Please read these instructions carefully:

- You must complete this quiz by 9:40am (EST) on Tuesday, February 11, 2020. This is an untimed quiz, but I do not encourage you to spend more than 6 hours[1] on this quiz.
- You may use the following resources for writing code: a calculator, your class notes, the course textbooks, any code you have written for this class, and content on the CSC 362 Moodle page, the `d3.js` website, `http://colorbrewer2.org`, or any of Mike Bostock's code examples.
- You are welcome to perform research on your proposed question by reading news articles or similar.
- You must cite any code that you use that you did not write yourself.
- You may *not* use any resources other than those specifically listed above — you may not work with others. This is a pledged activity and the Davidson Honor Code applies.
- There is one electronic deliverable — `quiz1.html`. Submissions will be handled via Moodle. Look for the "Quiz 1 Submission Link".

[1] This is an upper-bound, not a required amount of time that you should spend on the exam.

Data

Download the data file `Webtree1920.csv`[2] from the `Quiz 1` Moodle link. Your data file is webtree data from this current academic year. It has numerous columns including:

TERM - The course was offered in the fall (201901) or spring (201902) semester

CRN - The course CRN

SUB - The Davidson course subject

NUM - The course number

TOTAL_ENTRIES - The total number of webtree entries for a course

UNIQUE_STUDENTS - The number of unique students who requested the course

TREE1_BRANCH1 - The number of times the course was in the first spot of the first tree

CURR_ENROLL - The current course enrollment

MAX_ENROLL - The maximum number of students who may enroll in the course

You may not change any part of the `Webtree1920.csv` file. The data you present must accurately reflect the data. I will load data from my copy of the `Webtree1920.csv` file when running your web page.

Your Task

On this quiz you will help Davidson better understand course needs and demands across campus. There are many questions that we can ask with this single data set. For example, which department's courses are the hardest to get into, or how many introductory courses should computer science offer? There are many different and interesting questions that could be asked and answered using this data set.

In this assignment you will make an argument, for example:

The hardest part of computer science? Getting into class - `www.nytimes.com/2019/01/24/technology/computer-science-courses-college.html`

[2]Data collected from Davidson's Registrar.

and then support that argument by creating a D3 visualization with the webtree data. You will then write-up a statement making your case and supporting your claims with your visualization. Your final report should resemble an online news article. Take a look at the New York Times article linked above, or Davidson College's news for more inspiration `https://www.davidson.edu/news`.

In addition, you will further explain your reasoning behind your visualization. This must include clear explanations based on the readings from Ware and class discussions.

Your webpage news article must include the following:

- A catchy headline
- Your visualization
- An explanation of the problem
- The argument supporting your claim that is clearly supported by your visualization
- The perceptual explanation of the reasoning behind your visualization

Grading

5 points Explanation of, and problem you are attempting to answer.

15 points Visualization design and effectiveness.

5 points Code clarity and quality.

10 points Supporting argument tied to visualization.

5 points Creativity and implementation difficulty.

10 points Explanation of reasoning behind design

Submission

Submit your .html file, named `quiz1.html` to Moodle