Project Brief

This project intends to visualize a large set of gasoline receipt data that I have been collecting since June 2000 for each vehicle that I have owned. This gas receipt data includes items such as price per gallon, gallons filled, total fuel cost, and miles traveled. That data can then be used to calculate relevant metrics such as miles per gallon or cost per mile. At the moment, this data is contained in a set of Excel spreadsheets, and while this format works well for basic record keeping, software imposed chart aesthetics make for very bland plots when trying to represent this data in graphical form.

The challenge of this project is to effectively visualize the gasoline data in a manner that can convey the numerous dimensions of information in this data set on a single 2-dimensional plot. It will incorporate personal and world events to put the changes in gas prices and driving behavior into relevant context, and will use the Processing programming language to create a much better aesthetic than the one imparted by Excel.

Task Outline

- Filter and combine data from numerous spreadsheets into one macro spreadsheet
- Import data into MySQL
- Create functions to easily access data from MySQL within Processing
- Design a chart aesthetic
- Write functions to visualize data onto the chart
- Finish the data with additional personal and world event information
- Incorporate user interactivity (if time allows)