Model Optimization and Tuning Phase Template

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Team ID	SWTID1720104754
Project Title	Cereal Analysis Based On Rating By Using Machine Learning Techniques
Maximum Marks	10 Marks

Model Optimization and Tuning Phase

The Model Optimization and Tuning Phase involves refining machine learning models for 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.

Hyperparameter Tuning Documentation (6 Marks):

Model	Tuned Hyperparameters	Optimal Values
Decision Tree	max_depth, min_samples_split	10,2

Performance Metrics Comparison Report (2 Marks):

Model	Baseline Metric	Optimized Metric
Decision Tree	0.75	0.82

Final Model Selection Justification (2 Marks):

Final Model	Reasoning
Decision Tree	Decision Trees are easy to understand and interpret, making them ideal for explaining the factors that influence cereal ratings to stakeholders and end-users.