Target Variable

Return rate = $\frac{final\ price - inital\ price - investment}{initial\ price + invest\ ment}$

Features

['damage_code', 'misc_features’]

['zone', 'sub_type', 'city_name', 'area_type', 'inspection_type',
'structural_quality_grade', 'exterior_condition_grade', 'interior_condition_grade',
'utilities_grade', 'damage_and_issue_grade',
'exterior_color', 'exterior_material’]

['days_on_market', 'current_population', 'population_5_years_ago', 'schools_in_area',
'public_transit_score', 'crime_score', 'culture_score', 'average_neighborhood_price', 'overall_inspector_score',
'sqft', 'floors_in_building', 'floors_in_unit', 'floor_of_unit', 'bedrooms', 'bathrooms', 'parking', 'basement',
'central_hvac’]

['build_year', 'remodel_year']

Features

- Days on market
- Build date
- Remodle date
- Initial price

Model

- LighGBM
  - Gradient Boosting Machine
  - Developed by Microsoft