Data Tables

You will find some data in a file named "Ride_Data.csv" the aim of this exercise is to display the data on a page using D3, add a bit of interactivity, and perhaps plot a graph of the data, and any metric you might find interesting.

A Complication

To run this exercise you will need to run a simple web server to serve the data file to our JavaScript. This is because most browsers wont allow you to pull resources from the file system unless you have disabled some security options. That is, while it's possible to open files in your web browser out of the file system directly, this is likely to cause errors due to browser security restrictions.

Linux with python

If you are running Linux and have python installed you can start a simple HTTP file server by running:
`python -m SimpleHTTPServer`
in the terminal in the file directory where the html sources are stored. You should now be able to view the this file at Test 1.

Mac Os X

Taken from here.

Install npm and http-server
`curl https://npmjs.org/install.sh | sh npm install http-server -g`
Then in the directory where the html sources are stored.
`http-server ./`

Windows

Your a bit on your own on this one. If you can install python 2.7 you can do the same `SimpleHTTPServer` trick as before or perhaps you could try mongoose which is apparently quite good.

Formatting a Table

Html mark-up allows the definition of many different kinds of elements and objects such as the following table,

- Letter
- Number

Search

Loading, please wait...

Letter	Number
A	1

B	2

However I think you will agree that that is a bit dull and poorly formatted and also lacks interactivity. You may have noticed that the html pages you are viewing are actually quite well formatted them selves. This is because we are using a CSS framework developed by twitter called Bootstrap which handles all of the formatting for us. We can make this table look much nicer straight off by using the bootstrap CSS. Try editing the script below so that the table is classed as a table.

Edit me:

This still isn't much fun. How can I search or sort the table? Hide columns ect..? Well this is where Wen Zhi Xin's Bootstrap tables comes in useful. I have already included the relevant css and JS files in the header of this document. The library depends on JQuery and is linked to the relevant table tag like so:

```
$("#test_table table").bootstrapTable()
```

Where `#test_table` selects the div with the table in it and `table` selects the first table in that div. Have a go at adding attributes to the table and seeing what they do.

Edit me:

Using D3 to Build a Table

Now use your new found skills to generate a table from a variable `data` in the following script.

- Letter
- Number

Search

Loading, please wait...

Letter	Number
A	1
B	2

Edit me:

Turn Ride_Data into a table

Look at the data in Ride Data, can you turn it into a table using the techniques above? Can you make it so I could choose the ride with the most assent per mile travelled? You may be need to add an extra column. Can you spot anything unusual in the data, what do you think the data is from and is it what you would expect?

- type
- name
- distance
- time
- total assent

Search

Loading, please wait...

type	name	distance	time	total assent
Commute	03/14/2014 Brassington, England, United…	72.2	3:01:40	974
Commute	02/18/2014 Brassington, England, United…	63.3	2:41:28	914
Cross	The Tale of Two Trails and an early…	67.5	3:01:11	760
MTB	27/05/11 Swadlincote, Derbyshire,…	68.3	3:51:03	10565
MTB	exploring Greater Manchester	64.7	2:45:48	592
MTB	D&W Trailquest: Holymoorside. Rubbish…	38.7	2:03:29	5313
Ride	11/30/2013 Chesterfield, England,…	63.6	2:18:57	814
Ride	04/12/2014 Walton, England, United…	60.8	2:37:43	647
Ride	03/01/2014 Walton, England, United…	60.7	2:20:59	356
Ride	11/09/2013 Warrington, England, United…	78.5	2:43:31	17807

Showing 1 to 10 of 90 rows 10

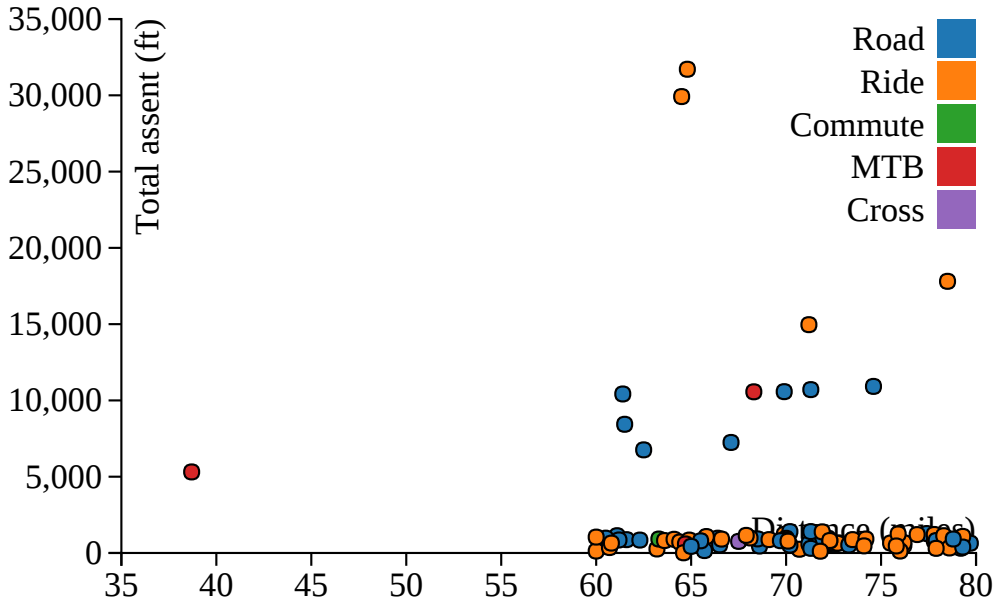
- 10
- 25
- 50
- 100

records per page

- «
- ‹
- 1
- 2
- 3
- 4
- 5
- ›
- »

Plot something

Look at some of the tutorials on blocks, can you plot anything interesting from the data in Ride_Data?



Surprise Me!

Resources

- Bootstrap
- Bootstrap tables
- D3 API reference