Predicting Long Island City's Real Estate Prices

A Project Proposal Written by Paminas Mayaka January, 2024

Problem Statement

What opportunities do exist for developing a model to predict real estate prices to provide value to investors in Long Island city, New York?

Context

Long Island city is one of the fastest growing neighborhoods in New York. Since the city was rezoned from an industrial to a residential neighborhood in 2001, it has experienced substantial commercial and residential growth with 41 new residential buildings built between 2010 and 2017(https://en.wikipedia.org/wiki/Long_Island_City). Long Island City is a hub for arts, technology, and culture attracting those seeking a thriving urban lifestyle and outdoor activities. The majority of those being young professionals and families (https://www.cityneighborhoods.nyc/long-island-city).

Real estate property is in very high demand. The rental market is competitive, the luxury real estate has seen the largest increase in sale prices(https://www.fortunebuilders.com/long-island-city-real-estate-market/). However, the median sale price of a home decreased by 19.3% and the median number of days a property stays on the market has increased, December 2023 (https://www.redfin.com/neighborhood/31697/NY/New-York/Long-Island-City/housing-market#trends). Therefore, there is a need for an accurate model to help interested stakeholders make better investment decisions.

Criteria for Success

 A model that can accurately predict the price of a real estate property based on its features.

Scope of Solution Space

• The focus is to provide investors interested in Long Island city's real estate market with a price prediction model.

Constraints within the solution space

 Since I am focusing on the physical features of a house in my prediction, other characteristics such as the locale, neighborhood, and economic outlook may also contribute to the valuation.

Stakeholders

• Real estate investors, buyers, and builders

Source of Data

• I used the dataset I obtained in Kaggle website: https://www.kaggle.com/datasets/ahmedshahriarsakib/usa-real-estate-dataset

Deliverables

- A final project report
- A Github repository for the project
- All code in Jupyter notebook