

SALEM REAL ESTATE

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OVERVIEW

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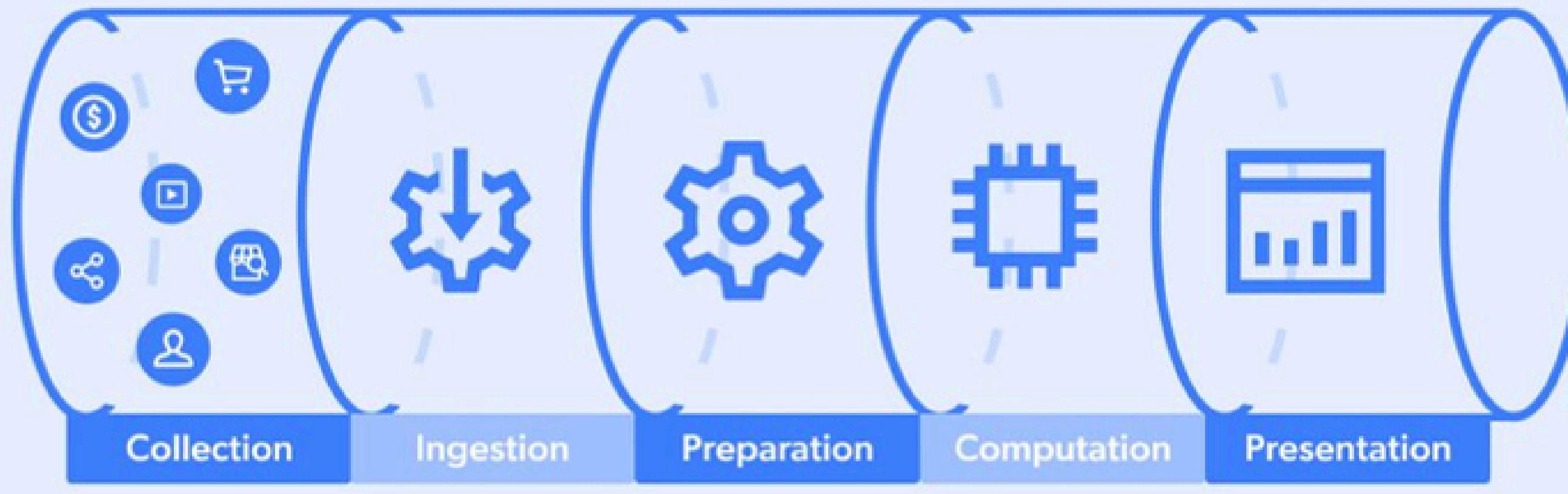
OUR QUESTION

Given the housing market,
should you buy or rent?

What are the financial and
supply limitations?



DATA PIPELINE



COLLECTION

Web Scrapers

We did all of our scraping through the Jed scraper

We collected the data from the US Real Estate API from three different endpoints

We started scraping on March 31st

For Sale
For Rent
Sold



INGESTION AND PREPARATION

Foreign Data Wrapper

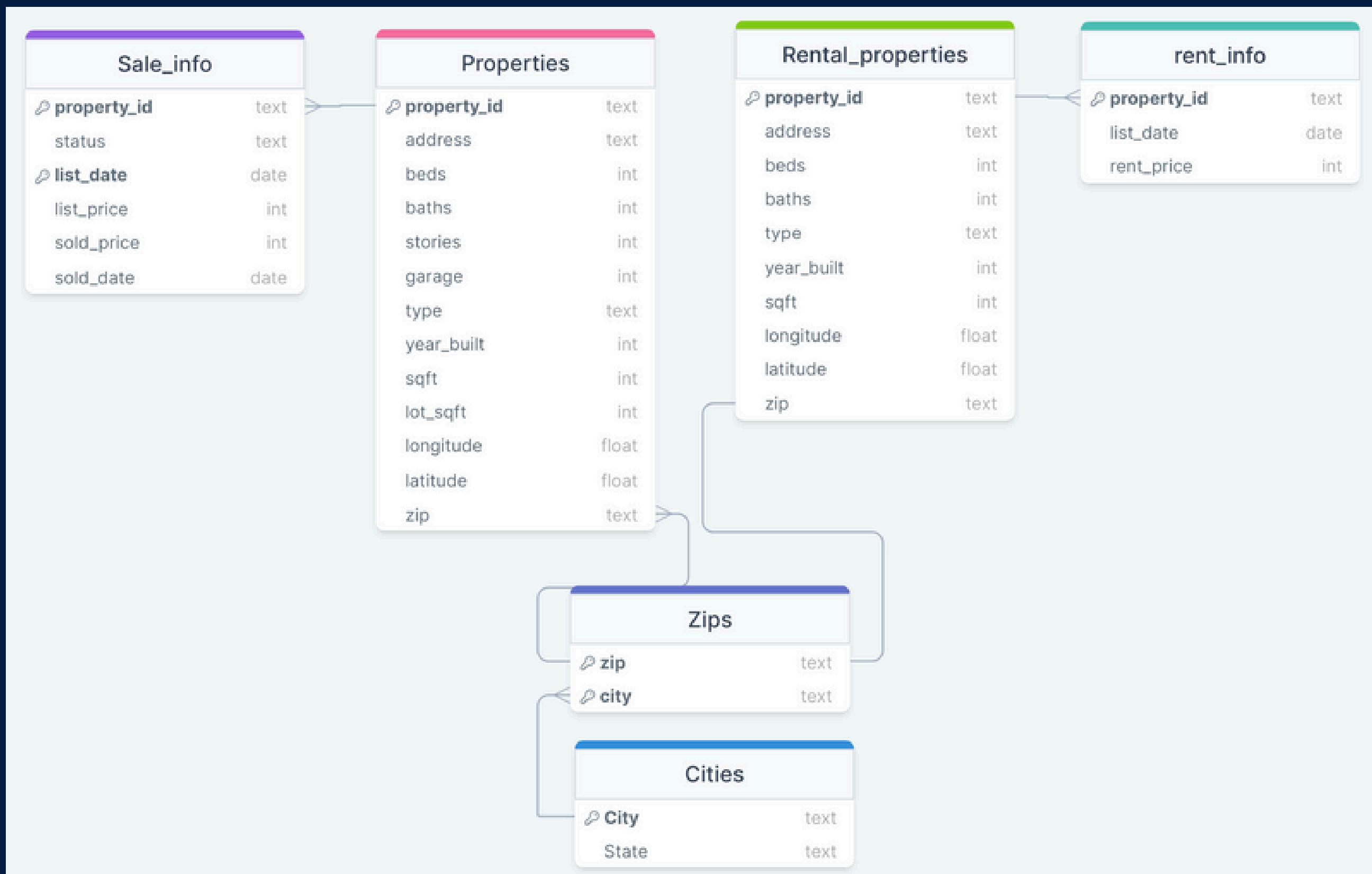
- Used the foreign data wrapper to connect all of our data

Cleaning

- JSON extraction house by house
- Extracting each house out



3RD NORMAL FORM



LIMITATIONS

Rapid API

- Rapid API used header keys, which wasn't originally compatible with the docker scrapper
- Thank You Jed!

Data Limitation

- Rapid API free version only allows 42 houses per API call, and only 300 calls a month.
- Leads to the low amount of data scrapped.

COMPUTATION

Power BI

01 Average Mortgage

02 Suggested household incomes for the given expenses



COMPUTATION

FAMILY SIZE (Bed, Bath)	RENT	BUY
LARGE FAMILY (3+ , 2+)	\$1715	\$2914
SMALL FAMILY (2+ , 1+)	\$1371	\$2096
COUPLE/SINGLE (0+ , 1+)	\$1056	\$1900

Suggested Monthly Household Income = Monthly Housing Cost / 0.3

It is suggested that households only spend 30% of their income on housing for healthy living





ANALYSIS

POWER BI DEMO





CONCLUSIONS

If large families can afford to buy, currently there are more options available

For small families and single/couples renting is significantly cheaper, but there are only a few house options. If they're okay with apartments there are more options at cheaper rates.

Buying is much more expensive right now, but if you need to rent something other than an apartment you don't have much of a choice.



Thanks For
Listening!
Questions?

