

- 1.Total credits give to every participants for whole game 100000.
- 2.On every click the credits for that feature will automatically deductued.So be patient after a click.

So lets get to the work !!

Features you are getting are

Null values

- 1.Show columns that has null (CREDITS:-**1500**)
 - it will give you a list of total no. of columns with True(if there is a null element in the column) OR False(if the column is full).
- 2.Number Of Null in cols (CREDITS:-**300**)
 - you have to choose the column in which you want to check the total no. Of null elements
- 3.Number Of columns Having Null (CREDITS:-**800**)
 - This will give the total number of columns which have atleast one empty data.

NORMALIZATION

Here you have to select a column name and normalistion way.

1ST Way (CREDITS:-400)

The every element(x) will be replaced by $(x - \text{Mean}) / \text{Deviation}$.
Where Mean is the mean of the data of whole column.

Deviation is the standard deviation of the data.

2ND Way (CREDITS:-400)

The every element(x) will be replaced by $(x - \text{Mean})$
Where Mean is the mean of the data of whole column.

3RD Way (CREDITS:-400)

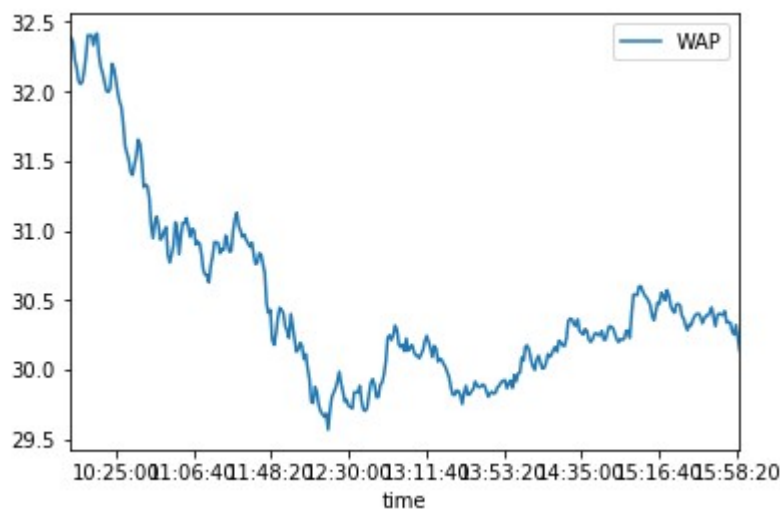
The every element(x) will be replaced by $x / \text{Deviation}$.
Where Deviation is the standard deviation of the data.

DATA VISUALIZATION

Here you have to select a graph type and column name

LINE (CREDITS:-300)

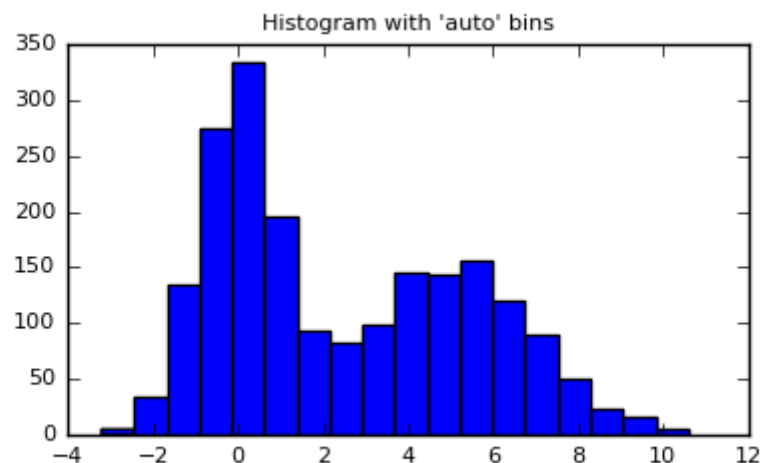
-you will get the graph of values of column vs entry number.



HISTOGRAM (CREDITS:-250)

-it will give you the the graph between column entry and frequency.

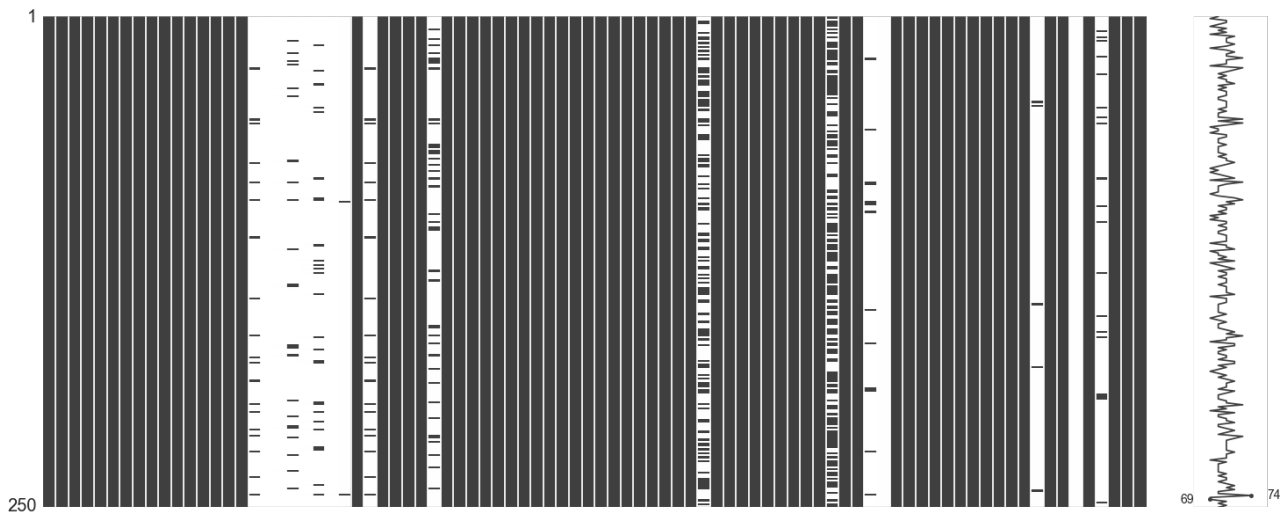
It would look like..



MISSING NUMBER VISUALISATION

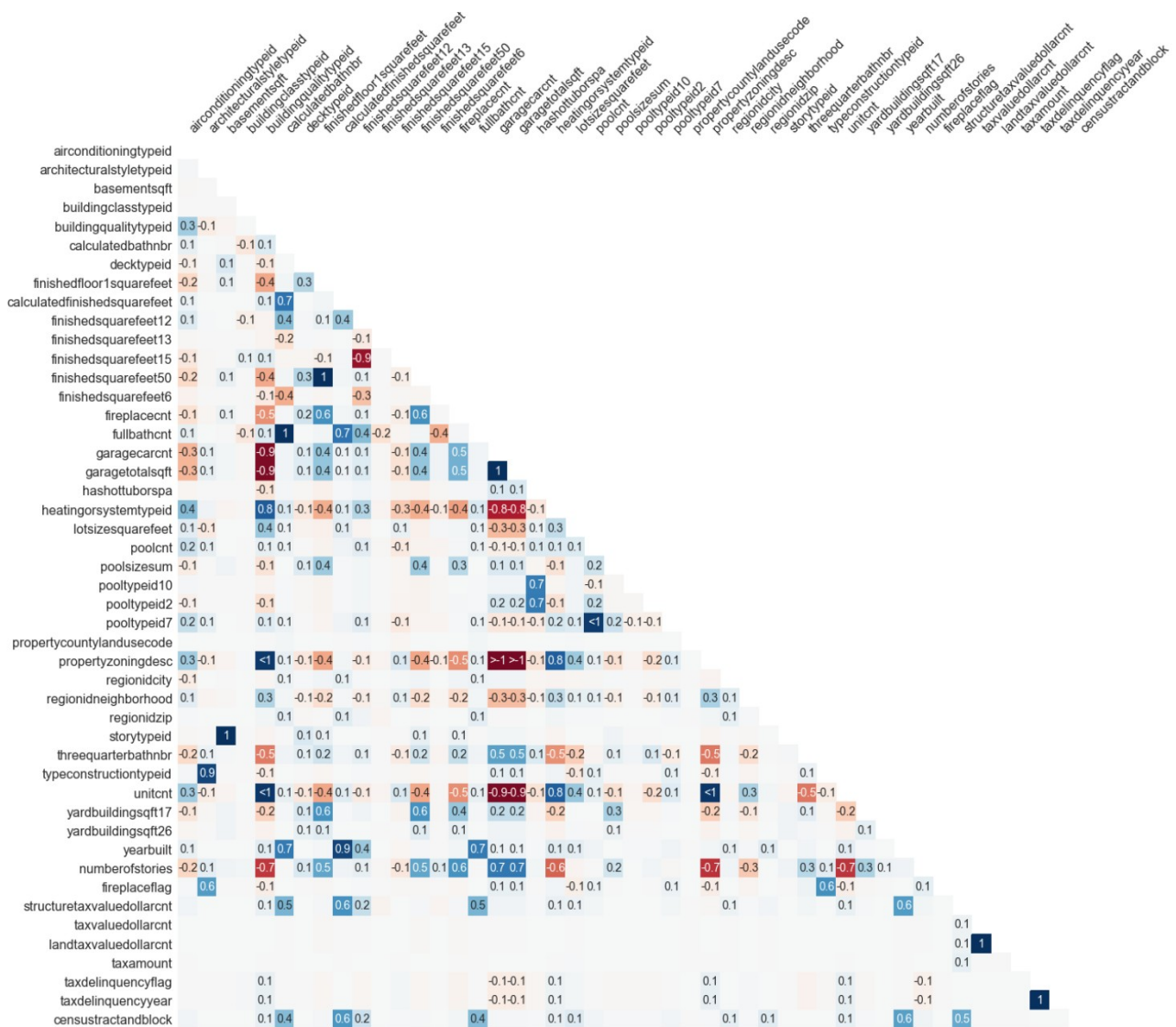
Matrix (CREDITS:-600)

- The nullity matrix gives you a data-dense display which lets you quickly visually pick out the missing data patterns in the dataset.



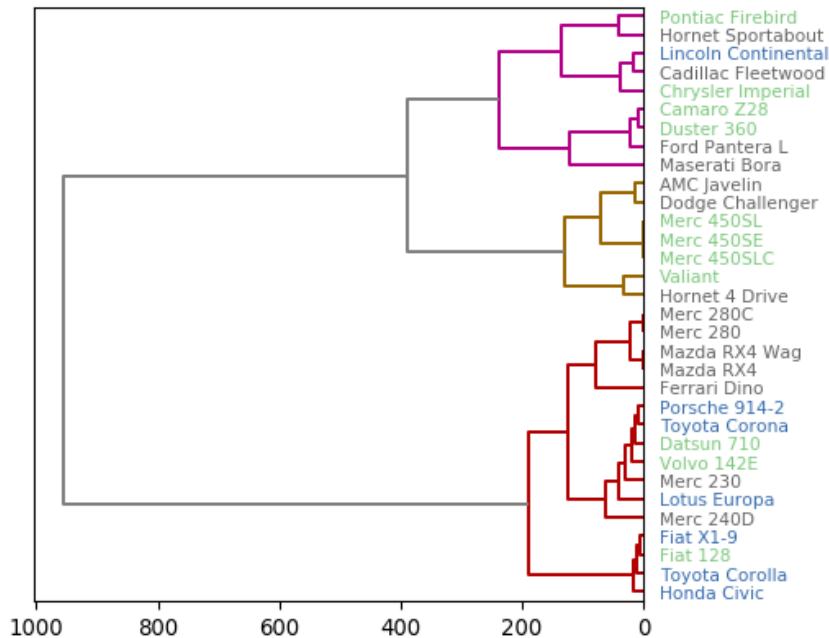
HEATMAP (CREDITS:-1000)

- This map describes the degree of nullity relationship between the different features. The range of this nullity correlation is from -1 to 1 ($-1 \leq R \leq 1$). Features with no missing value are excluded in the *heatmap*. If the nullity correlation is very close to zero ($-0.05 < R < 0.05$), no value will be displayed. Also, a perfect positive nullity correlation ($R=1$) indicates when the first feature and the second feature both have corresponding missing values while a perfect negative nullity correlation ($R=-1$) means that one of the features is missing and the second is not missing.



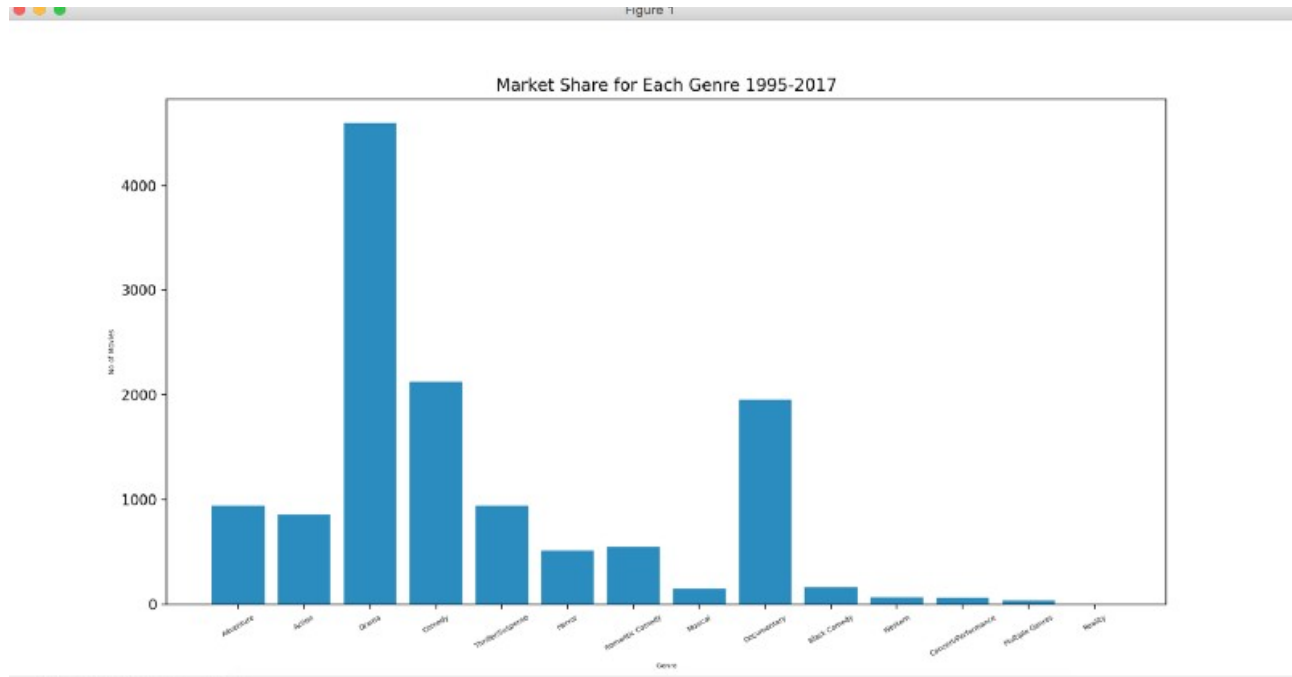
DENDROGRAM (CREDITS:-700)

-Its a hierarchical clustering analysis used to analyse the order of dependencies of partially filled columns
 The sample graph wold look like the below.



BAR (CREDITS:-900)

-Its a bar graph of all the cols vs the fraction of non empty data in that col.



FILL NULL VALUES

Here you have to select a column name and normalisation way.

Mean (CREDITS:-300)

The every element(x) will be replaced by **Mean**

Where Mean is the mean of the data of whole column.

Zero (CREDITS:-300)

The null element will be replaced by **Zero**

Standard Deviation (CREDITS:-300)

The every null element will be replaced by **Standard Deviation**.

Where Deviation is the standard deviation of the data.

LINEAR REGRESSION (CREDITS:-5 per row and after 3 linear regression 3000 per call)

- Here your model will be trained and then everytime you have to pick the no of data you want (one row is one data).

DROP COLUMN (CREDITS:-700)

- It drops the column from the dataset. It helps to remove the useless data to get more accurate answer.

CHECKPOINT (CREDITS:-2000)

- Whenever you clicks on checkpoint it stores your current situation and deduct the credit.

REVERT (CREDITS:-500)

- It takes you back to your position of your checkpoint.

TEST ACCURACY (Only be used thrice in a event no credits)

- It gives the accuracy of your model on our test set (test data).