Determining best household rental prices in Houston using Zillow.com

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Introduction

- Our team member is moving
- He searches on Zillow for "Houston, TX"
- He is confused seeing so many listings
- We are trying to simplify his life!

Approach

Data

Pull Rental Data using
Zillow API

Model

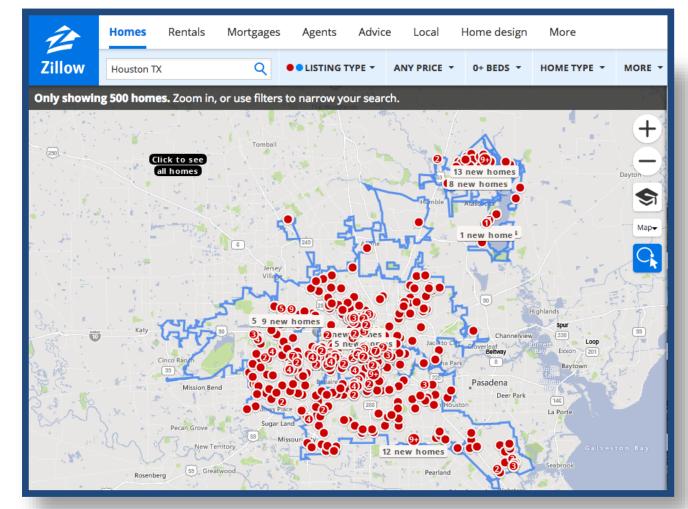
 Build Regression Model for Expected Rent



 Build GUI for user to input desired features

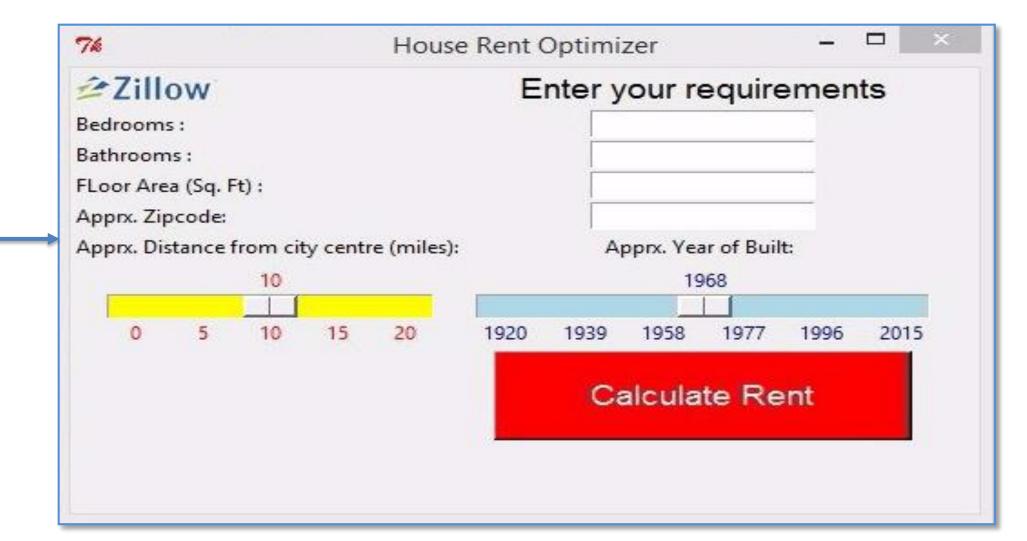


Visualize apartments
Above & Below Exp. Rent



Zillow: Current State

- Around 400 listings from Zillow API
- Data on:
 - Home Type
 - Latitude & Longitude
 - Year Built
 - Home size
 - Number of Bedrooms & Bathrooms
 - Street Address
 - Zip Code
 - Listed Rent
- Log. Linear Model VS, Linear Regression Model
- Adjusted R²: **60%** vs. **38%**
- **Positive** Effects:
 - Bathrooms, Bedrooms, Size
- **Negative** Effects:
 - Year Built , Few Zip Effects



Python GUI

Final Dashboard (Google Maps + D3)

