

Project Proposal

Project Purpose

It is to obtain data of real estate on CT State of US for rental and sellers to have best practice of their activities with existing market. However, the data might be pretty useful for customer to compare the prices amount on the town and type of property. There will be model solution to get the inputs and play it on the model to give the highest expectations for the end users.

Dataset Description

Subject: CT Real Estate Sales

I will use CT Real Estate sales from 2001-2016 period using [Kaggle](#) website repositories datasets. There will be many samples and characteristics will be explain separately. I will provide sample output data from large dataset that cover our subject on that project for end users.

Datasets size: (815905, 10)

- **Characteristics:**
 1. Serial Number.
 2. Year.
 3. Town.
 4. Sale Amount.
 5. Assessed Value.
 6. Sale Ratio.
 7. Property Type.
 8. Residential Type.
 9. Remarks.
 10. Address.

- **Sample:**

| SerialNumber | ListYear | DateRecorded | Town | Address | AssessedValue | SaleAmount | SalesRatio | PropertyType | ResidentialType | Remarks |
|--------------|----------|-----------------|---------|---------------------------|---------------|------------|-------------|--------------|-----------------|--------------------------------|
| 14046 | 2014 | 9/29/2015 0:00 | Andover | US ROUTE 6 M 33 B 36 L 22 | 10,720 | 75,000 | 0.142933333 | Vacant Land | NA | NA |
| 900035 | 2009 | 7/20/2010 0:00 | Andover | 1 DOGWOOD DRIVE | 55,600 | 99,000 | 0.561616162 | Vacant Land | NA | NA |
| 14011 | 2014 | 1/14/2015 0:00 | Andover | 1 JUROVATY LANE | 153,100 | 190,000 | 0.805789474 | Residential | Single Family | NA |
| 80009 | 2008 | 1/21/2009 0:00 | Andover | 1 ROSE LANE | 116,600 | 138,900 | 0.839452844 | Residential | Single Family | NA |
| 15006 | 2015 | 11/30/2015 0:00 | Andover | 1 ROSE LANE | 102,900 | 50,000 | 2.058 | Residential | Single Family | PROPERTY WAS OWNED BY THE BANK |

Model Description

Based on Sale Ratio there will be sorting for the town and property type in which we can show the best sale ratio that could the seller get with own property based on market needs and price.

Best Price = Sort (Town, Property Type) | Sales Ratio

- If Sale Ratio < 1 and > 0 that is mean the price is on market rate.
- If Sale Ratio > 1 that is mean the price is over the market rate

Tools

1. Numpy.
2. Pandas.
3. Jupyter notebook.
4. JupyterLab.

Note: I have notebook page for applying my test and development of model you can check [HERE](#).

MVP

The value of this project is user dashboard that show the charts of the real estate where the user can filter town and property type based on best price of market on CT State.

