Quiz 1.6 | Data pre-processing and Data transformation

Due No due date **Points** 10 **Questions** 7 **Time Limit** None

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	14,761 minutes	4 out of 10 *

* Some questions not yet graded

Score for this quiz: **4** out of 10 *
Submitted Oct 1 at 9:51pm
This attempt took 14,761 minutes.

Question 1

Not yet graded / 2 pts

Give 2 examples of Classification ML techniques.

Your Answer:

There are various types of ML classification techniques whose examples are stated below as:

- Linear Models. Logistic Regression. Support Vector Machines.
- Non-linear Models. K-Nearest Neighbours. Kernel SVM. Naïve Bayes. Decision Tree Classification. Random Forest Classification.

Question 2

1 / 1 pts

What do you mean by Noise in the data?

- Poor data quality
- Substituted data
- Data with too many variables

Correct!

- (selected) Meaningless input/values of a feature, measurement and typo errors

Question 3

1 / 1 pts

Binning helps to deal with which parameter in the dataset?

- Outlier
- Heteroscadicity
- Inconsistency

Correct!

- (selected) Noise

Question 4

Not yet graded / 2 pts

Where will you use Z-score and what are the characteristics of Z-score?

Your Answer:

(a) Use of Z-score: Z- score is used in a situation where we need to apply the data set on proximity based-algorithms such as k-means, k-nearest neighbor, etc.

(b) Characteristics of Z-score are:

1. The Z-score can be positive or negative.
2. The distribution of converted data is the standard normal distribution.

3. It signifies if a data point is below or above the mean.
4. it scales down the feature by making it unitless.

Question 5

1 / 1 pts

What is the name of the data transformation technique used for standardization?

- Min-Max
- p-value
- Binning
- Z-score

Correct!

Question 6

1 / 1 pts

What does z-score signify?

- The distribution of the feature is converted to standard normal distribution.
- It signifies the data point below or above the mean.
- It scales down the feature by making it unitless.
- All of the above

Correct!

Question 7

Not yet graded / 2 pts

Where to use min-max normalization and what are the characteristics of the min-max normalization?

Your Answer:

(a) Use of Min-Max Normalization:

1. It is useful in a situation where we need the data set to lie in a fixed range before feeding into the Machine learning algorithms.
2. For example, image processing algorithms require input pixels to fall in a definite range.

(b) Characteristics of Min-Max Normalization:

1. It scales down the feature to lie in the range of [0-1].
2. Min-Max normalization can result in data loss.
3. The Min-Max transformation will result only in positive values.
4. The distribution of converted data is a normal distribution.

Quiz Score: **4** out of 10