Cryptomarket

An exploration in SVG and HTML5 Canvas by vizualizing and analyzing cryptocurrencies market values since April 2013.

The data

crypto-markets.csv

```
symbol,date,close,name
BCC,2017-11-06,259.85, "Bitcoin Connect"
BCC,2017-11-05,276.28, "Bitcoin Connect"
BCC,2017-11-04,278.66, "Bitcoin Connect"
BCC,2017-11-03,271.12, "Bitcoin Connect"
BCC,2017-11-02,263.27, "Bitcoin Connect"
BCC,2017-11-01,250.93, "Bitcoin Connect"
BCC,2017-10-31,239.52, "Bitcoin Connect"
BCC,2017-10-30,228.12, "Bitcoin Connect"
BCC,2017-10-29,227.10, "Bitcoin Connect"
```

date	date in `%Y-%m-%d` format	⟶ Scale X-axis
close	float	⟶ Scales Y-axis
symbol	string	⟶ Label and Identifier
name	string	⟶ Not used

Data source: https://www.kaggle.com/jessevent/all-crypto-currencies

Target

People investing in the conventional finalcial market and cryptocurrencies or interested in starting.

People interested in understading what is this bitcoin phenomenon everyone is talking about.

Journalists covering business and finances who want to visualize trends and explore the cryptomarket.

Viz take-aways

Bitcoin (BTC) dictates the trends.

Bitcoin in overwhelmingly more valuable than the other main stakeholders in the cryptomarket.

There's an extremely high number of investment possibilities in the cryptocurrency market.

There are cryptocurrencies that are just as valuable as the famous bitcoin but nobody talks about it.
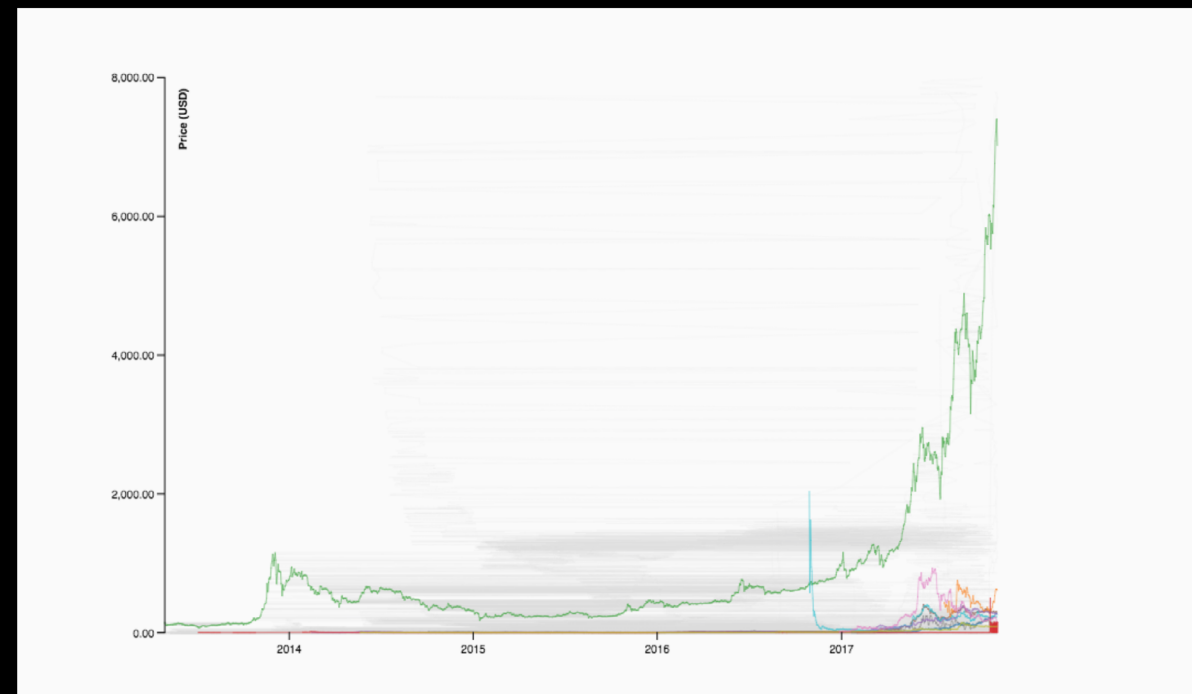
What went well

Visualizations have linear and logarithmic Y-axis scales, both relevant to financial data analysis in different ways.

Crossfilter.js made data handling and filtering easier.

Custom function to rescale Y-axis is used in both SVG and Canvas visualizations.

What could be improved

Hover tooltips for further exploration of the data and comparision between crypto-currencies.

Make hovering better without having to increase line widths.

What didn't work well

Data load takes too long. Data set needs to be trimmed of entries that are not displayed (there are plenty).

For being so many, the grey lines in the background of the Canvas visualization lose some meaning.

Hover interaction is not as effortless as it needs to be.

JS take-aways

Canvas is a viable alternative to SVG to visualize large amounts of data.

Features

D3 visualization
Hover
Transitions
Button-click update
Y-axis rescaling

Canvas visualization
Complete data set
Button-click update
Y-axis rescaling

Resources

Bootstrap (CSS)
D3 Queue (JS)
D3.js
Crossfilter.js

HTML5 Canvas
SVG

bl.ocks.org
w3schools.com
developer.mozilla.org
stackoverflow.com
kaggle.com
coinmarketcap.com