PROTOTYPE OF "PRICEASY"
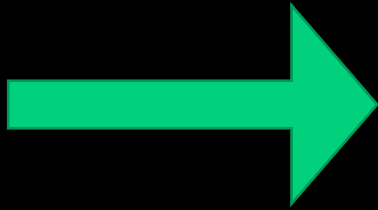
DATASET FEATURES FOR VARIOUS ITEMS :

❑ Product Brand

❑ Manufacturing year (for second hand items)

❑ Physical condition (scratches , torning etc)

❑ Material of the product

❑ Since how much time item is being used
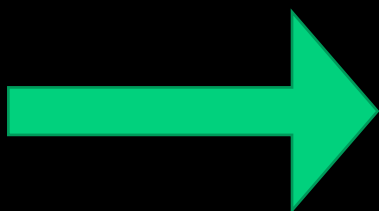
BASIC WORKFLOW :

Data Model

Data Pre-processing

Train Test Split

Linear & Lasso Regression Model

New Data   Trained Linear & Lasso Regression Model   Prediction

ROADMAP OF IMPLEMENTATION :

❑ Getting ready made Data model containing standard key features and price in iterative phase

❑ Coding part with Jupyter's notebook with Python language

❑ Getting basic working idea and familiarity with libraries such as Pandas , Matplotlib , Seaborn

❑ Importing Linear Regression model

❑ Importing Lasso regression model from sklearn

❑ Importing metrics module

❑ Data collection and processing

❑ Loading .csv file to panda data frame

❑ Inspecting data row wise simultaneously

❑ Forming predictive logic by quantity of different dependant attributes

❑ Also we have to keep record of missing attribute values

❑ Checking the distribution of categorical data

❑ Encoding this categorical data in numerical values , so that Machine Learning model can understand it.. For example, let processors type for laptop is mainly INTEL or RYZON so it can be encoding like "0" for INTEL , "1" for RYZON .Further for it can be encoded like 101 stands for INTEL i3 , 110 stands for INTEL i5 , 111 stands for INTEL i7 and similar in this kind of other things according to frequency digits can be decided .In this way data will be converted in suitable numbers.

❑ Splitting the Data into Training data and Test Data

❑ Size and variability in the dataset effects on the accuracy. The larger the data set , the more it will be precise.

❑ Model training via Linear regression model .Simply using Y = mX + C

- ❑ Prediction on Training data

- ❑ Then evaluating R square error defined as difference between the predicted value and original value. It depends on each on the magnitude of the value that we are using.

- ❑ Visualization of the actual prices and predicted prices by plotting their values on graph.

- ❑ Then the same way prediction on Testing data as well as R squared value and visualization.

- ❑ Then all these will be done with Lasso Regression

- ❑ By following this steps this project can be implemented at very initial level and then it can be expanded.

PRICEASY - THE PRICE CONSULTANT

Enter Specifications for car

Manufacturing Year:

2024

Current Market Price:

7

Kilometers Driven:

8876

Fuel Type:

- ● Petrol
- ○ Deisel
- ○ CNG

Transmission Type:

- ● Automatic
- ○ Manual

DISPLAY PRICE

Here, is the price based on your entries.

4.33144922

Validation in year :

PRICEASY - THE PRICE CONSULTANT

Enter Specifications for car

Manufacturing Year:

2025

Current Market Price:

7

Kilometers Driven:

8876

Fuel Type:

- ● Petrol
- ○ Deisel
- ○ CNG

Transmission Type:

- ● Automatic
- ○ Manual

DISPLAY PRICE

Here, is the price based on your entries.

ENTER year in between range:

Validation in KMS DRIVEN :

PRICEASY - THE PRICE CONSULTANT
Enter Specifications for car

Manufacturing Year:

2021

Current Market Price:

7

Kilometers Driven:

88765466

Fuel Type:
- ● Petrol
- ○ Deisel
- ○ CNG

Transmission Type:
- ● Automatic
- ○ Manual

DISPLAY PRICE

Here, is the price based on your entries.

This is overdriven car, don't go for it.