- **Problem Definition**: We figure out what kind of solution does our problem require, what kind of algorithm should be use supervised or unsupervised etc.
- **Data Collection**: In the next step we collect data necessary from various sources available. We require quality data in enough quantity.
- **Data Exploration and Preprocessing:** We manipulate data according to our needs that includes:
    1. Cleaning the data
    2. Removing missing values
    3. Normalizing the data or Standardizing them
    4. Splitting the data in train test, balancing in order to maintain overfitting and under fitting.
- **Model Selection:** This step includes choosing of suitable machine learning model according to our requirements.There are lots of ML model that we can use.
- **Model training:** We train the model using the python libraries where it learns the data patterns to generate the outputs.
- **Model evaluation:** After training we evaluate how the model performs on unseen data, whether it over fits or under fits or just performs accurate. We have

various evaluation and performance metrices.MSE,Cross validation,F1 score, precision recall etc based on the algorithms used.

- **Hyper parameter Tuning:** If the trained model doesn't perform according to the needs, we adjust the different parameters of the model so that it gives us the expected output.
- **Model Deployment:** Once we our model provides the desired output and is well trained, we finally deploy our model using joblib or pickle to save which can be loaded in future. We can also use APIs such as REST,FAST and Flask for deployment.