DATA VISUALISATION – CSE3020

DIGITAL ASSIGNMENT I

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SUBMITTED TO:

PROF. PATTABIRAMAN. V

DATA VISUALISATION – CSE 3020

PROBLEM STATEMENT

Identify any one Visualisation tool (Excluding R, Python and Tableau) and explore the basic operations on the tool, your answer should support the details about the tool and its basic operations. Explore the tool using valid dataset and show the output of the same. Provide the details of the tool, dataset and it visual analytics outputs.

DATA VISUALIZATION TOOL

I am working on **QLIK Sense Desktop** (Visualization Tool). This is great visualization tool in the market which is considered to be a tough competitor of data visualization giants like Tableau.

QLIK Sense is a paid data visualization tool and I have worked on the trail version of that tool for this assignment.

Qlik

Software company

Qlik is a software company based in Radnor, Pennsylvania, United States. Qlik is the provider of QlikView and Qlik Sense, business intelligence & visualization software. Wikipedia

CEO: Michael L Capone (11 Jan 2018–)

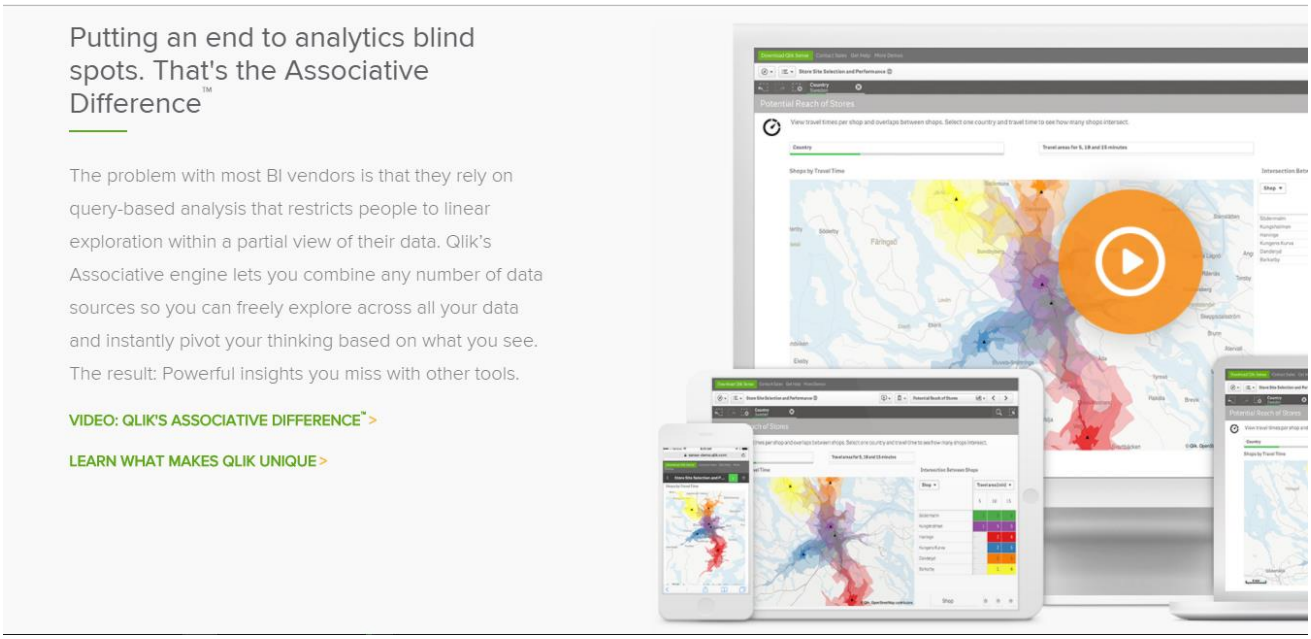
Headquarters: Radnor, Pennsylvania, United States

Founded: 1993, Lund, Sweden

Number of employees: 2,500 (October, 2015)

Founders: Björn Berg, Staffan Gestrelius

Parent organization: Qlik Technologies, Inc.



ADVANTAGES OF THIS TOOL

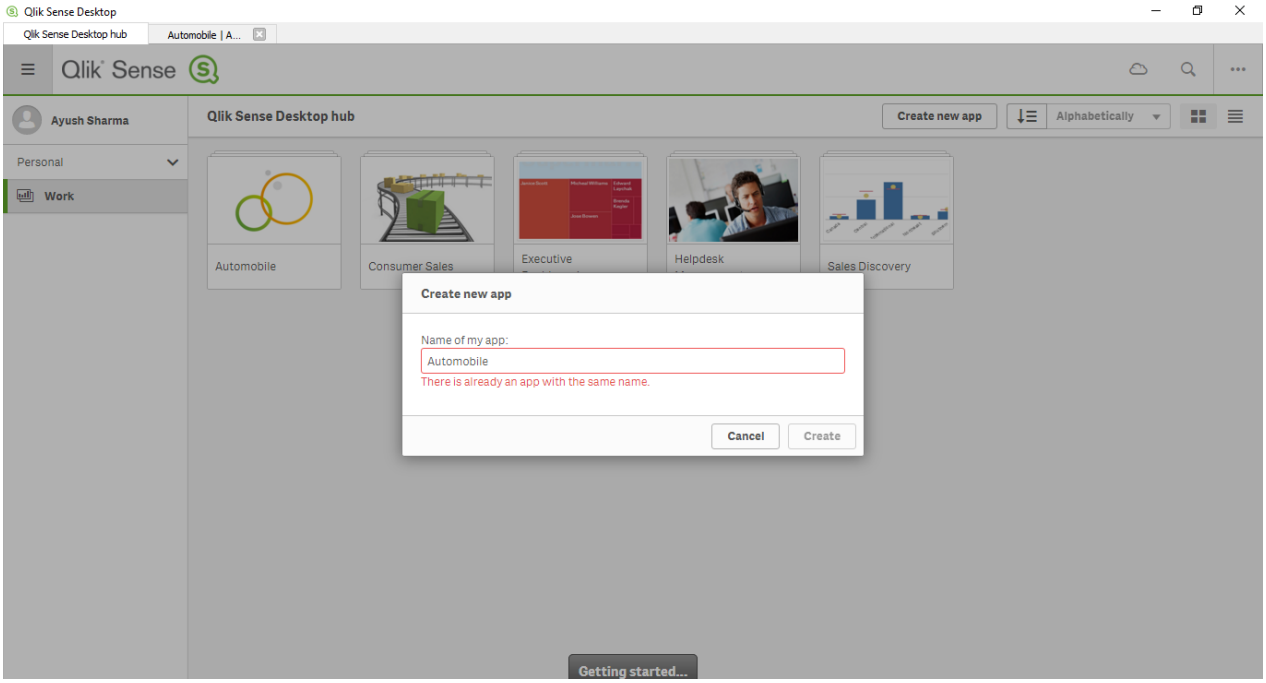
- This tool also provides us with a clean environment just similar to Tableau.
- It supports Drag and Drop Mechanism.
- We can create and visualize multiple graphs/ charts on a single screen.
- It gives us the power to show the relation of data using different graphs at once. (Shown in detail later on)
- Features great animations.

DATASET

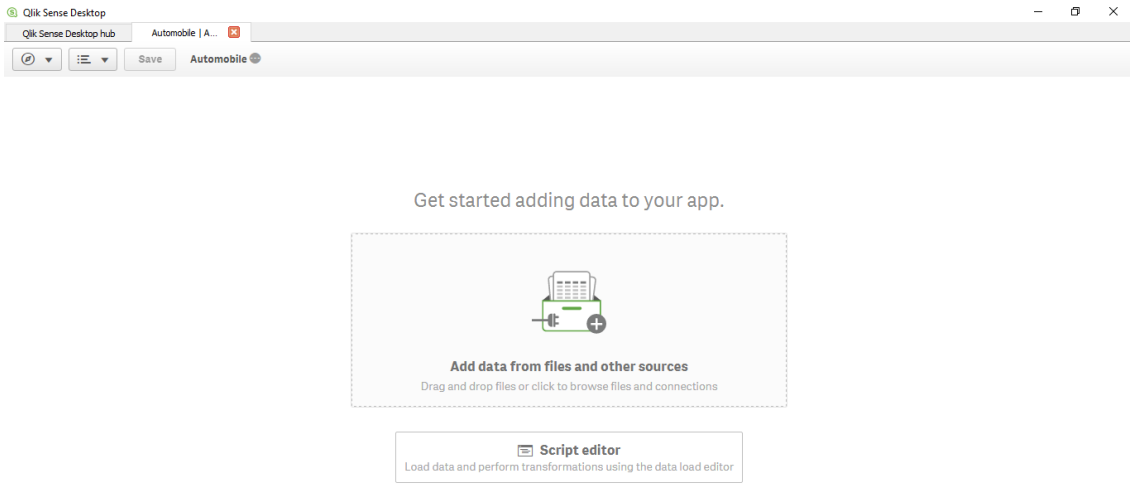
For this assignment, I am using the Automobile dataset available on Kaggle.
https://www.kaggle.com/toramky/automobile-dataset/data

GETTING STARTED

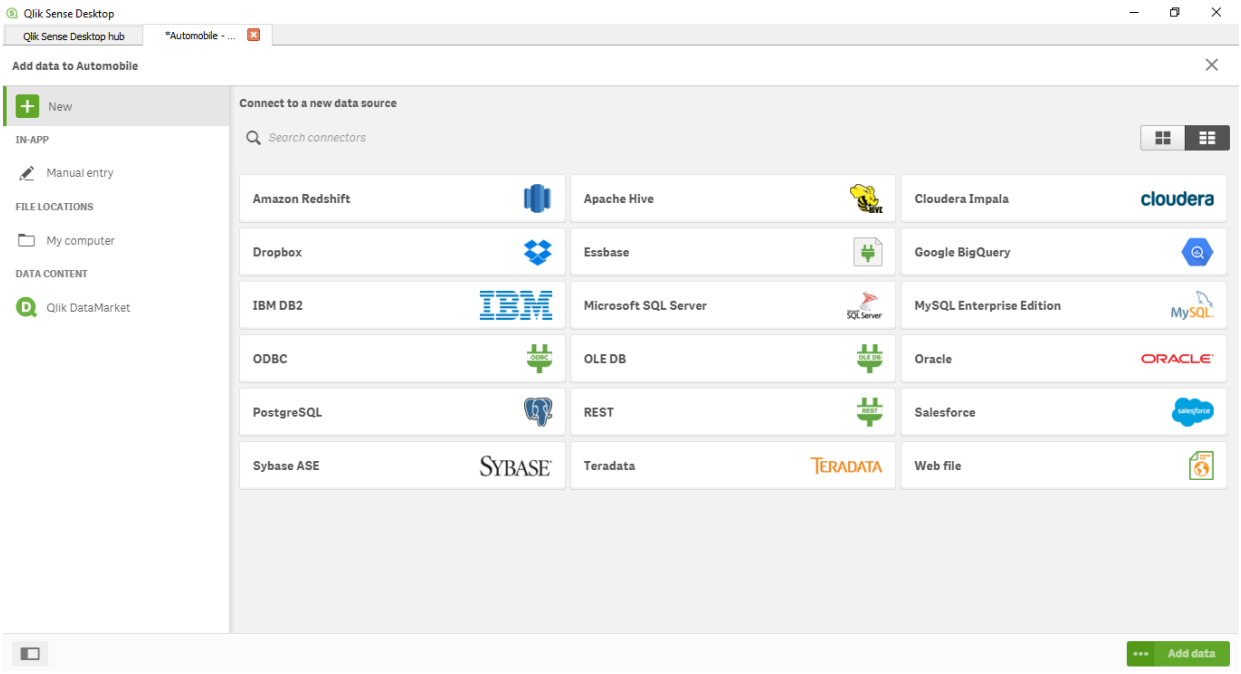
1. We create a app in this tool. This is where we will do all the work on the data.



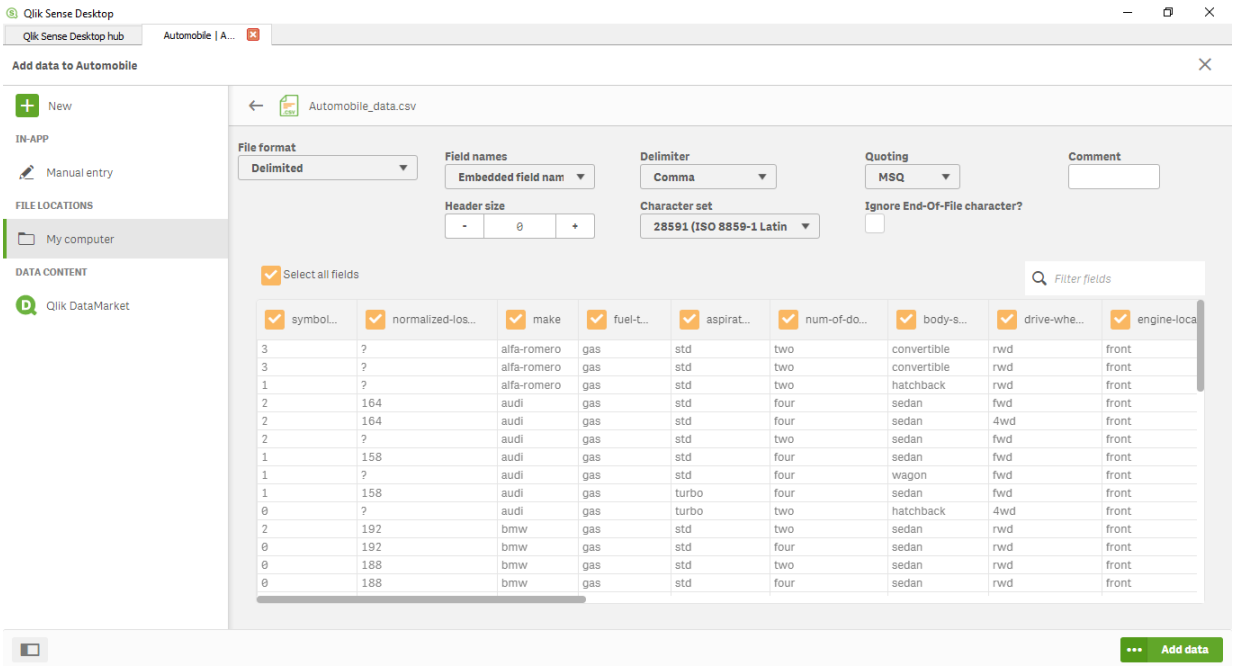
2. Once an app is created, we are required to insert/ feed some data in the workspace.



3. We can add multiple data files. We could also insert the data from different server. This data can be extracted once or can be set to live feed (active data).



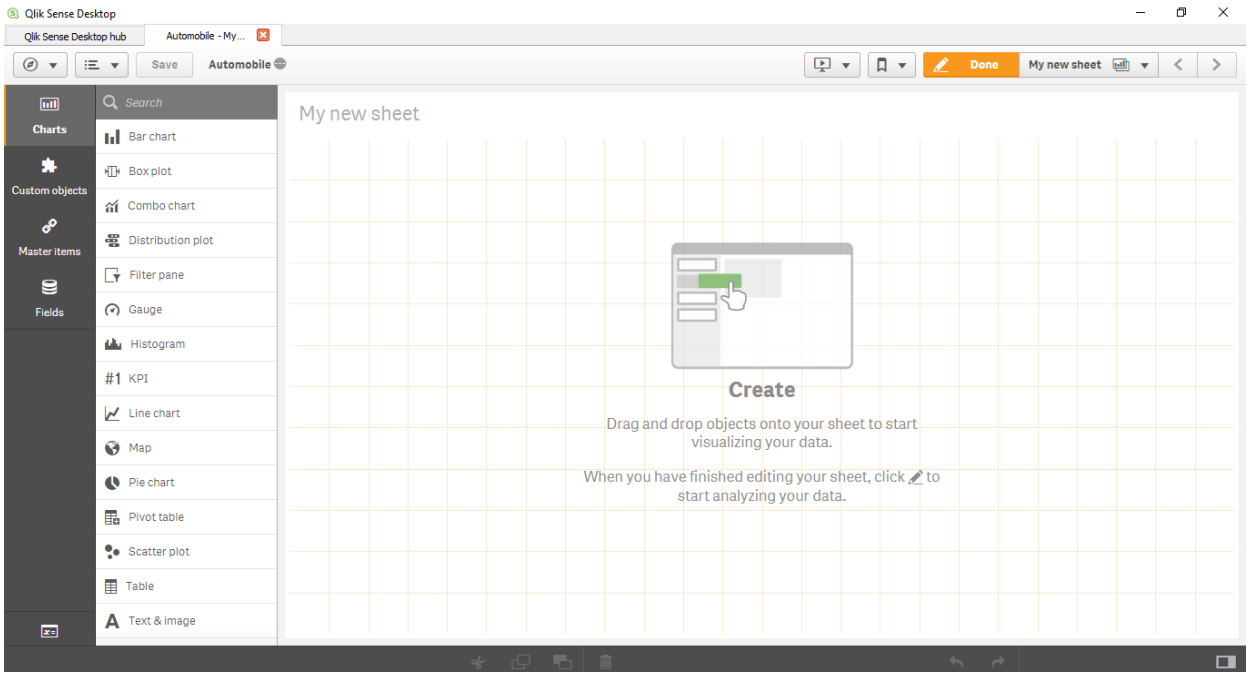
4. Once we feed the data, we can perform some formatting like choosing the header size, including some delimiters, removing some redundant attributes.

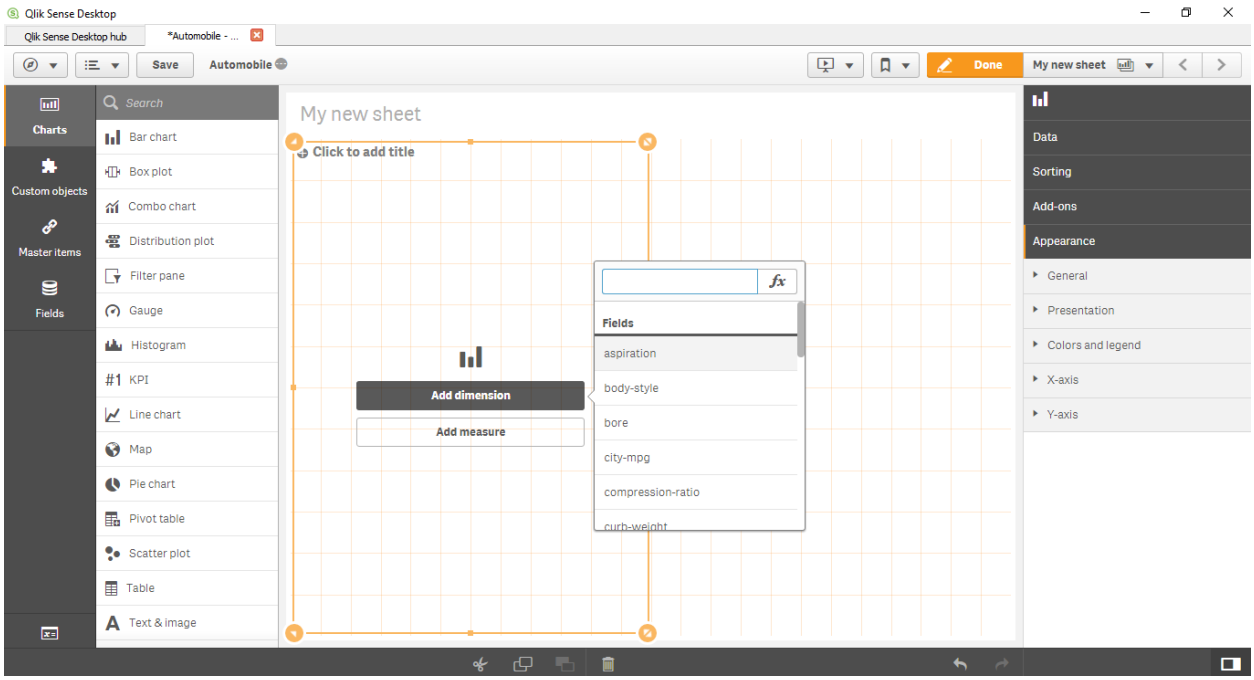


5. Once the data is finalized, we are directed to our Workspace. Here, we can select multiple charts/ graphs to display and place them as our preference. We can select from a number of options like Bar Chart, Box Plot, Combo chart, etc.

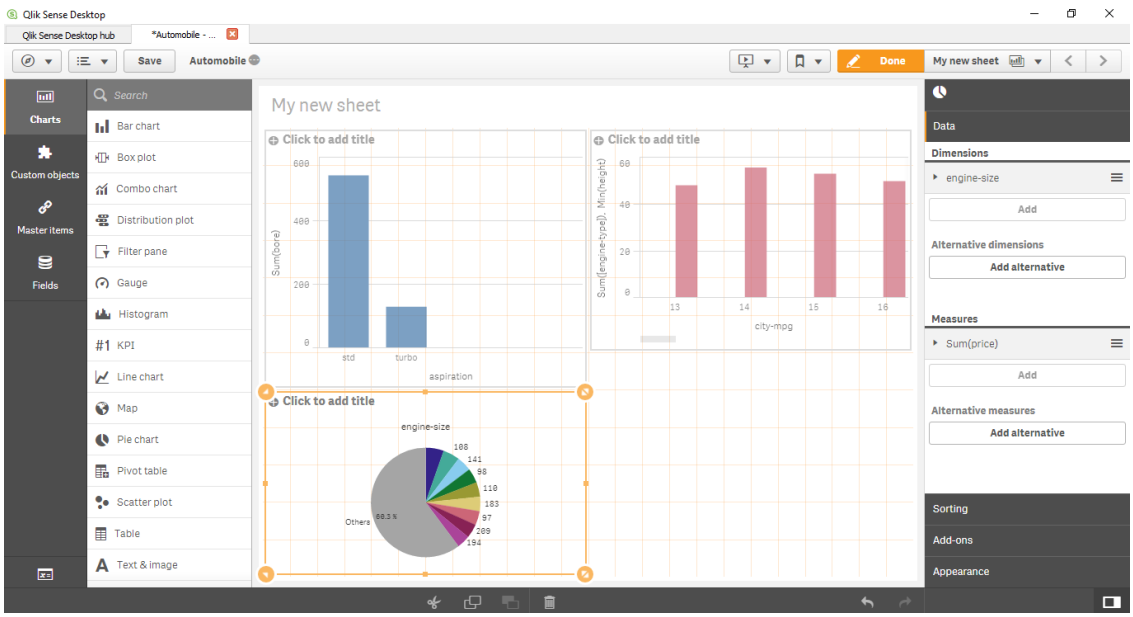
   Once we select a chart, we are required to select the dimensions and measures to visualize that chart.

   Most of the options are visible in the following screenshot.

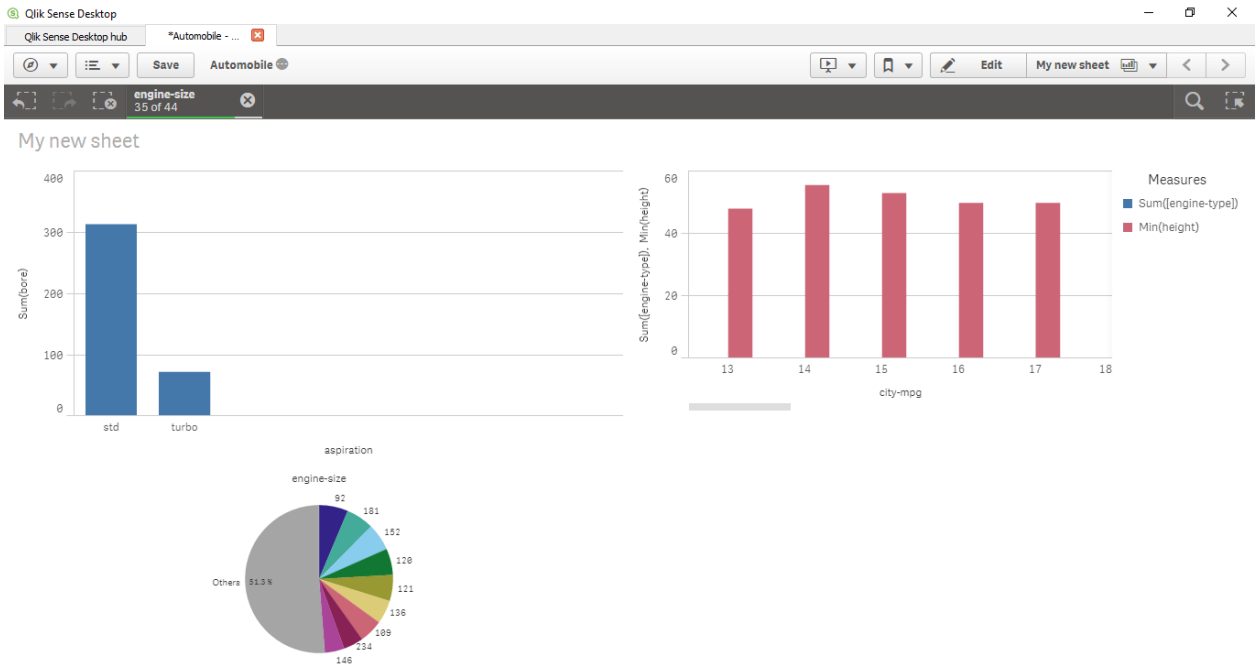




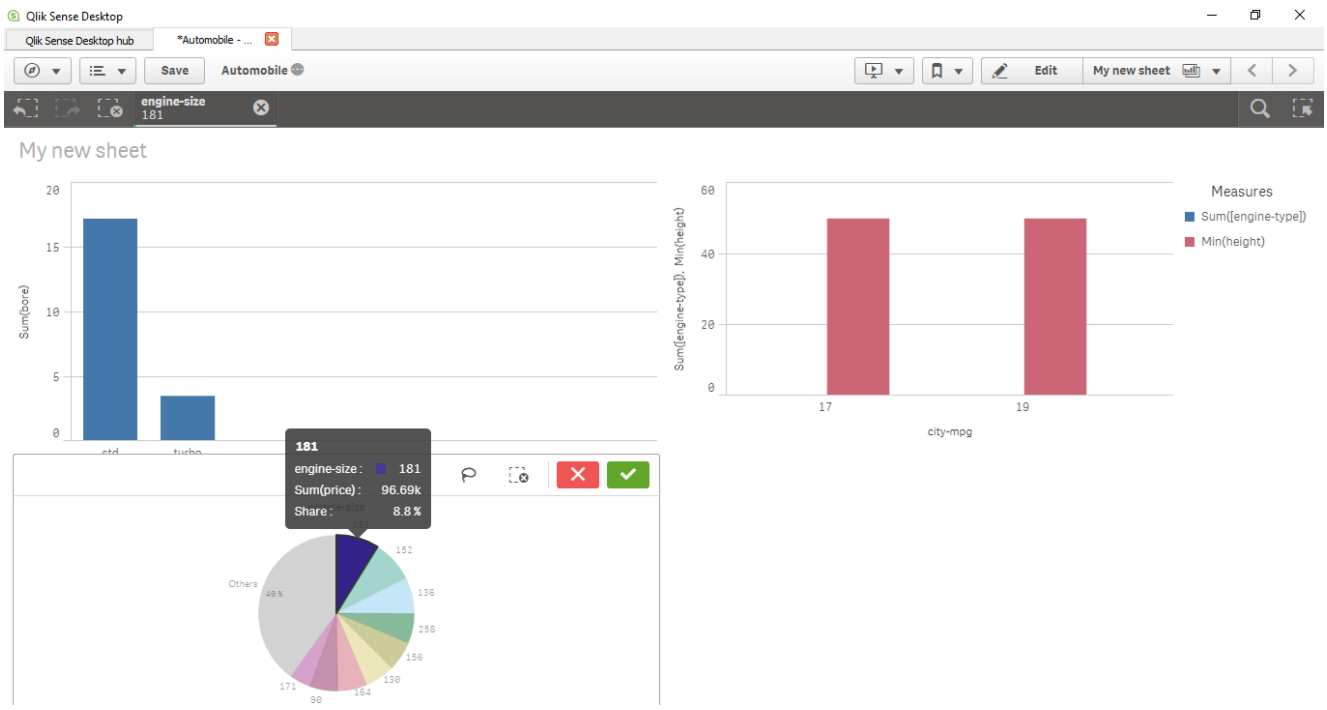
6. We can display multiple charts at once on the screen. These charts are interactive with some great animations. We can resize these charts and arrange them on the screen as per our preference.

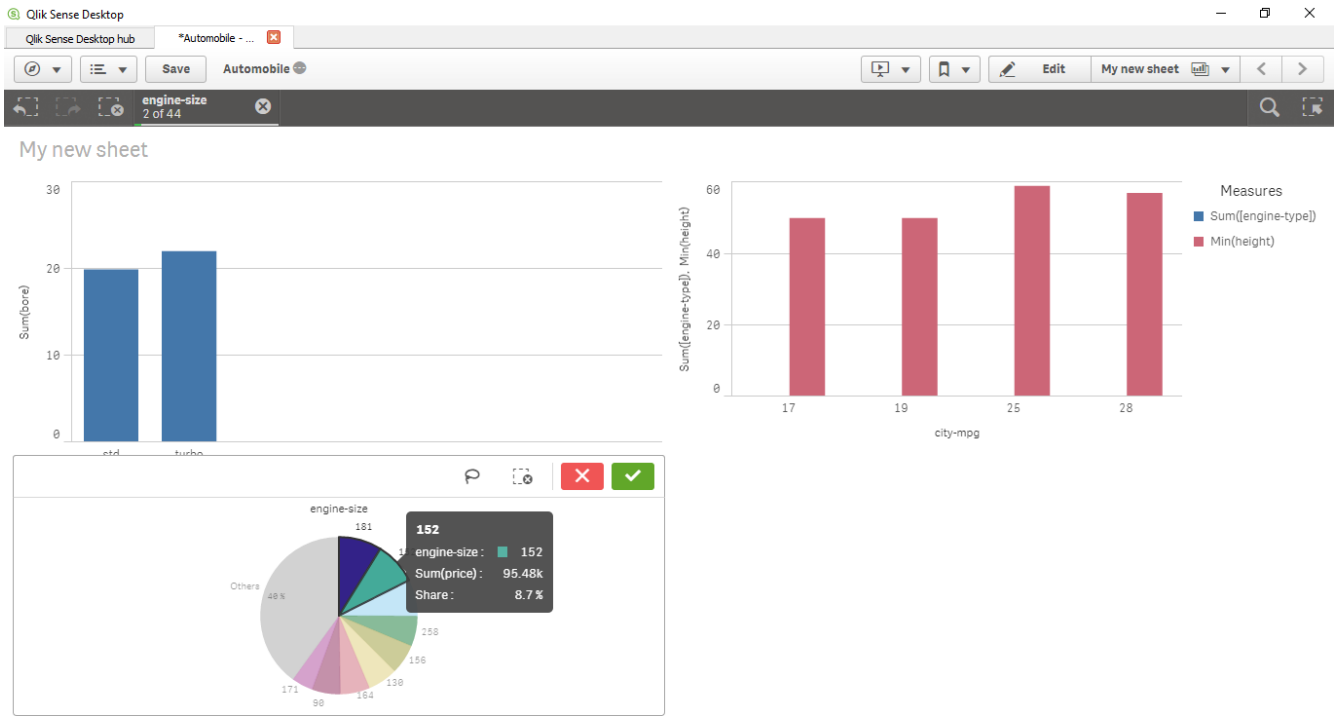


7. Once it's all set and done we are directed to the application (interactive screen) that we created.

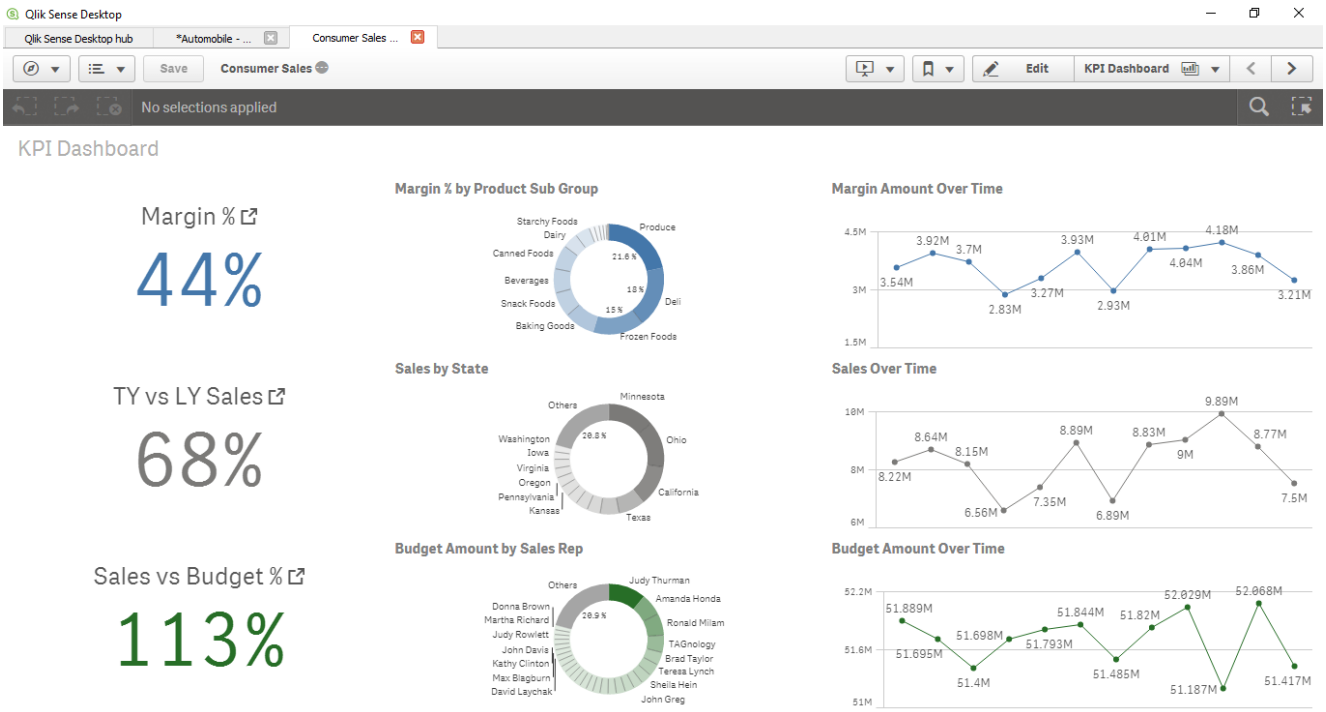


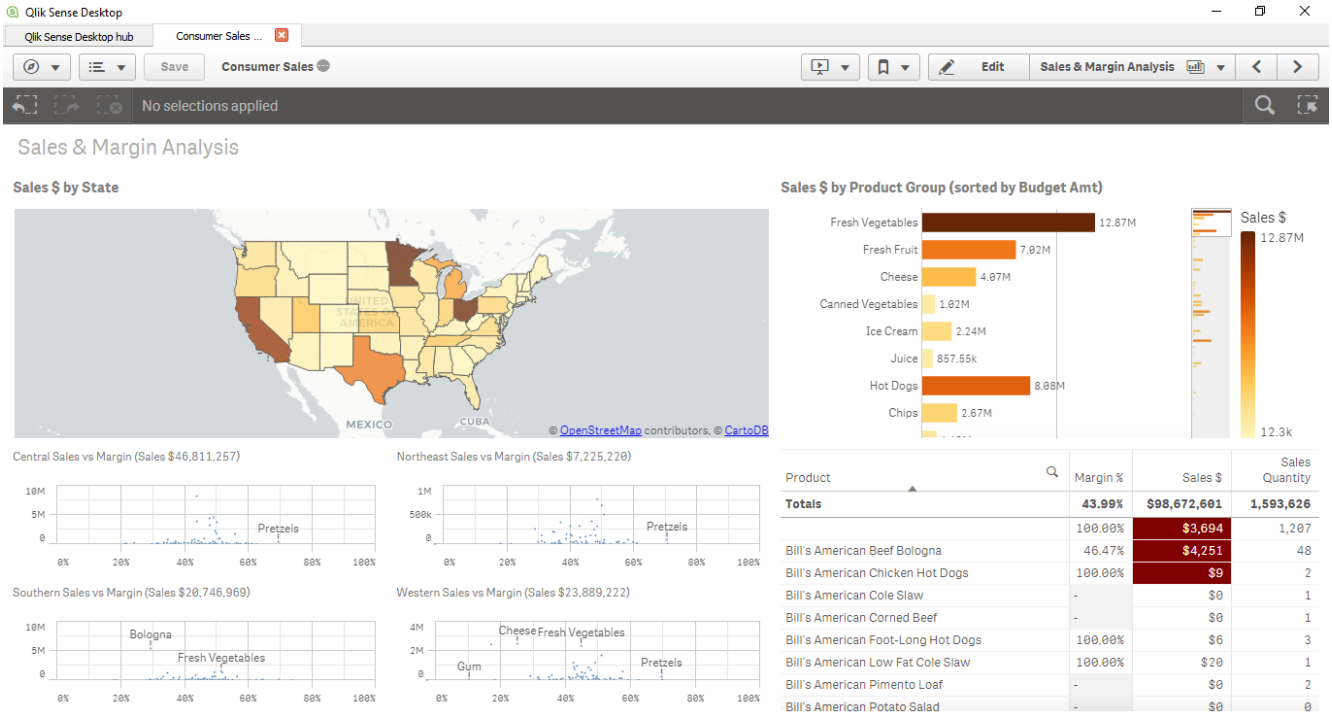
8. As I have already said, this screen is interactive. So if we select a particular region in any chart, the charts are automatically modified to display that specific data.





9. Additional Screenshots from sample dataset.





Product	Margin %	Sales $	Sales Quantity
Totals	**43.99%**	**$98,672,601**	**1,593,626**
	100.00%	$3,694	1,207
Bill's American Beef Bologna	46.47%	$4,251	48
Bill's American Chicken Hot Dogs	100.00%	$9	2
Bill's American Cole Slaw	-	$0	1
Bill's American Corned Beef	-	$0	1
Bill's American Foot-Long Hot Dogs	100.00%	$6	3
Bill's American Low Fat Cole Slaw	100.00%	$20	1
Bill's American Pimento Loaf	-	$0	2
Bill's American Potato Salad	-	$0	0

DISADVANTAGES OF THIS TOOL

- While selecting the charts, we are required to select the dimensions and measures. This decision of correct attributes may not be possible by an amateur.
- The tool does not provide that much visualization options as in Tableau.
- It's difficult to make changes to the charts once the app is created.
- The Join/ Merge screen of the data is not that interactive thus it may become a little difficult to join data from multiple sources (if local).