Analysis of Housing Market in USA

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Tableau Dashboard:

Motivation:

The interest in analyzing the housing market in the USA has been sparked by personal experience with buying a house and observing the "hotness effect" in the covid period – the rapid sale of houses before we had the chance to view them. I recognize that analyzing housing market trends is essential for making informed decisions about buying, selling, or investing in property. Specifically, I was keen on understanding how the concept of "hotness" in the market has evolved over time.

Data Questions:

* 1. What are the trends in average listing prices from 2017 to 2023
* 2. What are the trends in median days on the market from 2017 to 2023?
* 3. What is the correlation hotness and mortgage rates have with prices and days on market?

Data Cleaning:

The datasets for Housing Market gathered from different websites and need to change the data types for the Dates and also the place information to get the states. I used python and created the data frames and used to create multiple dataframes for the years 2017 - 2023.

Challenges:

All the datasets were separate, had to create a data frame for all 50 states and then merge them with them. Some data that was given were incomplete and have to change a few datatypes to merge them.

Technologies Used:

Python/Pandas – for exploration, normalizing and aggregation of dataset.

Tableau – for dashboards

PowerPoint for introducing the project

Sources:

1. <https://www.realtor.com/research/data/>
2. <https://www.redfin.com/news/data-center/>
3. <https://fred.stlouisfed.org/series/MORTGAGE30US>

Conclusion:

This analysis indicates a minimal correlation between hotness and with prices and days on market rates. During the COVID period, the active listing count increased, along with median listing prices and hotness. This surge suggests heightened demand outpacing supply. Despite fluctuations, mortgage interest rates dropped between 2019 and 2021 before increasing again. However, buyers persisted in purchasing homes despite these changes