**Project title**: PROJECT X

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**Project description/outline**: Our project is to uncover what helps determine the strength of the housing market. We’ll examine the relationship between US home prices and: 1) several economic datapoints; 2) the stock prices of construction companies.

**Research questions to answer**:

1. What economic indicators are correlated with the strength of the housing market (wage growth, housing inventory)?
2. Do the stock prices of construction companies tell us anything about future home prices?

**Datasets to be used**:

1. [Zillow](https://www.zillow.com/research/data/)
2. Alpaca

**Questions/Outline:**

1. **What has been the trend in U.S. housing prices from 2018-2022? In what areas have prices increased the most? Anything else to show the trends in housing over the years?** 
   1. Chart ideas: line plot of Zillow housing price index over the period, bar chart of Zillow housing price index change each year, hv.plot.points of the change in housing prices by region (that geographic map with color of bubble showing the change in price over the period)
   2. Data: zillow housing price index, zillow housing inventory
2. **What’s the relationship between wage growth and housing prices?** 
   1. Chart ideas: similar to the above
   2. Data: zillow housing price index and Atlanta Fed wage growth tracker
3. **Does the stock price of US construction companies tell us anything about the strength of the housing market?** 
   1. Chart ideas: similar to the above, statistic summary table, can maybe even do a confidence interval table here?
   2. Data: Alpaca

**List of data files:**

* Zillow housing price index (saved in Data folder)
* Zillow housing inventory (saved in Data folder)
* Atlanta fed wage growth (saved in Data folder)
* Alpaca. Need create data frame for stock data for:
  + DHI
  + LEN
  + NVR
  + PCOR
  + MTHSKY
  + KBH
  + LGIH
  + TPH
  + CCS
  + GVA
  + MHO
  + MYRG
  + GRBK
  + ROAD
  + PRIM
  + DFH
  + STRL
  + BZH
  + TPC
  + NWPX
  + HOV
  + LSEA
  + HIL
  + ORN
  + SGBX