A screenshot of a computer

AI-generated content may be incorrect.

Confusion Matrix:

**7125**: True Negatives (Correctly predicted negative)

**7814**: True Positives (Correctly predicted positive)

**2870**: False Positives (Wrongly predicted positive)

**2191**: False Negatives (Wrongly predicted negative)

model achieved 74.7% accuracy, meaning it correctly classifies ~75% of tweets.

Precision (How many predicted positives were correct?)

* Negative tweets: 76% of predicted negatives were truly negative.
* Positive tweets: 73% of predicted positives were truly positive.

Recall (How many actual positives were correctly identified?)

* Negative tweets: 71% of all negative tweets were correctly classified.
* Positive tweets: 78% of all positive tweets were correctly classified.

F1-score (Balance between precision & recall)

* Both negative (0.74) and positive (0.76) classes are performing similarly.

**Conclusion:**

The model performs well, but there's room for improvement.

False positives and false negatives should be reduced. Possible improvements:

* Use TF-IDF instead of BoW.
* Train a Naïve Bayes or SVM model for better performance.
* Use Deep Learning models (LSTMs, BERT) for improved accuracy.