

Steps to-do Twitter Sentimental Analysis:

1. Data Inspection
 - a. Checking for missing values
 - b. Exploring the distribution of sentiment labels
2. Text Preprocessing
 - a. Removing unnecessary columns that are not relevant to sentiment analysis
 - b. Cleaning the 'text' column by handling mentions, URLs, special characters, and converting text to lowercase.
 - c. Tokenizing and removing stop words if necessary.
3. Label Encoding
4. Data Splitting
 - a. Train Test Splitting
5. Text Vectorization
 - a. Conversion of processed text data into numerical vectors using techniques like TF-IDF (Term Frequency-Inverse Document Frequency) or word embeddings.
6. Model Selection
 - a. Choosing a suitable machine learning or deep learning model for sentiment analysis. Common choices include logistic regression, support vector machines, or neural networks.
7. Model Training
 - a. Training the selected model on the training dataset.
8. Model Evaluation
 - a. Evaluating the model's performance on the testing dataset using appropriate evaluation metrics (accuracy, precision, recall, F1-score).
9. Results Interpretation
 - a. Interpreting the results, analyzing misclassifications, and understand the model's performance on different sentiment categories.
10. Fine-Tuning and Optimization
 - a. Fine-tuning the model or exploring hyperparameter optimization techniques for improved performance.