COMP5048 Week 2 Tutorial

1. Tableau Installation

Tableau is a software that produces interactive data visualization for Business Intelligence and Analytics.

1. Go to the Tableau website at https://www.tableau.com/ and go to the download page.
2. Select the appropriate package for your system and download.
3. Run the installer.

2. Examples runthrough

2.1. Connect to data source

1. Open Tableau and create a new workbook.
2. To connect to a data source, click 'Connect to Data' appears below the toolbar. Alternatively, selects Data \ New Data Source (or Ctrl + D).
3. Select 'Text file' and prompt for the *Small Towns.csv*
4. Once loaded, a tabular view will appear. The table will shows four columns of Country, State, City and Rank.

Note, Tableau provides different data connectors so that you can connect to an Excel file, a text file, Json file.

2.2 Create simple charts

1. Connect to Small Towns.csv file
2. Click Sheet1 tab and create a Design Sheet
3. Type 'SUM(Rank) into Columns field.
4. Select Country, State, City for Rows field.
5. Then Select Bar ('horizontal bars') chart type. Then a bar chart is shown.
6. Try with other chart types such as Pie chart, stacked bars chart, 'side-by-side' circles, and tree maps.

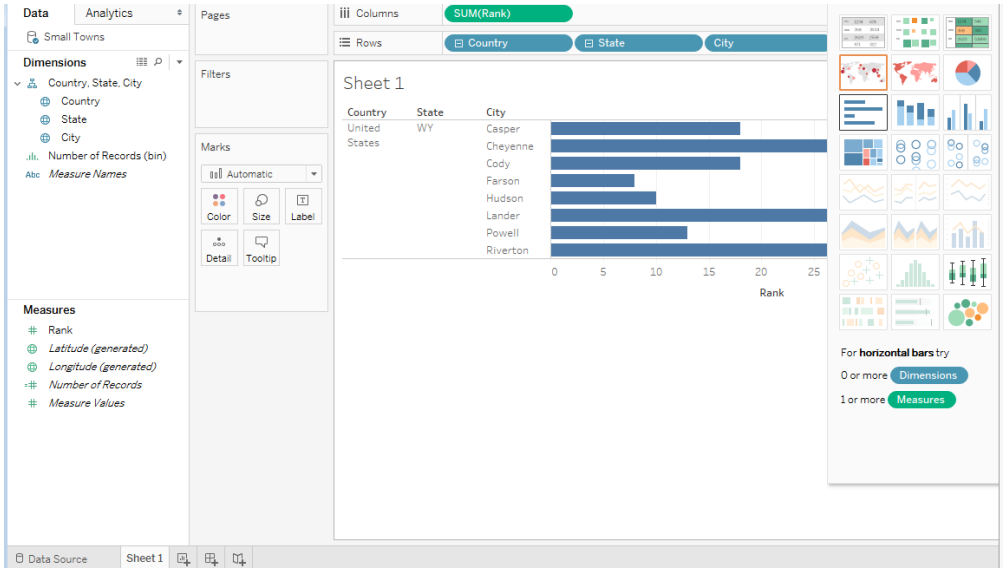

Figure 1. Horizontal bars view of the Small Towns data set

2.3 Put your data on a map

1. Connect to *Country Locations.csv* file
2. Click Sheet1 tab and create a Design Sheet
3. Drag 'Latitude' into Columns field and drag 'Longitude' into Rows field. Alternatively, you can type directly into the fields.
5. Then Select Map ('symbol maps') chart type and then a map is shown.
6. Drag 'Country' and 'Division' labels into Marks section. Now all eight divisions are shown on the map.

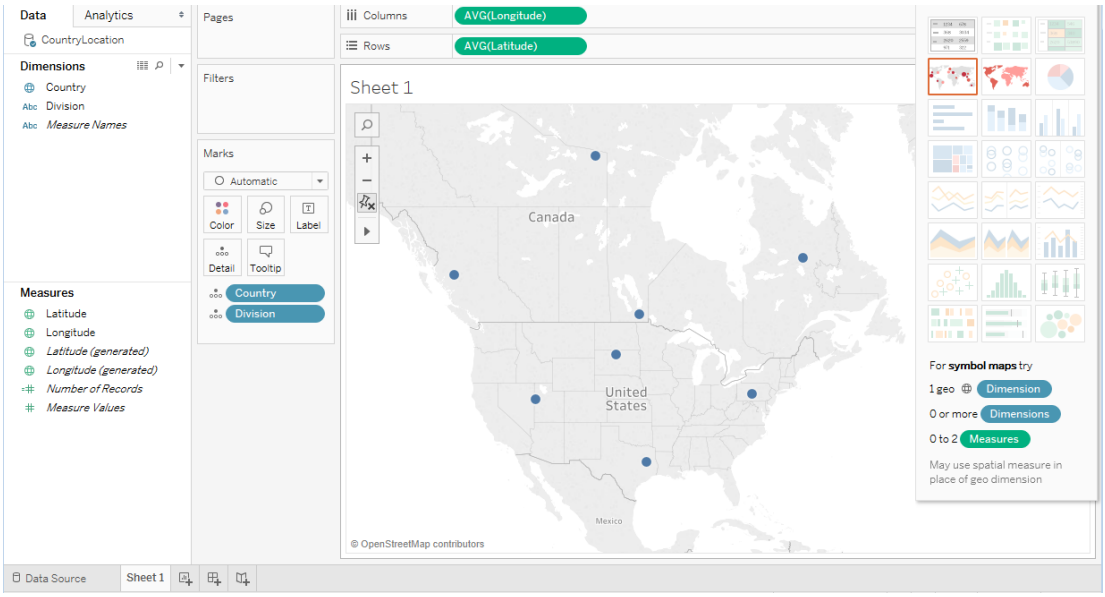

Figure 2. Putting the cities in Country Locations.csv on the map

Exercises

2.4 Create maps and trajectories

For some data source, you want to create a flow map that show paths over time. The data source should include the following types of information: (a) Latitude and longitude coordinates for each data point in a path, (b) a column to define the order to connect the point, (c) A unique ID for each path. See http://onlinehelp.tableau.com/current/pro/desktop/en-us/maps_howto_flow.html

2.4 Create a Dashboard

You can create a dashboard

1. Create two worksheets
2. Create a dashboard
3. Choose Tiled or Floating layout.
4. Drag both worksheets into the empty Dashboard. Then the visualizations from the worksheets are displayed.

2.5. More examples and user guides can be found on Tableau's help site, which is available at http://onlinehelp.tableau.com/current/pro/desktop/en-us/default.html