

# Project Document Title

Erick Vega

## Project Summary

The purpose of this project is to introduce the required tools to properly develop and run the upcoming projects in the CSE250 course. Altair, a visualization package, will be used to generate the chart presented in this project.

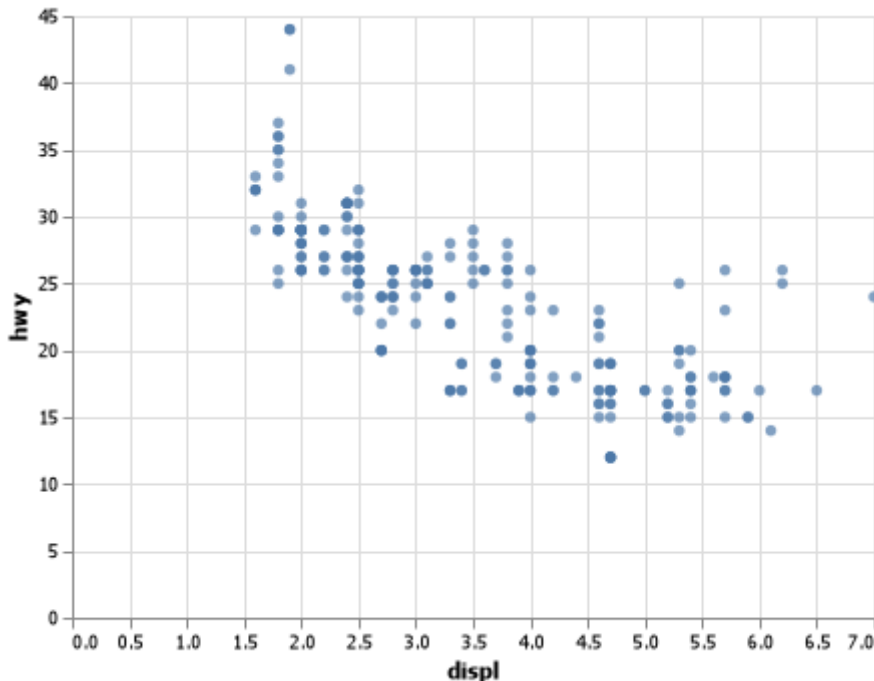
## Technical Details

**1. Finish the readings and come to class prepared with any questions to get your environment working smoothly.**

I completed the readings and installed the required packages. I run on a problem saving the Altair chart but this was solved in class installing Node.js.

**2. Write a python script to create the example Altair chart from section 3.2.2 of the textbook.**

This is the chart created using Altair and data from the **mpg** dataset:



### 3. Include a markdown table created from a particular code.

manufacturer	model	year	hwy
audi	a4	1999	29
audi	a4	1999	29
audi	a4	2008	31
audi	a4	2008	30
audi	a4	1999	26

## Appendix A

```
import pandas as pd
import altair as alt

# Question 2: Creating a chart based on the mpg dataset
url = "https://github.com/byuidatascience/data4python4ds/raw/master/data-raw/mpg/mpg.csv"

# Use the read_csv module in pandas to pull a csv file from a url
mpg = pd.read_csv(url)

# Create a chart with the mpg data set, setting 'displ' as the x-axis and 'hwy' as the y-axis in
chart = (alt.Chart(mpg)
        .encode(
            x='displ',
            y='hwy')
        .mark_circle()
)

chart

# Save the chart as a .png file
chart.save("my_chart1.png")

# Question 3: Creating a markdown table given the following code
print(mpg
      .head(5)
      .filter(["manufacturer", "model", "year", "hwy"])
      .to_markdown(index=False))
```