1. **Multinomial Logistic Regression:** A statistical model used to predict the probability of an instance belonging to one of three or more classes.
2. **Confusion Matrix:** A table used to evaluate the performance of a classification model. For multinomial models, it shows the counts of true and predicted classes for each class.
3. **Multilabel Confusion Matrix:** A confusion matrix specifically designed for multilabel classification problems, where each instance can belong to multiple classes simultaneously.
4. **Classification Report**: A comprehensive evaluation metric that includes precision, recall, F1-score, and support for each class, as well as overall accuracy and averages.
5. **Precision:** The proportion of true positive predictions out of all positive predictions for a specific class.
6. **Recall:** The proportion of true positive predictions out of all actual positive instances for a specific class. Also known as sensitivity.
7. **F1-Score:** The harmonic mean of precision and recall, providing a balanced measure of a model's performance for a specific class.
8. **TN (True Negative):** The number of instances correctly predicted as not belonging to a specific class.
9. **FP (False Positive):** The number of instances incorrectly predicted as belonging to a specific class.
10. **FN (False Negative):** The number of instances incorrectly predicted as not belonging to a specific class.
11. **TP (True Positive):** The number of instances correctly predicted as belonging to a specific class.
12. **Test Statistics:** Evaluation metrics used to assess the performance of a classification model.
13. **Support:** The number of actual instances belonging to a specific class in the test set.