

Predicting Laptop Prices











INTRODUCTION

this year's most important back-to-school supply is a computer/Laptop How much you need to spend to get a computer with a good battery and a webcam that can keep on trucking for three or four years? In this project I'm going to do web scraping from the jarir.com website then linear regression to predict the laptop prices.



The purpose of this project is to estimate the laptop cost based on the laptop features.

which is achieved using linear regression models



Data is scrapped from jarir.com and it contain the important features for The laptops

- Company Name
- Product Name
- Laptop Type
- Screen Inches
- Screen Resolution
- CPU Model
- RAM Characteristics
- Memory
- GPU Characteristics
- Operating System
- Laptop's Weight
- Laptop's Price



DATA CLEANING & EDA

- Remove extra unnecessary details
- Convert some columns into Numeric Values
- Convert some categorical variables into dummy variables

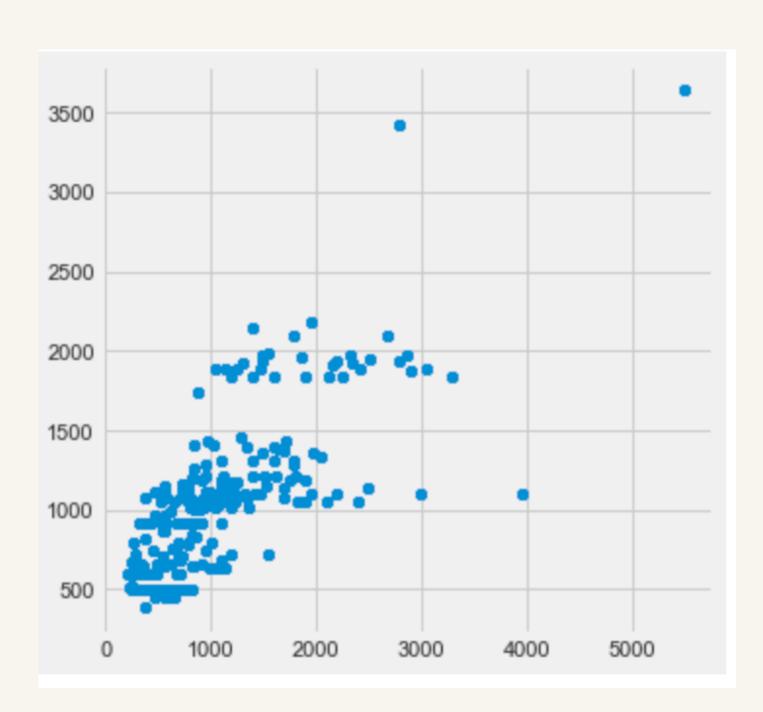


LINEAR REGRESSION

train-set score: 0.611682790488211

R2 score: 0.56

mean_absolute_error: 323.6





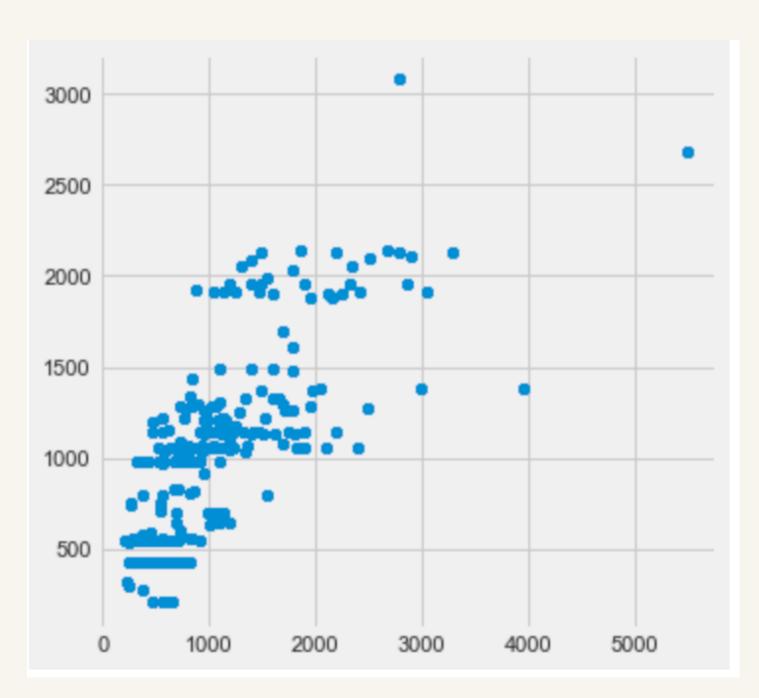


PLOYNOMIAL REGRESSION

train-set score: 0.6562040131528291

R2 score: 0.5614717749913734

mean_absolute_error: 325.217





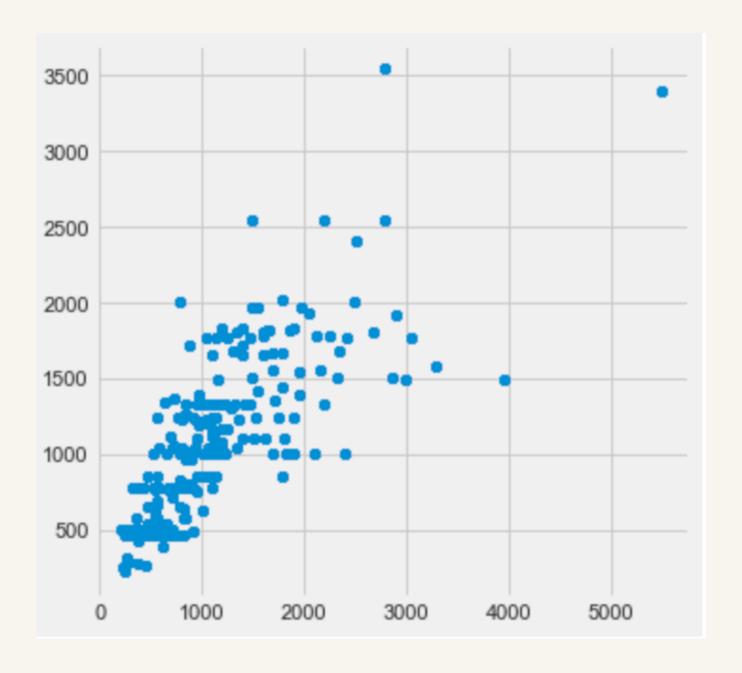


RANDOM FOREST REGRESSOR

train-set score: 0.8164159587295187

R2 score: 0.6

mean_absolute_error: 287.130





This model has the best R2 score

TOOLS

- Pandas & Numby for data manipulation
- Selenium web scraping
- Matplotlib & Seaborn for plotting
- Sklearn for machine learning
- Canva for presentation

THANK YOU

Any Questions?