Cap-stone: Team4

Topic: Diamonds Sales

1. Dataset: https://www.kaggle.com/shivam2503/diamonds
2. What you plan/hope to predict:
   o Diamond's worth depending on the specifications.
3. Screenshots for tableau inspiration
   o Chart on price, year, model

Diamond Pricing Model
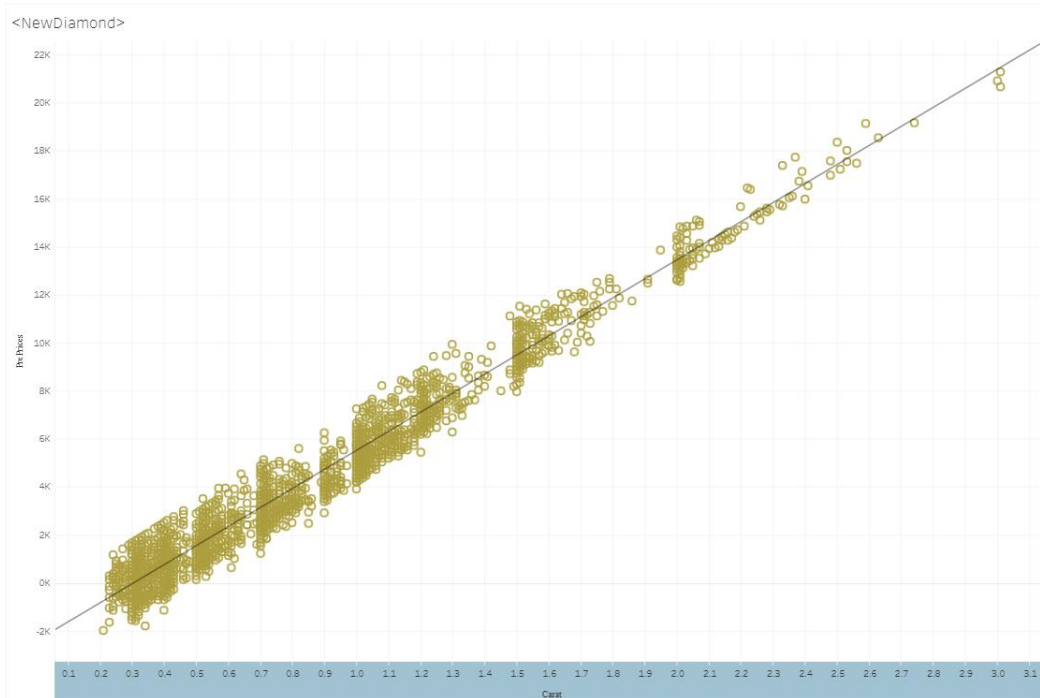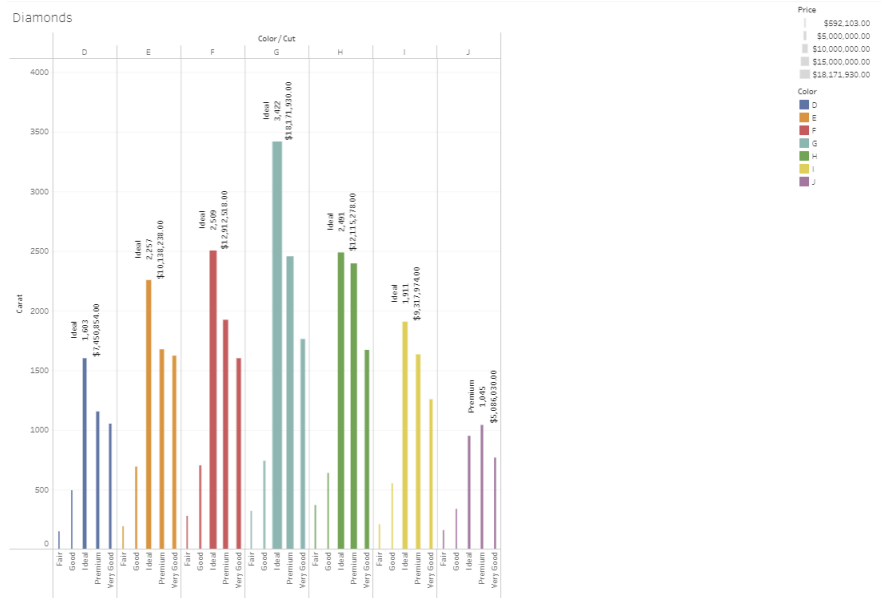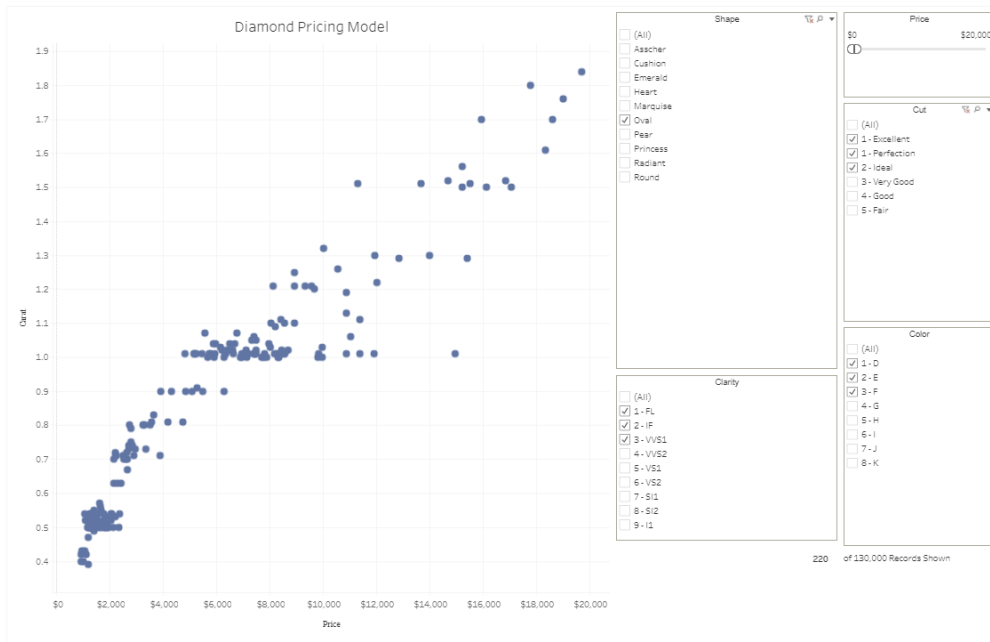
Diamonds

The Stone of Love

- The Variaous types of diamonds are present in the market based on different characterstics like Clarity, Color, Cut and Weight.

-Clarity is rated from I1 (worst) to IF(best), Mostly SI1 and VS2 is present.

-Cut is rated from ideal to Fair and as the name suggest, ideal is best cut with higher refractive properties and Fair is just fair enough. Ideal and Premium are the popular choice of people.

- Color is available from D(best) to J(worst). G, E, F are seems to being popular in market that's why high number of samples are present. While J has lowest samples available.

-Mostly,there is high frequency of diamonds sample is present within 2000$ price range.
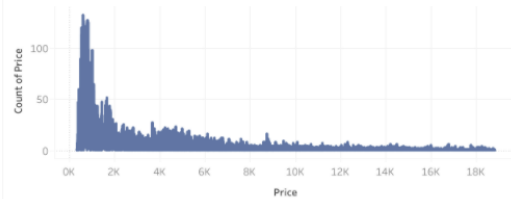
Clarity

Clarity	
SI1	13,065
VS2	12,258
SI2	9,194
VS1	8,171
VVS2	5,066
VVS1	3,655
IF	1,790

Color

Color	
G	11,292
E	9,797
F	9,542
H	8,304
D	6,775
I	5,422
J	2,808

Cut

Cut	
Ideal	21,551
Premium	13,791
Very Good	12,082
Good	4,906
Fair	1,610

Carat Dependecy on Price

Frequency of Price
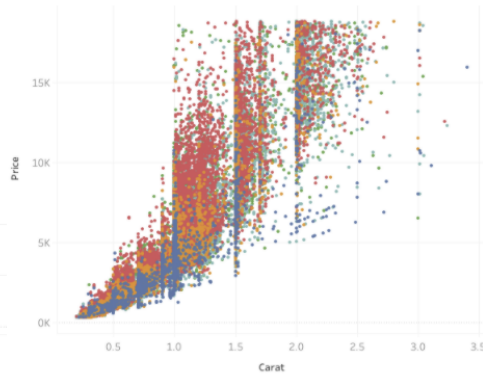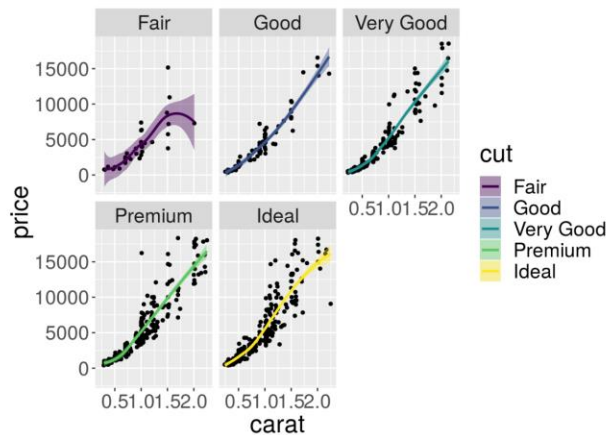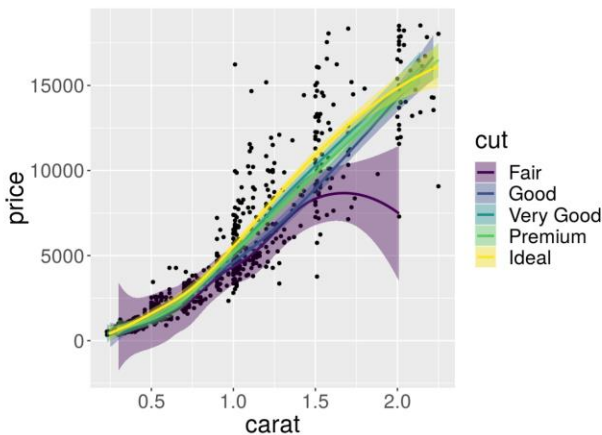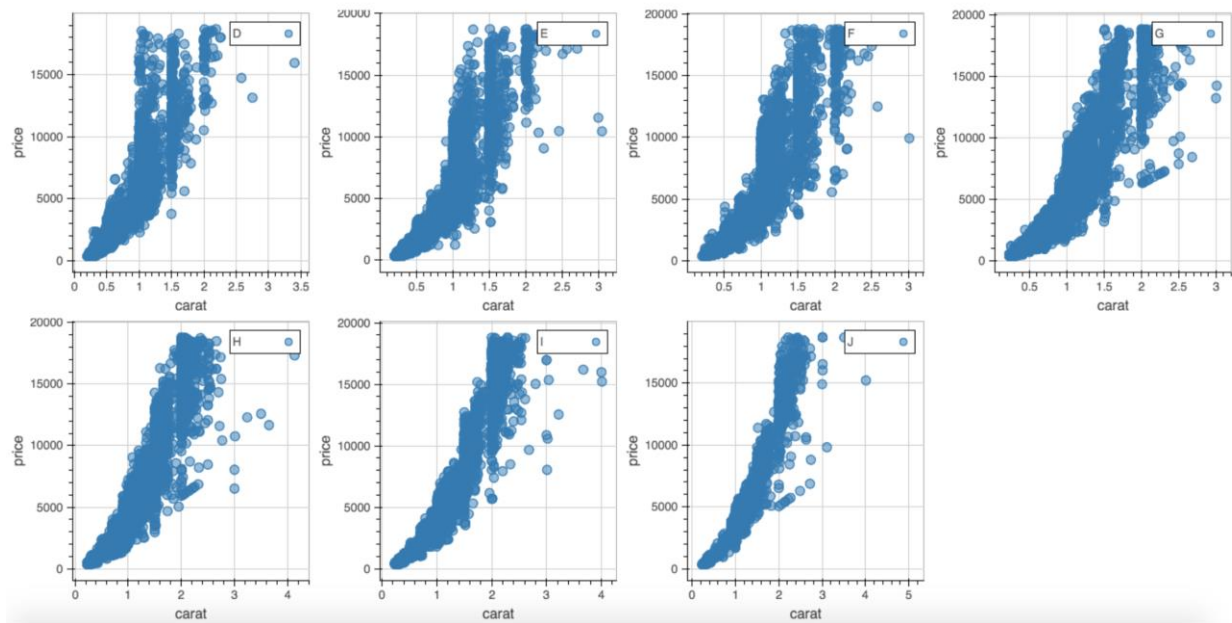
4. Links to code/notebooks for ML inspiration
    o https://www.kaggle.com/alfathterry/cars-price-prediction-automl
    o https://www.kaggle.com/fuzzywizard/diamonds-in-depth-analysis
    o https://www.kaggle.com/himahima/prediction-diamond-prices
5. Break down of roles/responsibilities
    o Machine Learning/Flask: Justin Merryman
    o Tableau: Patricia Berry, Cade Culver, Karla Murphy
    o Web design: Cade Culver, Karla Murphy
    o Write Up: Patricia Berry
    o Power Point: Karla Murphy
    o Read me: All
6. Basic hypotheses, trends
    o Identify sales trends so we can predict the diamond pricing/value and/or future sales.
    o Sales trends by carats
7. Design inspirations - color schemes, fonts, etc.
    o https://coolors.co
    o https://bootswatch.com/slate/
    o https://bootswatch.com/lux/