

■ Model Evaluation Results

Model	Accuracy	Precision	Recall	F1 Score
Logistic Regression	0.7468	0.6379	0.6727	0.6549
Naive Bayes	0.7662	0.6610	0.7091	0.6842
Random Forest	0.7597	0.6667	0.6545	0.6606

Logistic Regression

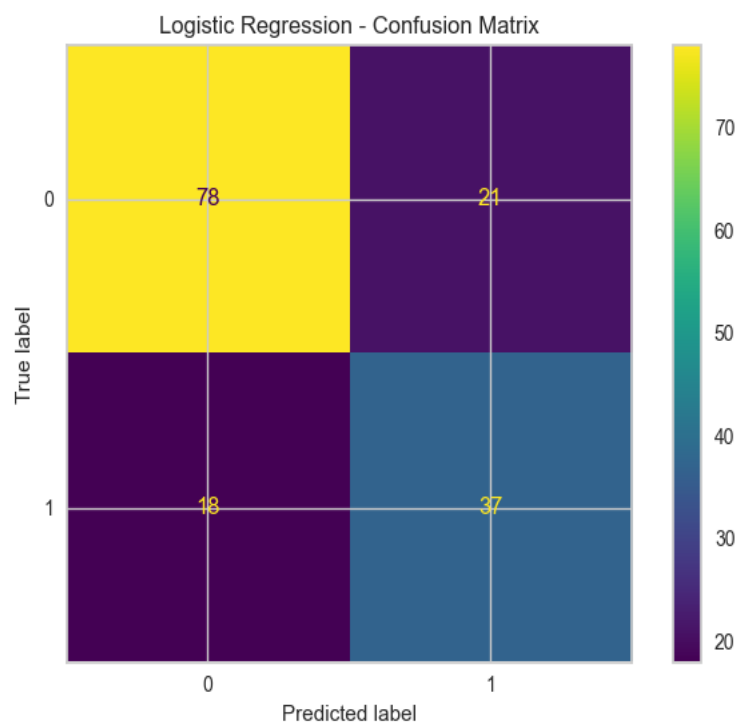
Accuracy: 0.7468

Precision: 0.6379

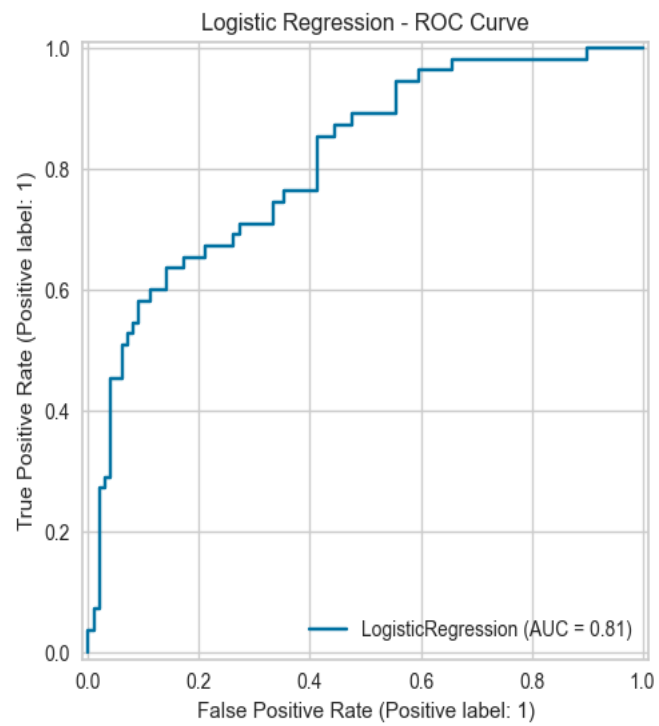
Recall: 0.6727

F1 Score: 0.6549

Confusion Matrix:



ROC Curve:



Naive Bayes

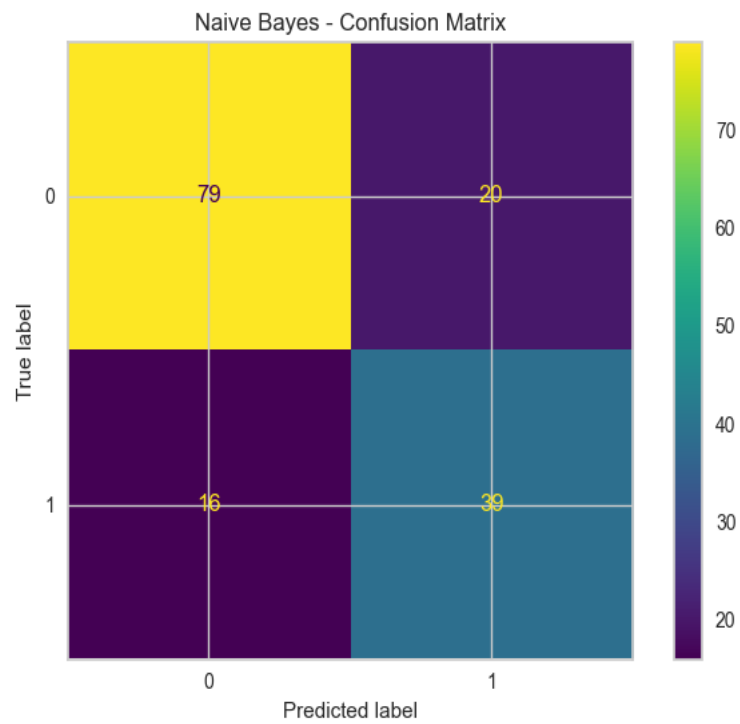
Accuracy: 0.7662

Precision: 0.6610

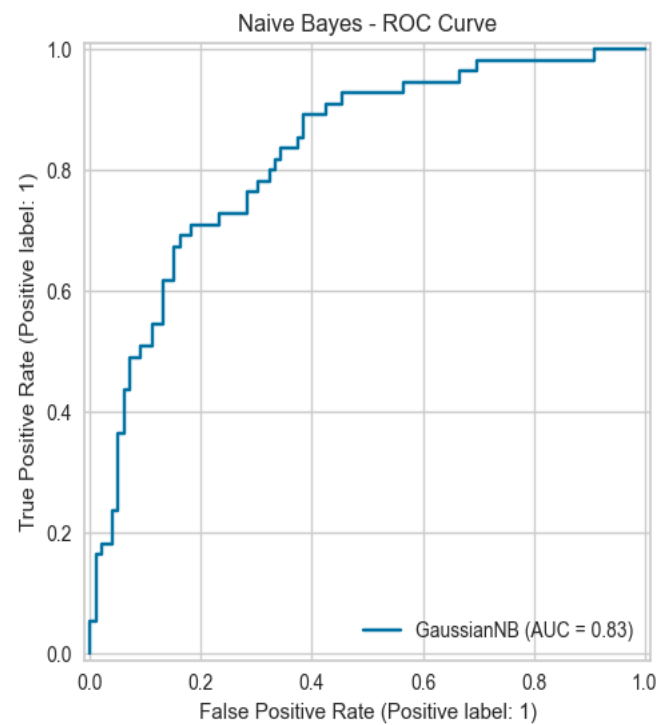
Recall: 0.7091

F1 Score: 0.6842

Confusion Matrix:



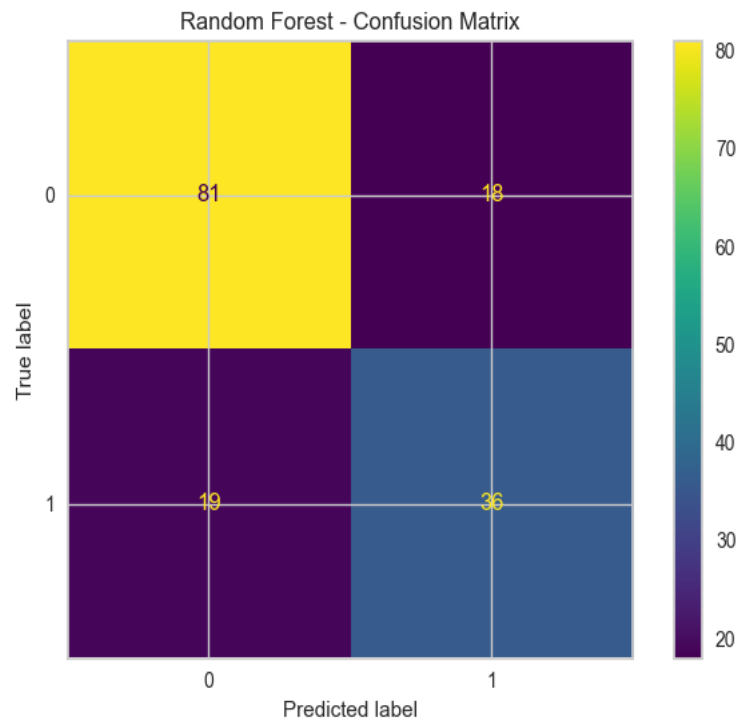
ROC Curve:



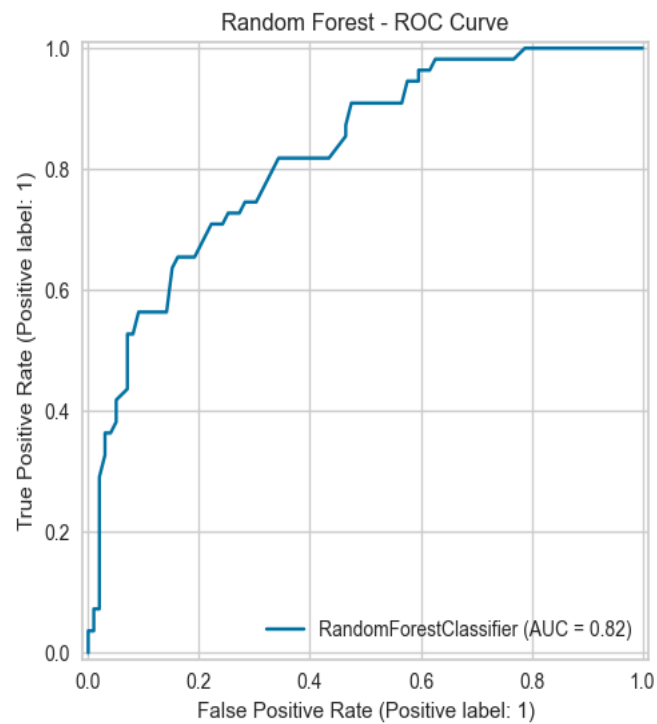
Random Forest

Accuracy: 0.7597
Precision: 0.6667
Recall: 0.6545
F1 Score: 0.6606

Confusion Matrix:



ROC Curve:



■ Best Model Summary

Based on evaluation metrics, the best performing model is **Naive Bayes** with an accuracy of **0.7662**. It also achieved precision = 0.6610, recall = 0.7091, and F1 score = 0.6842. ■ This model is recommended as the final choice for deployment.