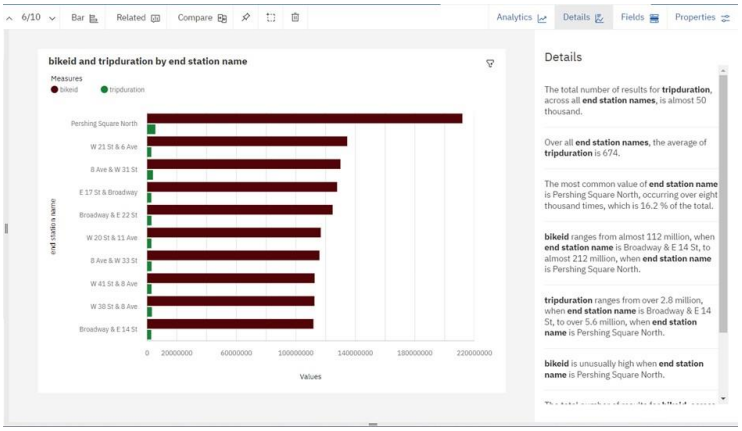


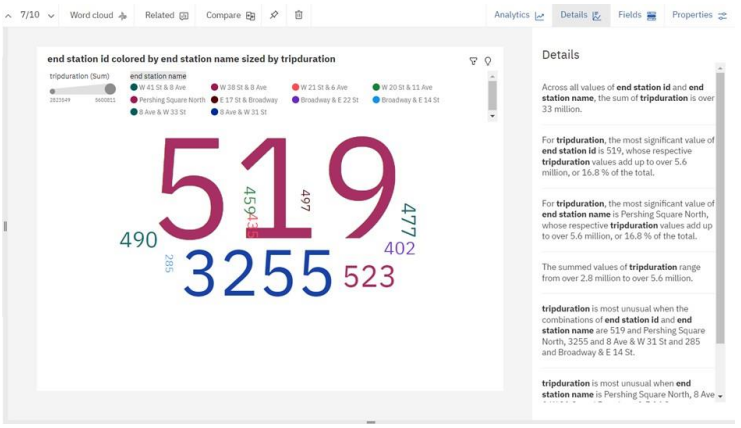


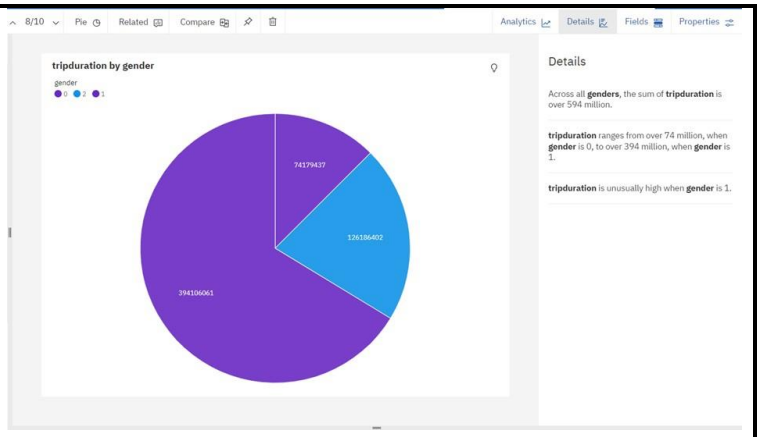


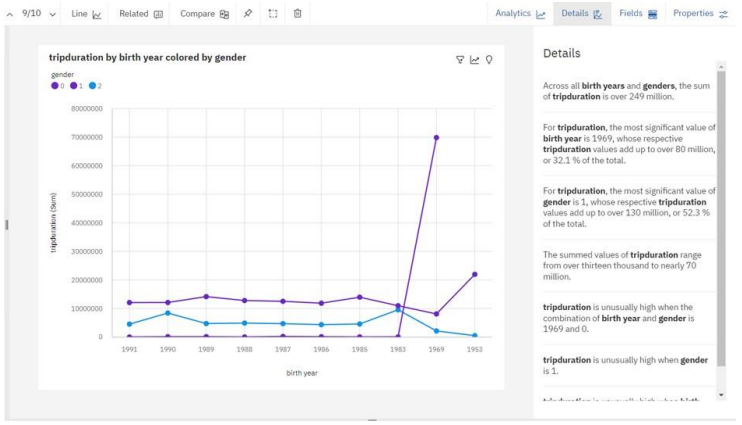

4/10
Column
Related
Compare
Analytics
Details
Fields
Properties
tripduration by bikeid colored by bikeid
bikeid (Sum)
33518
4610855
100000
80000
60000
40000
20000
0
tripduration (Sum)
33522
33521
33519
33518
33481
33473
33469
33468
33467
33466
bikeid
Details
Over all values of bikeid, the sum of tripduration is almost 480 thousand.
tripduration ranges from 418, when bikeid is 33518, to over 96 thousand, when bikeid is 33468.

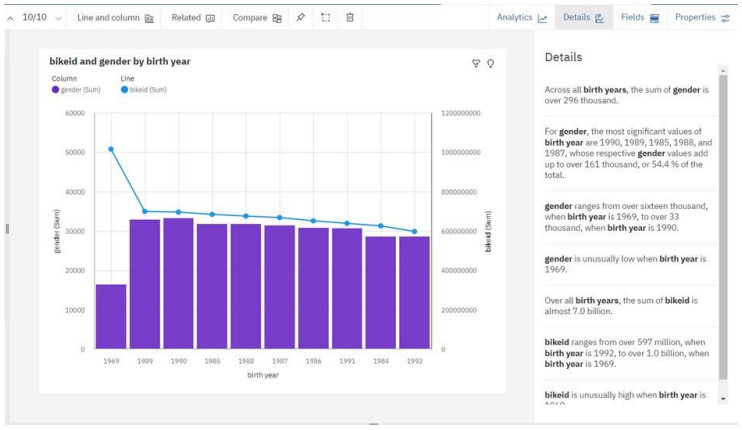

5/10
Pie
Related
Compare
Analytics
Details
Fields
Properties
starttime by start station id
start station id
519
435
3255
402
497
490
523
477
285
459
8080
6093
4852
4526
4503
4281
4278
4256
4222
4057
Details
The total number of results for starttime, across all start station id, is over 48 thousand.
The most common value of start station id is 519, occurring over eight thousand times, which is 16.8 % of the total.


6/10
Bar
Related
Compare
Analytics
Details
Fields
Properties
bikeid and tripduration by end station name
Measures
bikeid
tripduration
Pershing Square North
W 21 St & 6 Ave
8 Ave & W 31 St
E 17 St & Broadway
Broadway & E 22 St
W 20 St & 11 Ave
8 Ave & W 33 St
W 41 St & 8 Ave
W 38 St & 8 Ave
Broadway & E 14 St
end station name
0
20000000
60000000
100000000
140000000
180000000
220000000
Values
Details
The total number of results for tripduration, across all end station names, is almost 50 thousand.
Over all end station names, the average of tripduration is 674.
The most common value of end station name is Pershing Square North, occurring over eight thousand times, which is 16.2 % of the total.
bikeid ranges from almost 112 million, when end station name is Broadway & E 14 St, to almost 212 million, when end station name is Pershing Square North.
tripduration ranges from over 2.8 million, when end station name is Broadway & E 14 St, to over 5.6 million, when end station name is Pershing Square North.
bikeid is unusually high when end station name is Pershing Square North.


7/10
Word cloud
Related
Compare
Analytics
Details
Fields
Properties
end station id colored by end station name sized by tripduration
tripduration (Sum)
2823649
9600811
end station name
W 41 St & 8 Ave
W 38 St & 8 Ave
W 21 St & 6 Ave
W 20 St & 11 Ave
Pershing Square North
E 17 St & Broadway
Broadway & E 22 St
Broadway & E 14 St
8 Ave & W 33 St
8 Ave & W 31 St
519
497
459
477
490
402
285
3255
523
Details
Across all values of end station id and end station name, the sum of tripduration is over 33 million.
For tripduration, the most significant value of end station id is 519, whose respective tripduration values add up to over 5.6 million, or 16.8 % of the total.
For tripduration, the most significant value of end station name is Pershing Square North, whose respective tripduration values add up to over 5.6 million, or 16.8 % of the total.
The summed values of tripduration range from over 2.8 million to over 5.6 million.
tripduration is most unusual when the combinations of end station id and end station name are 519 and Pershing Square North, 3255 and 8 Ave & W 31 St and 285 and Broadway & E 14 St.
tripduration is most unusual when end station name is Pershing Square North, 8 Ave


8/10
Pie
Related
Compare
Analytics
Details
Fields
Properties
tripduration by gender
gender
0
2
1
74179437
126186402
394106061
Details
Across all genders, the sum of tripduration is over 594 million.
tripduration ranges from over 74 million, when gender is 0, to over 394 million, when gender is 1.
tripduration is unusually high when gender is 1.


9/10
Line
Related
Compare
Analytics
Details
Fields
Properties
tripduration by birth year colored by gender
gender
0
1
2
tripduration (Sum)
birth year
Details
Across all birth years and genders, the sum of tripduration is over 249 million.
For tripduration, the most significant value of birth year is 1969, whose respective tripduration values add up to over 80 million, or 32.1 % of the total.
For tripduration, the most significant value of gender is 1, whose respective tripduration values add up to over 130 million, or 52.3 % of the total.
The summed values of tripduration range from over thirteen thousand to nearly 70 million.
tripduration is unusually high when the combination of birth year and gender is 1969 and 0.
tripduration is unusually high when gender is 1.


10/10
Line and column
Related
Compare
Analytics
Details
Fields
Properties
bikeid and gender by birth year
Column
gender (Sum)
Line
bikeid (Sum)
gender (Sum)
bikeid (Sum)
birth year
Details
Across all birth years, the sum of gender is over 296 thousand.
For gender, the most significant values of birth year are 1990, 1989, 1985, 1988, and 1987, whose respective gender values add up to over 161 thousand, or 54.4 % of the total.
gender ranges from over sixteen thousand, when birth year is 1969, to over 33 thousand, when birth year is 1990.
gender is unusually low when birth year is 1969.
Over all birth years, the sum of bikeid is almost 7.0 billion.
bikeid ranges from over 597 million, when birth year is 1992, to over 1.0 billion, when birth year is 1969.
bikeid is unusually high when birth year is