

Classification Report:

Here we have made the classification report which displays the precision, recall, F1, and support scores for the model.

-> No. of datapoints: 33% of the final train data is used(1/3rd of 1989 ie 657)

Confusion Matrix:

| | 0 | 1 |
|---|-----|-----|
| 0 | 222 | 62 |
| 1 | 30 | 343 |

Positive sentiment are classified as 1's

Negative sentiment are classified as 0's

- **Accuracy** = 83.4%
- **Precision**: Precision is the ability of a classifier not to label an instance positive that is actually negative = 91.9%
- **Recall (Sensitivity)**: Recall is the ability of a classifier to find all positive instances = 84.6%
- **f1 score**: The F1 score is a weighted harmonic mean of precision and recall such that the best score is 1.0 and the worst is 0.0 = 0.87
- **False Alarm** = 88.09%
- **Specificity** = 78.16%

Also, **10-fold cross validation average accuracy = 85.81%**