

Machine learning Life cycle

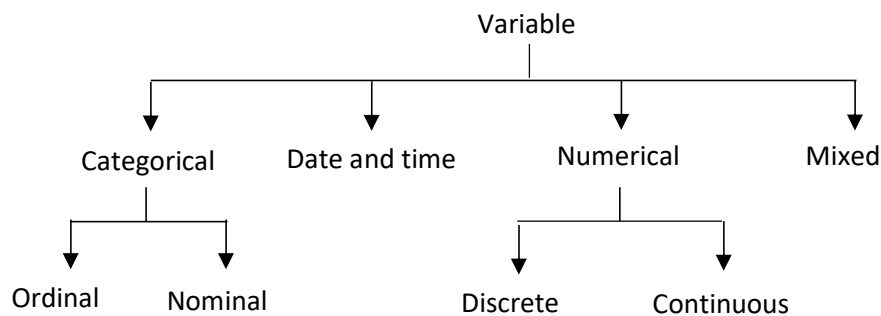
Machine learning life cycle is a cyclic process to build an efficient machine learning project. The main purpose of the life cycle is to find a solution to the problem or project.

Machine learning life cycle involves seven major steps, which are given below:

1. **Gathering Data** identify and collect data from various sources, ensuring its quantity and quality for accurate predictions.
2. **Data preparation** Combine, randomize, and understand the data, then pre-process it for analysis.
3. **Data Wrangling** Clean and convert raw data to a usable format, addressing issues like missing values, duplicates, and noise.
4. **Analyse Data** Select analytical techniques, build models, and review results to understand and analyze the data.
5. **Train the model** Use datasets to train the model with machine learning algorithms to recognize patterns and features.
6. **Test the model** Evaluate the model's accuracy by testing it with a separate dataset.
7. **Deployment** Deploy the model in a real-world system, ensuring it meets accuracy and performance requirements.

Variable

It look like a placeholder or container which are used to store the values.



Discrete e.g. 1, 2, 3 ...

Continuous e.g. 1.2, 1.3, 1.9 ...

Ordinal e.g. shirt in small, medium, large, extra-large sizes. Finding sequence in this data

Nominal e.g. language like java, python, c sharp and many more