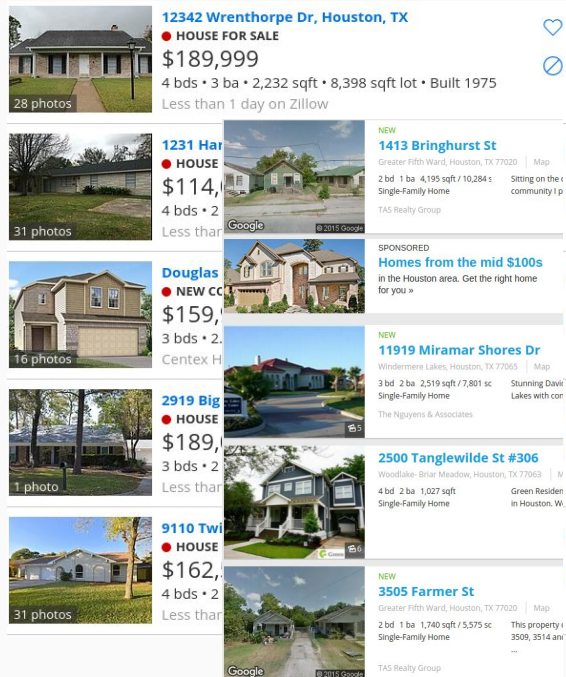


Intelli Invest

Spotting Tomorrow's Good Investment Today

Let's Start With a Story...



A grid of real estate listings from Zillow. Each listing includes a photo of the house, the address, the number of bedrooms and bathrooms, the square footage, and the price. The listings are arranged in a 4x3 grid. The first listing is for 12342 Wrenthorpe Dr, Houston, TX, priced at \$189,999. The second listing is for 1231 Har... priced at \$114,000. The third listing is for Douglas... priced at \$159,000. The fourth listing is for 2919 Big... priced at \$189,000. The fifth listing is for 9110 Twi... priced at \$162,000. The sixth listing is for 1413 Bringham St, priced at \$114,000. The seventh listing is for 11919 Miramar Shores Dr, priced at \$189,000. The eighth listing is for 2500 Tanglewilde St #306, priced at \$162,000. The ninth listing is for 3505 Farmer St, priced at \$114,000.

12342 Wrenthorpe Dr, Houston, TX
● HOUSE FOR SALE
\$189,999
4 bds • 3 ba • 2,232 sqft • 8,398 sqft lot • Built 1975
Less than 1 day on Zillow

1231 Har...
● HOUSE
\$114,000
4 bds • 2 ba • 1,000 sqft
Less than 1 day on Zillow

Douglas...
● NEW CONSTRUCTION
\$159,000
3 bds • 2 ba • 1,000 sqft
Centex Homes

2919 Big...
● HOUSE
\$189,000
3 bds • 2 ba • 1,000 sqft
Less than 1 day on Zillow

9110 Twi...
● HOUSE
\$162,000
4 bds • 2 ba • 1,000 sqft
Less than 1 day on Zillow

1413 Bringham St
NEW
\$114,000
2 bd 1 ba 4,195 sqft / 10,284 sq ft
Single-Family Home
Sitting on the edge of a community / 1 p
TAS Realty Group

11919 Miramar Shores Dr
NEW
\$189,000
3 bd 2 ba 2,519 sqft / 7,801 sq ft
Single-Family Home
Stunning Dark
Lakes with cor
The Noyens & Associates

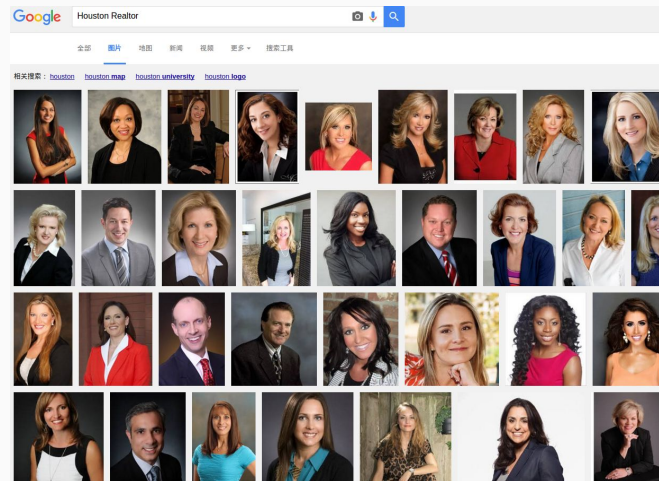
2500 Tanglewilde St #306
NEW
\$162,000
4 bd 2 ba 1,027 sqft
Single-Family Home
Green Residen
in Houston, W...
TAS Realty Group

3505 Farmer St
NEW
\$114,000
2 bd 1 ba 1,740 sqft / 5,575 sq ft
Single-Family Home
This property is
3509, 3514 and
TAS Realty Group

United StatesTM
Census
Bureau

America's
Best
High
Schools

 **CRIME STOPPERS**
CALL 713.222.TIPS



Google Houston Realtor

全部 图片 地图 新闻 视频 更多 搜索工具

相关链接: houston houston.map houston.university houston.huge

A grid of 30 realtor portraits arranged in 5 rows and 6 columns. Each portrait is a headshot of a realtor, mostly women, dressed in professional attire. The grid is part of a search results page for 'Houston Realtor' on Google.

Let's Start With a Story...



What is the Problem?

3000+ Counties

40,000+ Zip Codes

1,000,000+ Listings

0 Time Series Data

0 School Data

0 Crime Data

0 Population / Growth Data

What is the Problem?

Too Big a Decision

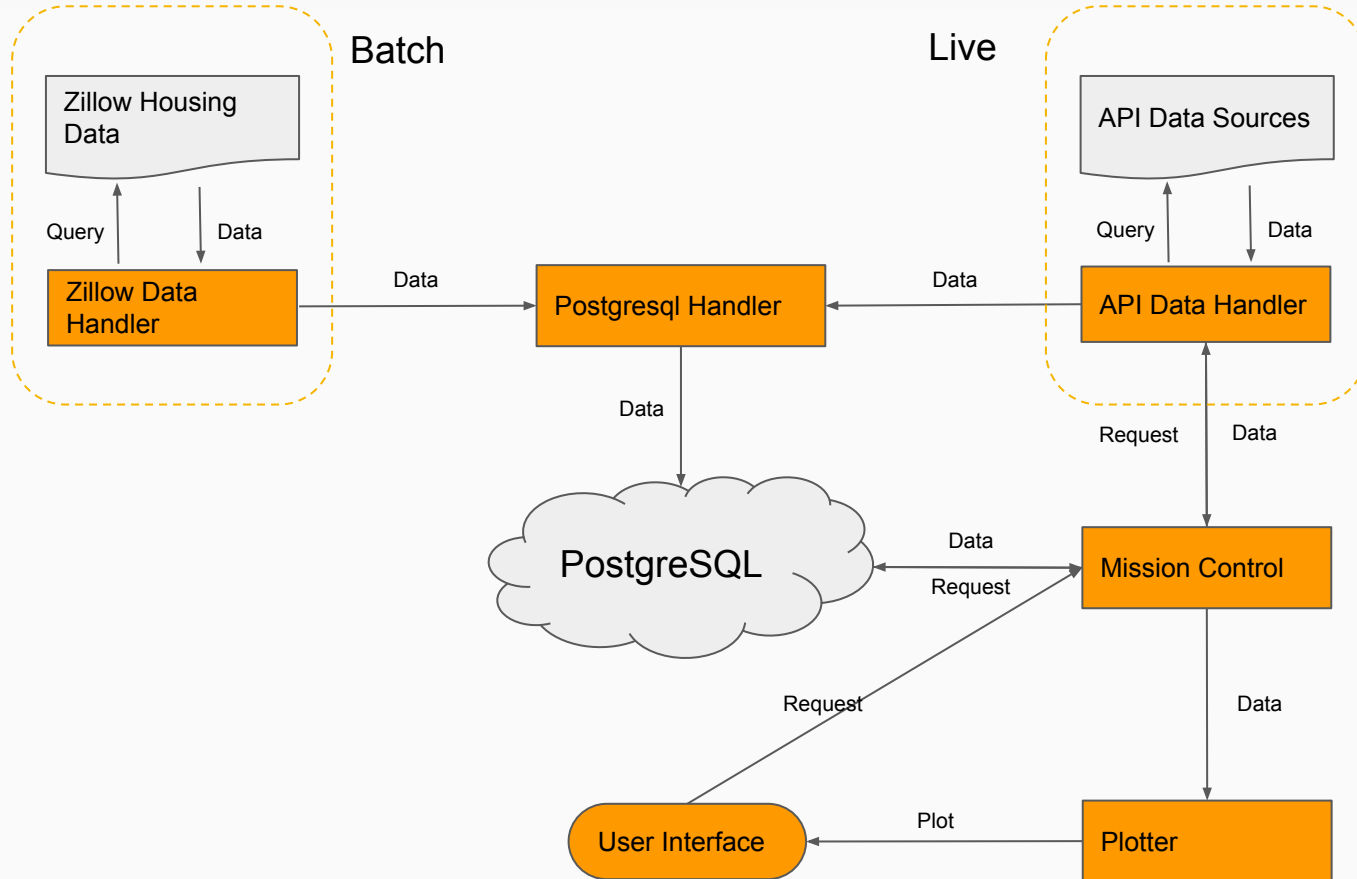
Too Scattered the Data

Too Many Choices

Theories of Property Investment

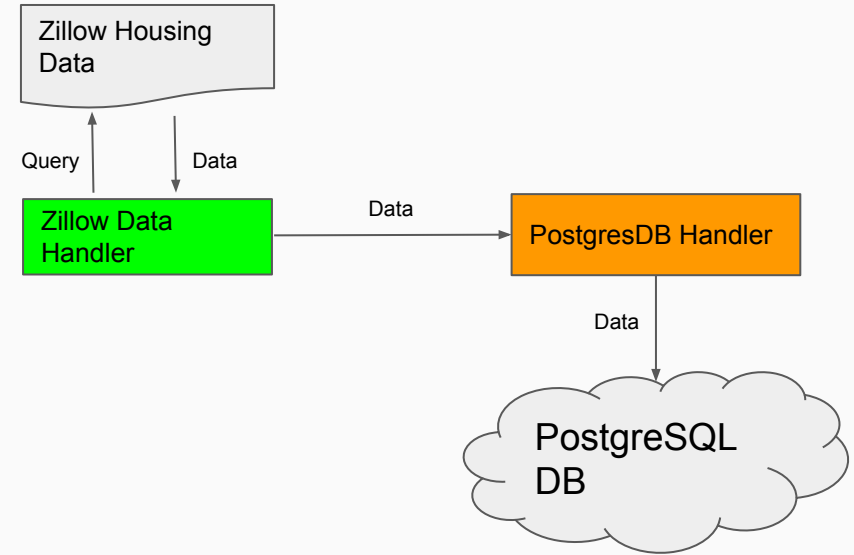
- Focus on “Return on Investment”
 - Zillow Price and Rent Data
 - Historical Price / Rent Data (1996 ~ 2015)
 - US Census 2010 & Forecast 2013
 - GreatSchools.org, Walkscore etc.
- Consistency over time
- Population matters
- A place where people want to live

Architecture



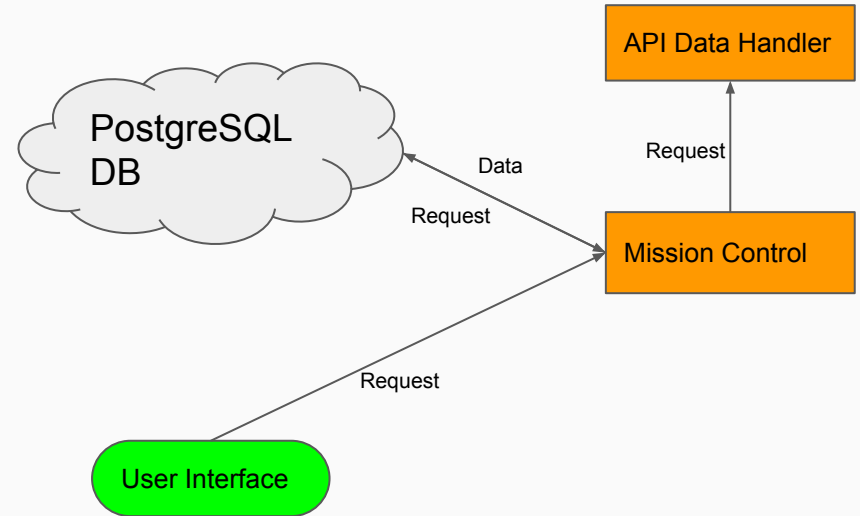
Zillow Data Handling

- Periodic Update (Monthly)
- Original Data in CSV on remote servers
- Size ~ Hundreds of MB
- Preprocessing required



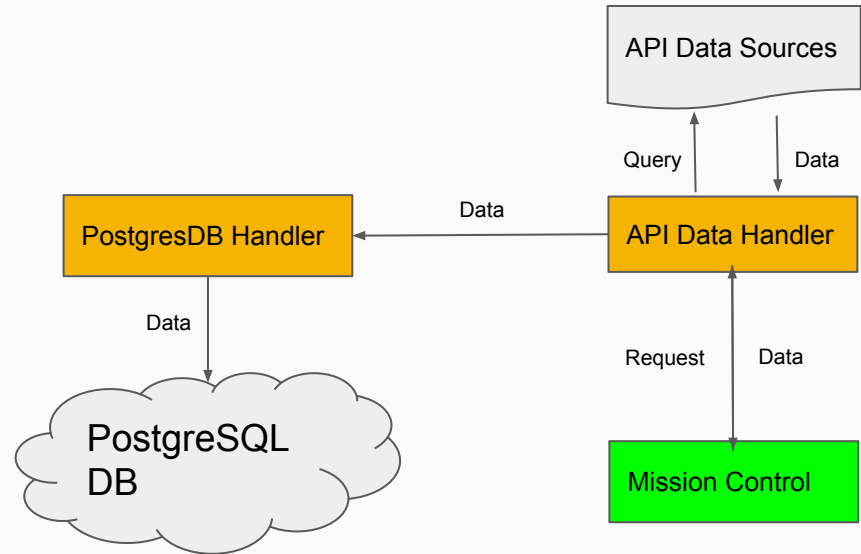
User Request Handling

- Completely reactive
- Always check required data in database first
- Triggers required API only needed

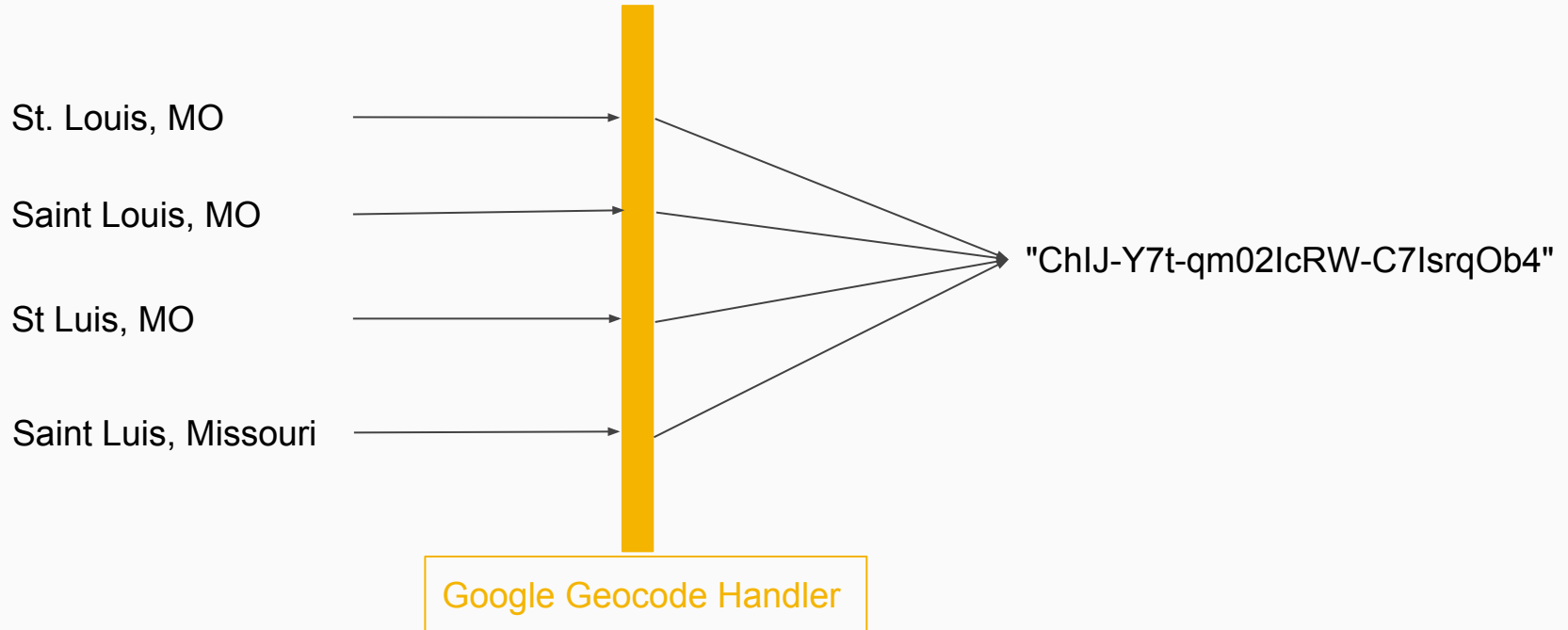


API Data Handling

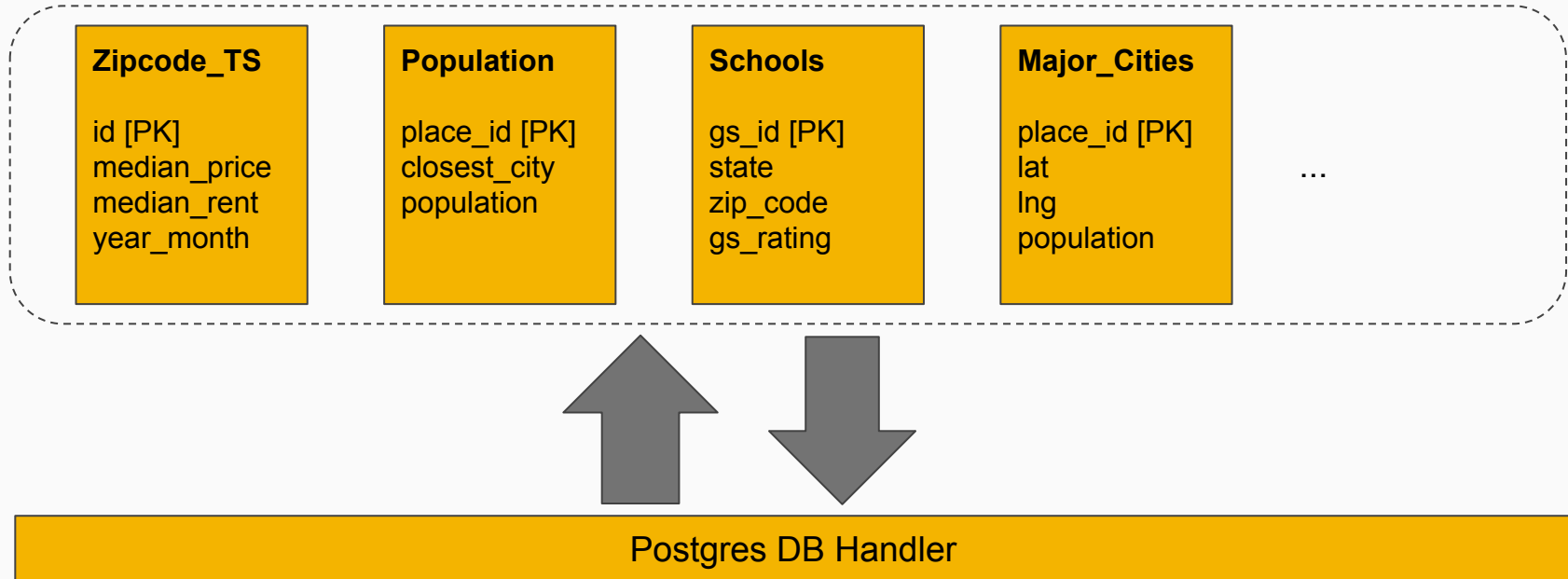
- On demand query
 - Always checks internal DB first
 - Always updates DB with API data
- Common API Data Handler layer for parsing
- Small in size, but big in variety



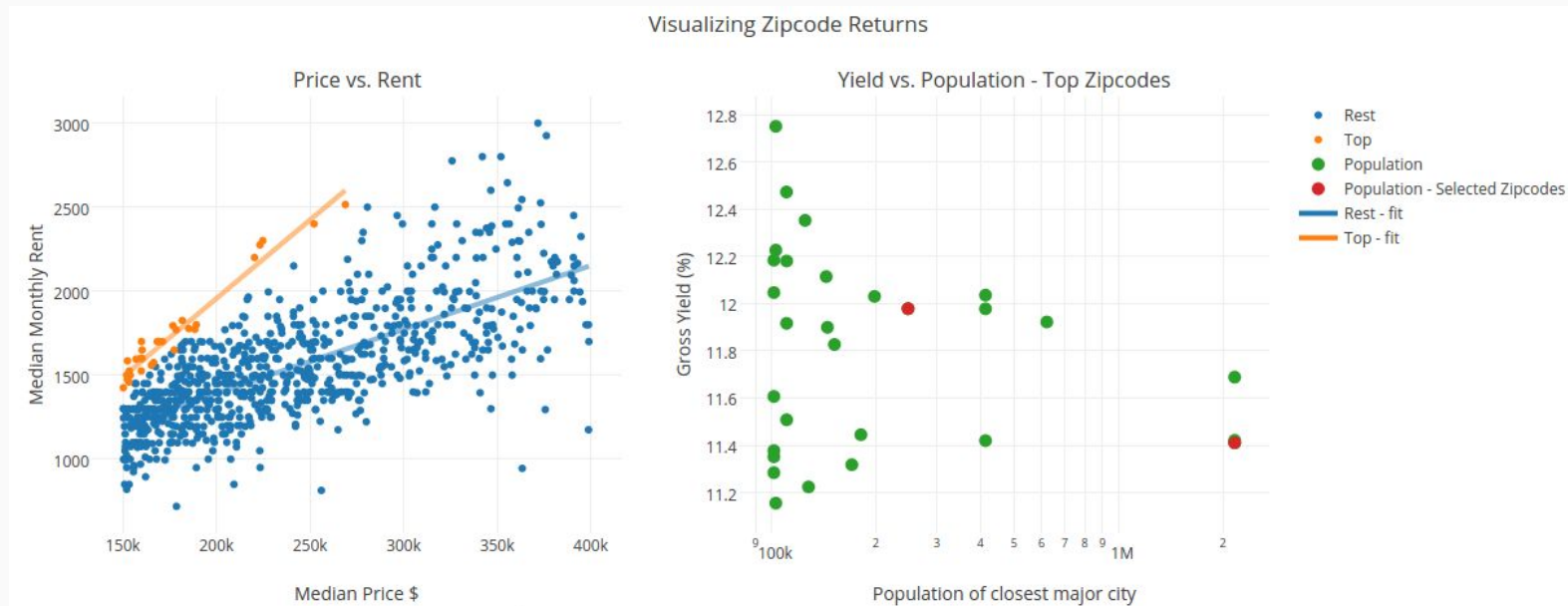
Overcoming Challenges



Database and Tables

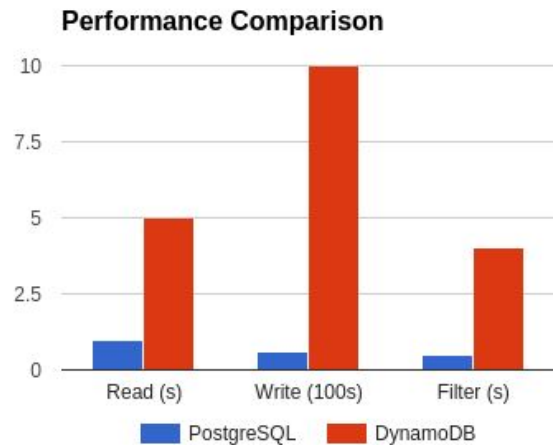


Shall We See Some Results?



Practical Considerations

- Postgres vs. DynamoDb
- Mission Control / Plotter



Areas to Improve

Front End Portfolio Analysis	API Handler More Data Sources
ElastiCache Large scale concurrency	DynamoDB Less reliance on Schema

Practical Impact

Number of Potential Areas

Number of Web Searches

Amount of Historical Data

Before
After

40,000+

25

100+

<10

0

250+ mns



Questions?