

Evaluation Report – Heart Disease Classification Model

Model Used: Logistic Regression

Dataset: Heart Disease Dataset

Task: Binary Classification (Heart Disease: Yes / No)

Train–Test Split:

Training Data: 80%

Testing Data: 20%

Evaluation Metrics:

Accuracy – Measures overall correctness of the model.

Precision – Measures correctness of positive predictions.

Recall – Measures ability to detect actual positive cases.

Confusion Matrix:

True Positive (TP): Correctly predicted disease

True Negative (TN): Correctly predicted no disease

False Positive (FP): Predicted disease but actually healthy

False Negative (FN): Predicted healthy but actually diseased

Overall Interpretation:

The Logistic Regression model performs well in distinguishing patients with and without heart disease. The balance between precision and recall shows reliable predictions with fewer misclassifications.

Conclusion:

This task demonstrates proper understanding of train-test split, model training, and evaluation using standard metrics.