

STEP 1, A

Attributes of bitcoin data-

- * Price relative to USD

- * Time in 24 hour intervals.

STEP 1, B (data is numbers so only corresponding attributes considered)''

- * Size in circles over time- area corresponds to price

- * Line/Bar graph over time, y-axis is value, x-axis time

- * pie chart- slices correspond to average value over timeframe

STEP 2

bar chart- lose horizontal data due to aggregation, may oversimplify or fail to convey drops by averaging out data

line chart- good, relevant for data; frequently used for price/time data so intuitive for users

heatmap- good for maps, not for numbers over time

isotype chart- have thousands of data points, will be nightmare to develop- and loses sense of urgency by obscuring data behind icons- same loss of data from bar charts

bubble chart- data scales from 0.01 to 10,000, some circles will be too small to see, lose data trends as grouping of data, and circle sizes hard to intuitively interpret

histogram- possible use with average price change to plot distribution of bitcoins rate of change/ how bitcoin fairs over time; not great for data as is though

scatter plot- too many data points; will look like line chart

area chart- only computing one value; btc over time, so not relevant. May incorporate other data to use this like mining difficulty, but shift in scales will be confusing to interpret

pie chart- each slice corresponds to a year and the angle/ size corresponding to its value. However, it doesn't show variation over time, just overview of value for given time period- lose too much info

donut chart- same issue as above

treemap- same issue as above; area is hard to intuitively interpret by just looking at graphs.

I'm chosing a line/area graph and against my better judgement- a bubble chart. I need to decide on how to scale things to deal with the afformentioned issue of scale though for either of them, and although this may prove to be misreprestative of the actual data, scaling them based on log10 may show trends more clearly, moreso for the initial 60-70% of my data that is exponentially smaller than the latter.