Brief explanation of the key concepts will be discussed hereafter:

- 1. Classification: a type of Machine Learning tasks in which the predictive model attempts to label the newly collected data into certain predefined classes or categories. A practical example of this is a cancer detecting model, which, from the picture of a tumor, can tell if the cell is a benign or malignant. Some popular algorithms suitable for this task are Supported Vector Machine and Decision Trees.
- **2. Target:** a field of data whose values the model tries to predict, usually based on its correlations with other known data fields. For example, when a model tries to predict the value of a stock, the closing price of the stock will be the target while data such as starting price and trade quantity are features for the model to perform calculation on.
- **3. Feature:** a collection of values of the same data type which describes an attribute of a data point. For example, when collecting data of customers, features of a customer can be that her name is Sara, age 34 and her job is an accountant.
- 4. Predictor: one or a set of features which are used to as input to compute the target. Simply put, features are all the data fields which present in the raw data set, while predictors are only those with high correlation with the target and are used to make predictions. The same example of a stock value predicting model can be used again here: features such as starting price and trading quantity are predictors, while the number of starving people, even though can be collected, does not seem to have any correlation with the stock price in general, thus is not a predictor.
- **5. Regression:** a type of Machine Learning tasks in which the predictive model attempts to define the value of a continuous data type. For example, it is a regression task when you want to predict the temperature of the next few days, which is some specific numerical values.