Project Brief

Classification – House Grade Prediction

House Grade Classification

Property buyers have different requirements. To facilitate this, real estate companies prefer categorizing various houses into different grades based on various parameters. This would help agents in identifying the type of house a customer is looking for. This way, the search for the house can be narrowed down by focusing only on the ‘condition of the house’.

The Grade (condition of the house that ranges from A (Best) – E (Worst)) can also be used by existing owners to list their properties for sale. Grading helps them in arriving at a price of the house.

Business Objective

- Build a predictive model to determine the Grade of house (The grades are A,B,C,D, and E)

Data Dictionary: HouseGrade Data

The house dataset contains 3000 records in a CSV format. Click here to download the datafile for this project.

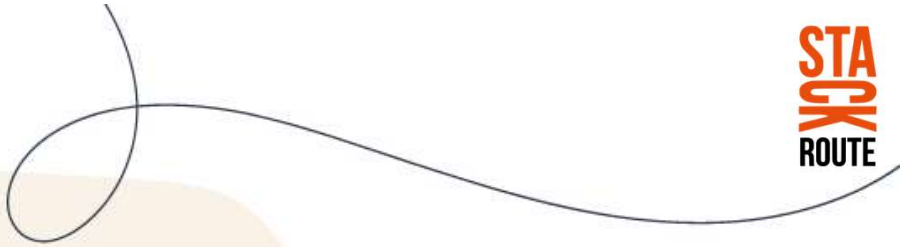
S.No	Feature	Data Type	Description
1	Id	Numeric	Unique record identification number
2	Totalarea	Numeric	Total area of the house
3	Trooms	Numeric	Number of rooms in the house
4	Nbedrooms	Numeric	Number of bedrooms in the house
5	Nbwashrooms	Numeric	Number of attached washrooms with bedroom
6	Twashrooms	Numeric	Total number of washrooms
7	Roof	Categorical	Does the house have a roof ?

Data Dictionary: HouseGrade Data (contd.)

S.No	Feature	Data Type	Description
8	Roofarea	Numeric	Area of the roof
9	Lawnarea	Numeric	Area of the lawn
10	Nfloors	Numeric	Total floors
11	API	Numeric	Air pollution index level
12	ANB	Numeric	Average number belonging
13	Expected_price	Numeric	Approximate cost price of the property
14	Grade	Categorical	The grade of the house/property

Technical Goals

- Understand the data very well. Do all transformations / data engineering / etc. wherever applicable
- Perform Exploratory Data Analysis (EDA)
- Carry out all the Data mining tasks
- Identify the salient features that will determine the best results
- Perform the model evaluation to select the appropriate algorithms



Thank you!