**ModelOptimizationandTuningPhaseReport**

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| **Date** | **10-july-2024** |
| **TeamID** | **740106** |
| **ProjectTitle** | **WalmartSalesAnalysisForRetailIndustry With Machine Learning** |
| **MaximumMarks** | **10Marks** |

**ModelOptimizationandTuningPhase**

TheModelOptimizationandTuningPhaseinvolvesrefiningmachinelearningmodelsfor peak performance. It includes optimized model code, fine-tuning hyperparameters, comparing performance metrics, and justifying the final model selection for enhanced predictive accuracy and efficiency.

**HyperparameterTuningDocumentation(6Marks):**

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| --- | --- | --- |
| **Model** | **TunedHyperparameters** | **OptimalValues** |
| DecisionTree | **-** | **-** |
| RandomForest | **-** | **-** |
| Xgboost | **-** | **-** |
| ARIMA | **-** | **-** |

**PerformanceMetricsComparisonReport(2Marks):**

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| **Model** | **OptimizedMetric** |
| DecisionTree | **-** |
| RandomForest | **-** |
| Xgboost | **-** |
| ARIMA | **-** |

**FinalModelSelectionJustification(2Marks):**

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| --- | --- |
| **Final Model** | **Reasoning** |
| Random Forest |  |