

Using linear regression to predict the price of Swarovski & GUESS Jewelry.

Abstract:

This project was conducted for T5 Data Science Bootcamp, where we performed linear regression of Swarovski & GUESS Jewelry. This project aims to forecast future prices for Swarovski and Guess jewelry.

Design (Background Company):

- **Company info:** Amazon and also subscribed to Amazon.com is an e-commerce and cloud computing website founded on July 5, 1994, by Jeff Bezos and headquartered in Seattle, Washington. It is the largest online retailer in the world by area and market turnover. Amazon.com started as an online bookstore and later diversified into selling DVDs, Blu-rays, CDs, video downloads, streaming, audiobook downloads, software, games, toys, furniture, and jewelry.
- **Problem/opportunity:** Our linear regression model will make us able to predict the prices of Swarovski and Guess jewelry in the future

Data:

Data will be scraped from the Amazon website from the jewelry section of the Swarovski and GUESS brand. A sample of the features that will be used to determine our target are "brand", "rating", "review_num", "price", "type".

Column description:

- brand: type of brand GUESS or Swarovski
- j_type: description of jewelry.
- rating: number of rating
- review_num: number of reviews
- price: price of jewelry

Algorithms:

1. Understanding the Problem .
2. Data scraping.
3. Data Set Exploring and Cleaning.
 - Null Values
 - Duplicate Rows
 - Structural error
4. Exploratory Data Analysis (EDA)
5. Feature Selection
6. Modeling

Tools Description

The main technologies and libraries that will be used are:
Technologies:

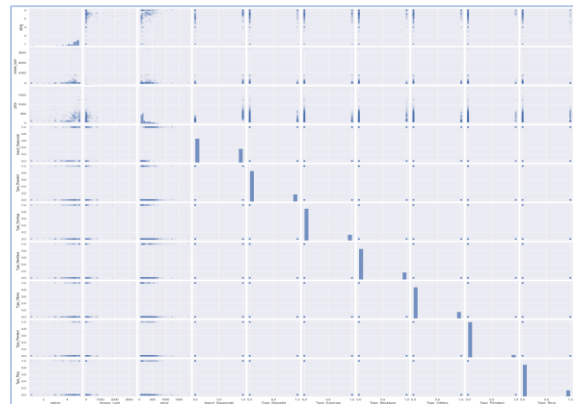
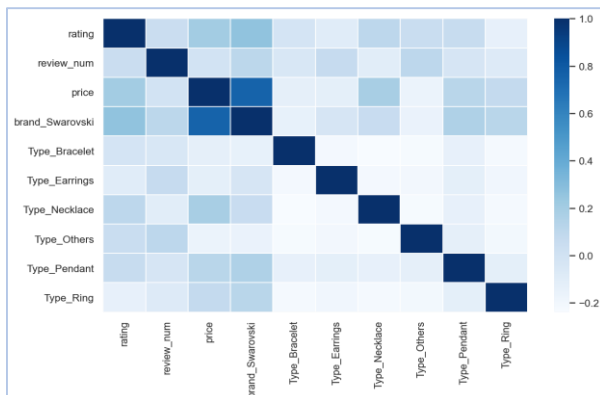
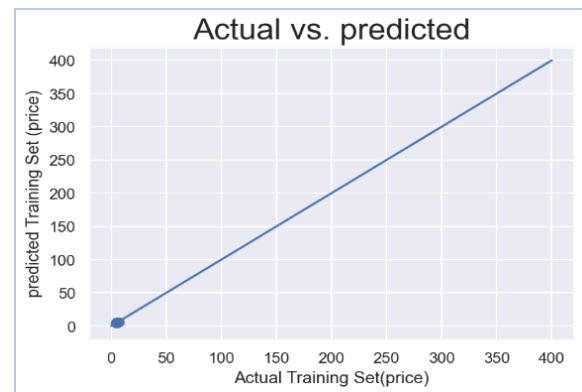
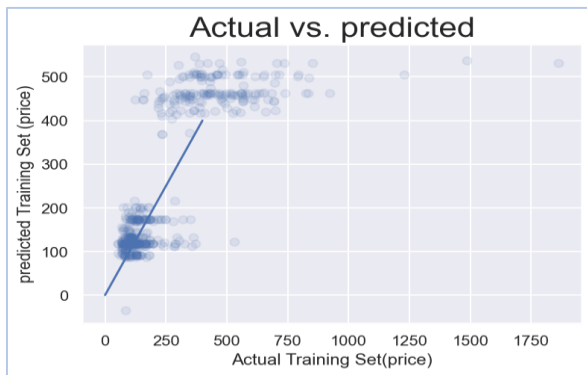
1. Python
2. Jupyter Notebook
3. HTML/CS

Libraries:


1. Pandas
2. BeautifulSoup
3. Matplotlib
4. Seaborn
5. Numpy
6. Sklearn

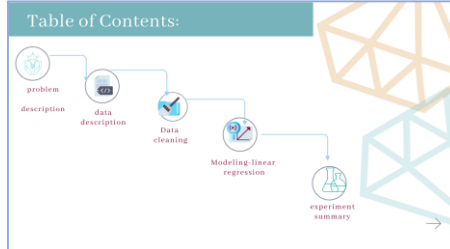
Communication:

-Charts:



Presentation snips:


Swarovski & GUESS Jewelry
Using Linear Regression To Predict The Price Of
Swarovski & Guess
Jewelry
prepared by:
Amani Albalawi
Tahani Alqhtani



problem description:

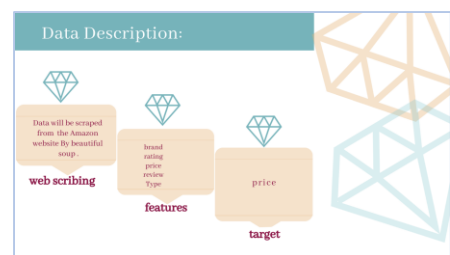


predict the prices of Swarovski & GUESS jewelry in the future.

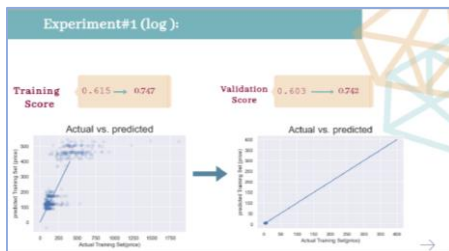
Dataset Exploration(Data Cleaning)



correlation
Duplicate
null value



Modeling-linear regression



Baseline Model:

Training score: 0.615
Validation mean score: 0.604

experiment summary :

	Training score:	Validation score:
log	0.747	0.742
Lasso	0.614	0.604
Ridge	0.615	0.604


THANK YOU
Any Question! 