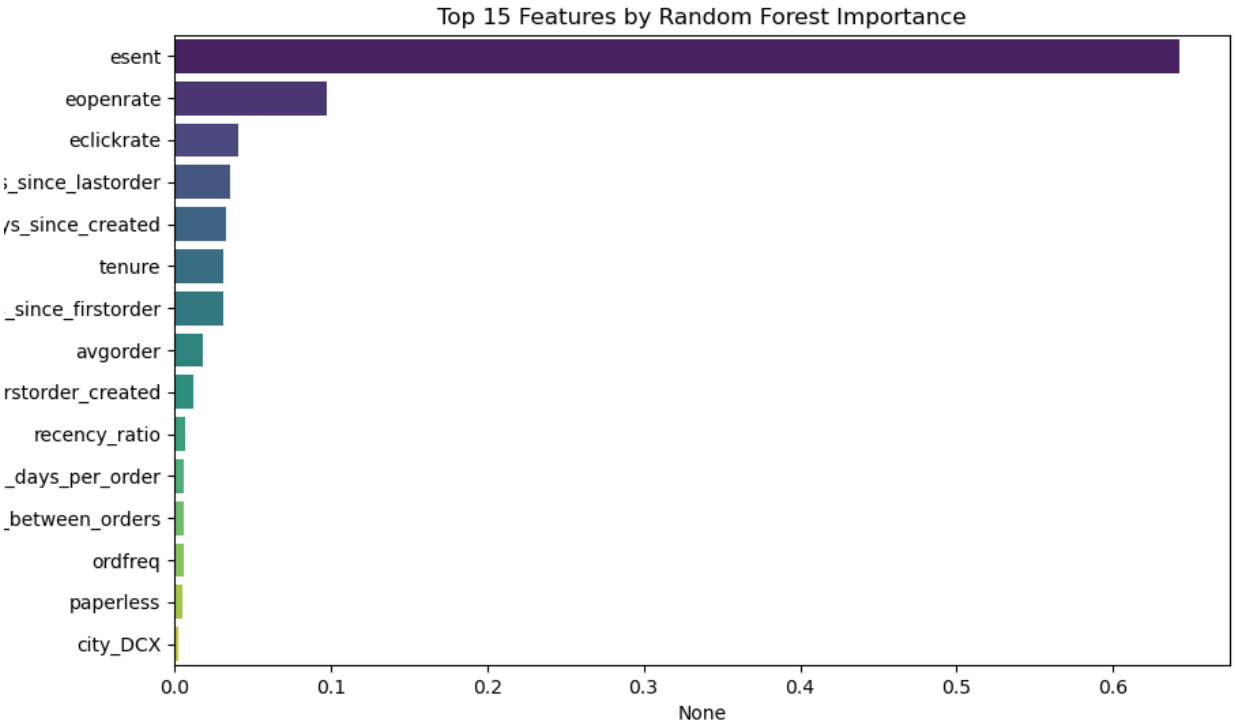
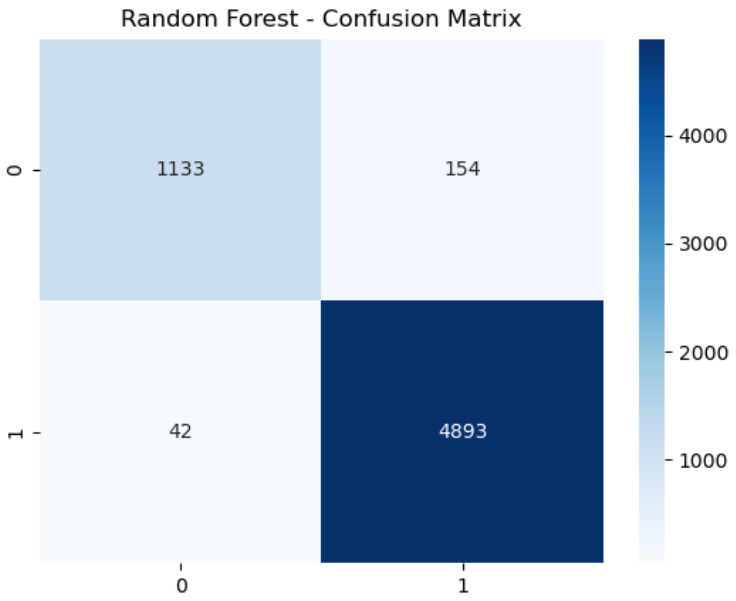
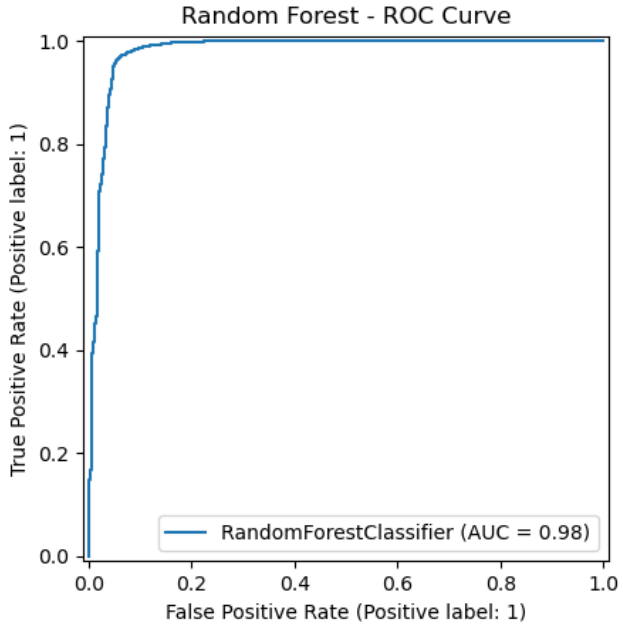
Customer Churn Prediction Report

Selected Features (14): esent, eopenrate, eclickrate, days_since_lastorder, days_since_created, tenure, days_since_firstorder, avgorder, days_since_firstorder_created, recency_ratio, avg_days_per_order, days_between_orders, ordfreq, paperless

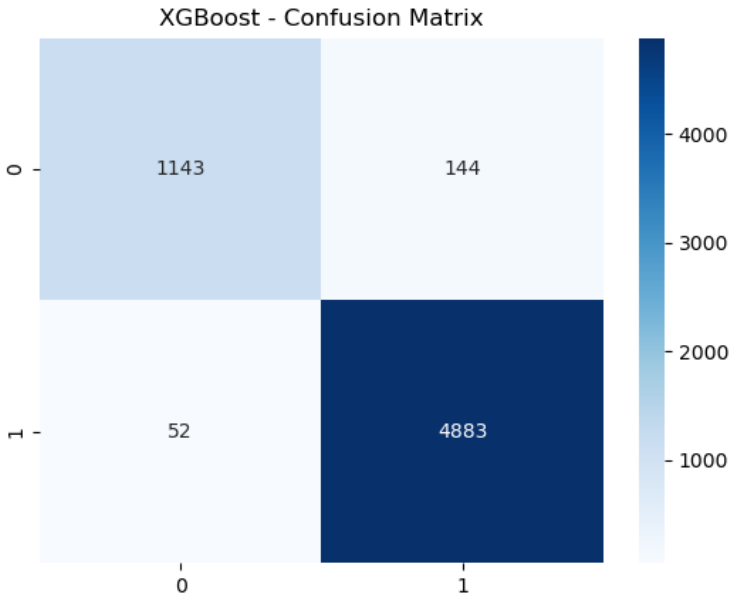


Random Forest - Accuracy: 0.9685, F1 Score: 0.9804

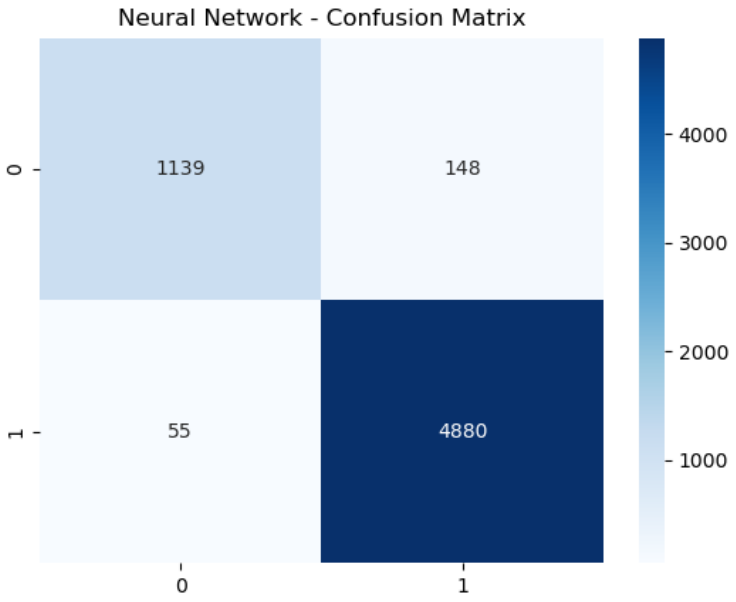


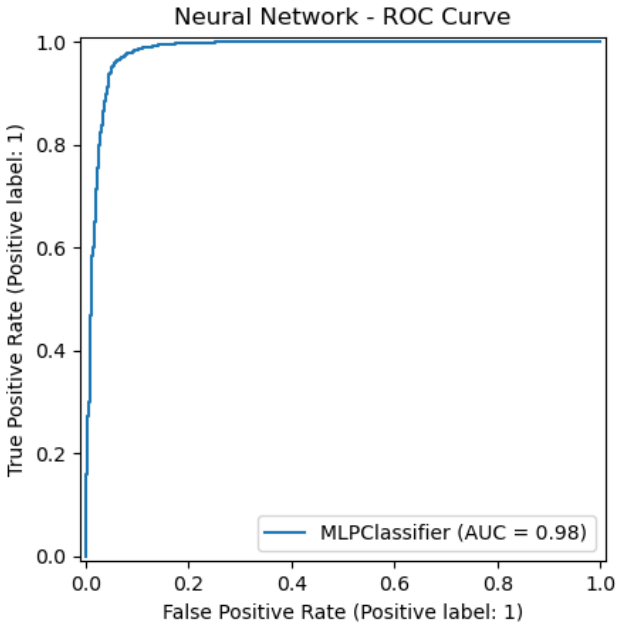


XGBoost - Accuracy: 0.9685, F1 Score: 0.9803

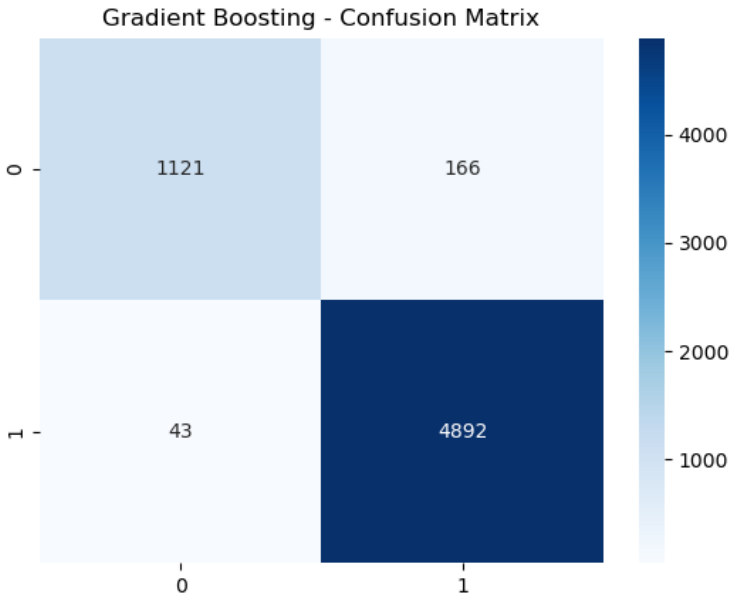


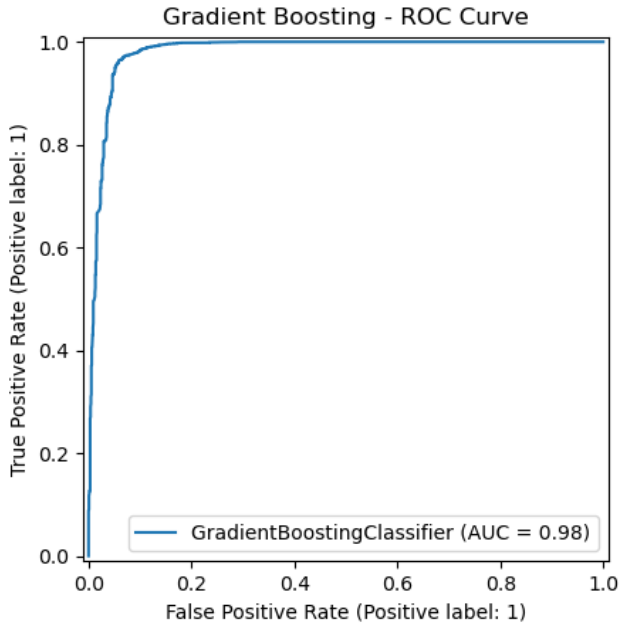
Neural Network - Accuracy: 0.9674, F1 Score: 0.9796



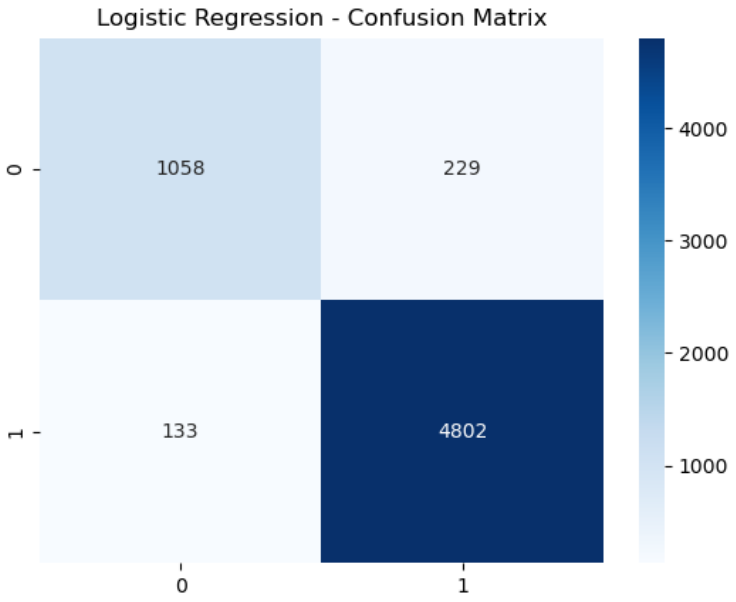


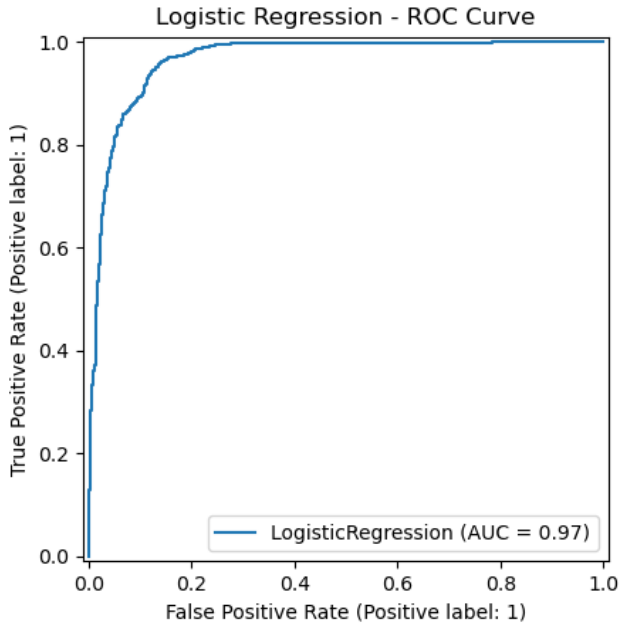
Gradient Boosting - Accuracy: 0.9664, F1 Score: 0.9791



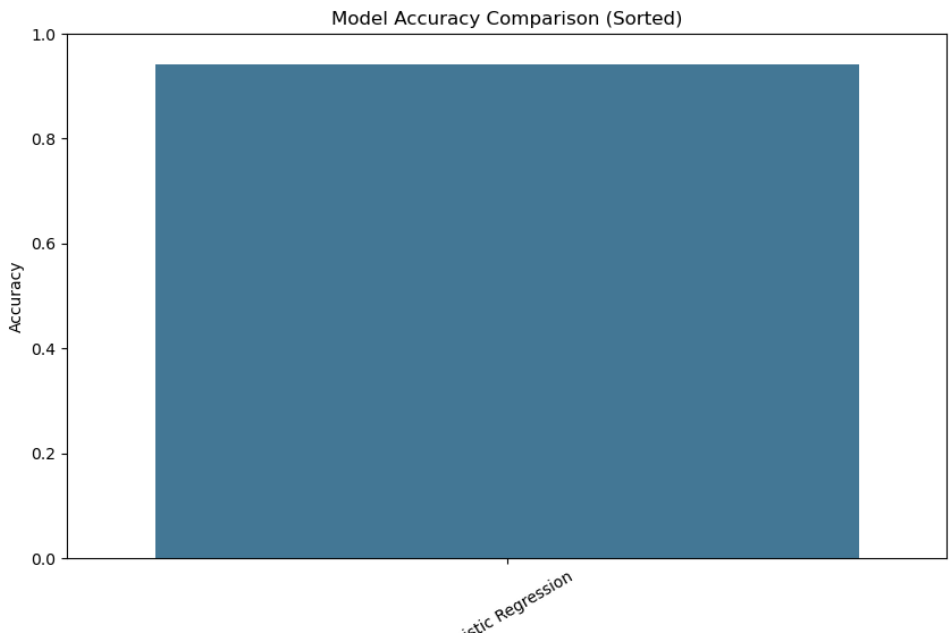
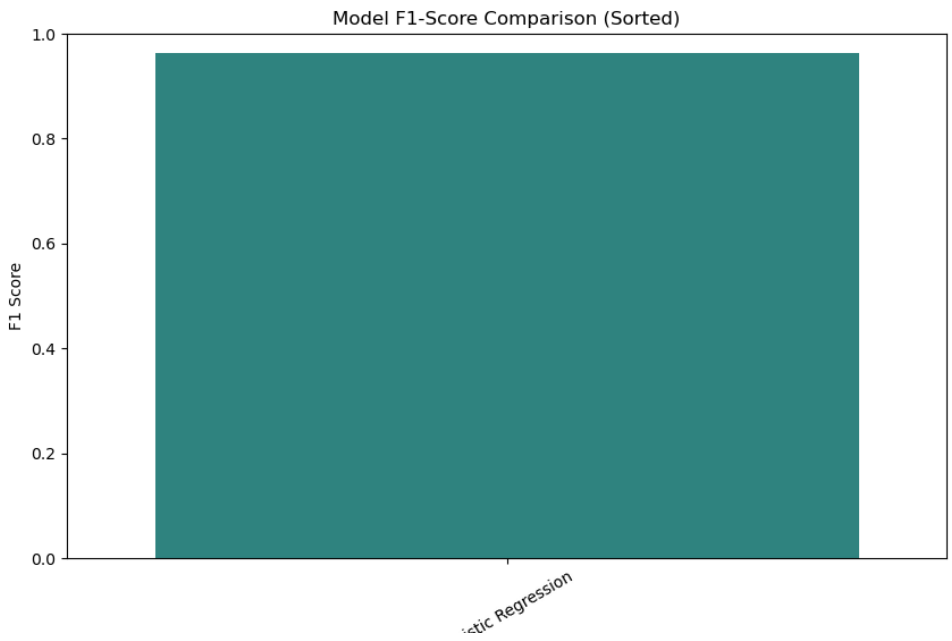


Logistic Regression - Accuracy: 0.9418, F1 Score: 0.9637


Logistic Regression - Confusion Matrix
1058
229
133
4802
0
1
0
1
4000
3000
2000
1000


Logistic Regression - ROC Curve
True Positive Rate (Positive label: 1)
False Positive Rate (Positive label: 1)
LogisticRegression (AUC = 0.97)
0.0
0.2
0.4
0.6
0.8
1.0

Accuracy Comparison



F1 Score Comparison