Assignment 2

30 points

Use the data in file Walmart_Store_sales.csv

1. (5 points) Plot the weekly sales (use column *weekly sales* and plot the data for each day available in the table) for store # 3. Apply a filter to select the store. You can generally convert measures to dimensions and vice versa.
2. (5 points) For each date in the data, plot the average CPI and the average unemployment. Use a line chart. Decide whether to use dual or single axes based on the data.
3. (5 points) Plot the average fuel prices for the 3 years in the data. You need to show the data aggregated on a year level. Do it using a bar chart and a pie chart (i.e. 2 different charts).
   a. On the bar chart drop the numeric axis and grid and instead have the price show by the bar.
   b. On the pie chart use sequential colors that correspond to the fuel price value accordingly and show the price and year by the pie slices.
4. (5 points) We want to see if the increase in Temperature and Fuel Price are correlated. Show the average temperature versus the average fuel price for each month of 2011. What type of chart do you need? Think about the number of markers you have, it can show you whether your aggregation was done right.
5. (10 points) Needless to say, style all charts – all text must be readable, the axes should be labeled correctly, declutter labels if you don't need them, use meaningful titles etc. Feel free to add context with annotations and other elements. You can make up stories about the data to make the plots more interesting.

Submit the .twbx file

Dataset Description :
This is the historical data that covers sales from 2010-02-05 to 2012-11-01, in the file
Walmart_Store_sales. Within this file you will find the following fields:
Store - the store number
Date - the week of sales
Weekly_Sales - sales for the given store
Holiday_Flag - whether the week is a special holiday week 1 – Holiday week 0 – Non-holiday week
Temperature - Temperature on the day of sale
Fuel_Price - Cost of fuel in the region
CPI – Prevailing consumer price index
Unemployment - Prevailing unemployment rate