Model Used: Logistic Regression

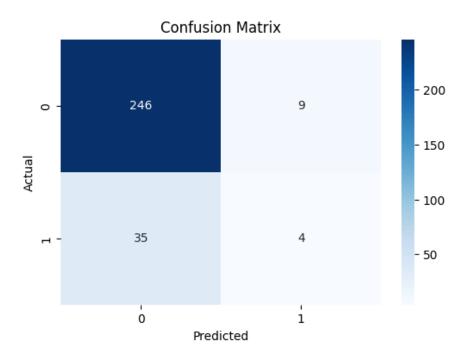
Accuracy Score

• 85.03%

Classification Report:

•	precision		recall	call f1-score		support	
•							
•	0 0.	88	0.96	0.9	2 2	55	
•	1 0.	31	0.10	0.1	5 3	39	
•							
•	accuracy			0.8	5 29	94	
•	macro avg	0.5	59 (0.53	0.54	294	
•	weighted avg (.80	0.85	0.82	294	

Confusion Matrix



Interpretation

- The model predicts "No Attrition" (class 0) very accurately.
- However, it struggles to predict "Attrition = Yes" (class 1), likely due to class imbalance.
- Overall accuracy is strong, but recall and precision for class 1 can be improved by resampling, feature engineering, or trying other algorithms like Random Forest or XGBoost.

This model evaluation is a key component of the HR Analytics pipeline and directly supports the SHAP-based insights and HR recommendations.