AWS ML Associate — Section 4.1: Apply Responsible AI Practices

This section highlights responsible AI principles, focusing on fairness, bias detection, explainability, and governance. SageMaker Clarify plays a central role in responsible AI workflows.

# Responsible AI Practices

• Bias detection — SageMaker Clarify detects bias in training data and models

• Explainability — SHAP values in Clarify explain model predictions

• Governance — document datasets, maintain lineage, track model decisions

# Best Practices

• Evaluate models for bias before deployment

• Provide explainability reports to stakeholders for transparency

• Track dataset versions, feature transformations, and model changes

# Exam Tips

• Clarify = main service for bias detection and explainability

• SHAP = key method for local interpretability of predictions

• Governance practices are critical in regulated industries (finance, healthcare, etc.)