

Alternative Currency Visualizations

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Background and Motivation

We decided to choose this project because alternative currencies are increasing in popularity and yet there is no easy way to understand the aggregate dataset of all the different digital currencies. The terms bitcoin and dogecoin and becoming so commonplace that we think it is important to be able to understand the trends in usage and volumes of exchange. Neither of us have backgrounds in digital currency, but we are both interested in the topic.

Project Objectives

How do the less popular digital currencies compare to bitcoin in terms of growth, trade volumes, and other metrics over time?

Do digital currencies exhibit similar trends of emergence and growth or are they independent?

How does the growth of newer currencies impact the alternative currency market?

Some benefits include being able to analyze trends over time amongst different currencies and potentially use it as a tool to predict future trends.

Data.

We are collecting all our data from online sources.

<https://www.cryptocurrencycharts.info/v2/>

<http://bitcoincharts.com/about/markets-api/>

Data Processing. Do you expect to do substantial data cleanup? What quantities do you plan to derive from your data? How will data processing be

implemented?

We will not need to do substantial data cleanup because most of the data is available through several RESTful API endpoints. This means we can essentially grab the components that we want and display them in our visualizations.

Some quantities we will need to derive are: growth rates, adjusted value for inflation, exchange ratios between digital currencies.

Visualization. How will you display your data? Provide some general ideas that you have for the visualization design. Include sketches of your design.

We will use line graphs to display different trends over time, like the trading price for each currency, market cap, trade volume, etc.

We might use bar charts to compare the trade volumes of different currencies.

Sketch:

<https://www.dropbox.com/s/hv5ap7tlkcv1191/Photo%20Mar%2010%2C%203%2041%2043%20PM.jpg>

Must-Have Features. These are features without which you would consider your project to be a failure.

Buttons to toggle currencies on and off.

Hover tooltip to view description of specific data points

Categories to view different attributes of the currency (i.e. trade value, trade volume, etc).

Optional Features. Those features which you consider would be nice to have, but not critical.

Option to select time range

Option to select desired currency value range

Option to see cryptocurrency market prices in various currency exchanges (and sort)

Project Schedule. Make sure that you plan your work so that you can avoid a big rush right before the final project deadline, and delegate different modules and responsibilities among your team members. Write this in terms of weekly deadlines.

March 13th - Turn in proposal and organize meeting dates and tasks that we need to accomplish

March 20th - First half of functional prototype due.

- create parsers to make API calls and grab/parse data
- create sketches of all the visuals
- create front end of project website -> Karine

March 27th - Start second half of functional prototype built

- Create buttons to toggle currencies on and off, hover tooltip to view description of specific data points

-Categories to view different attributes of the currency (i.e. trade value, trade volume, etc).

Thursday, April 10: Functional project prototype due

Week of April 14: Project review with the TFs

April 20 - Make necessary changes, refine visualization aesthetics

Thursday, May 1: Projects due (including screencast)

Thursday, May 8: Best project presentations and prizes