# NOTES

**What is Supervised and Unsupervised ML?**

Supervised Machine Learning is a method where the models are trained using labelled data, it needs supervision to train the model.

In Unsupervised Machine Learning, extraction of features and patterns takes place as it includes unlabelled data in the scenario.

**What is XGBoost?**

XGBoost is a new Machine Learning algorithm designed with speed and performance in mind. XGBoost stands for eXtreme Gradient Boosting andis based on decision trees. In this project, we will import the XGB Classifier from the xgboost library; this is an implementation of the scikit-learn API for XGBoost classification.

In Detection of Parkinson’s Disease Project, using the Python libraries scikit-learn, numpy, pandas, and xgboost, we will build a model using an XGB Classifier. We’ll load the data, get the features and labels, scale the features, then split the dataset, build an XGB Classifier, and then calculate the accuracy of our model.

You’ll need the UCI ML Parkinson’s dataset for this (Download here: <https://archive.ics.uci.edu/ml/machine-learning-databases/parkinsons/>) . The dataset has 24 columns and 195 records and is only 39.7 KB.