

Model Development Phase Template

Date	20 June 2024
Team ID	739813
Project Title	Optimizing Sleep Efficiency: Harnessing Machine Learning For Enhanced Restorative Rest
Maximum Marks	6 Marks

Model Selection Report

In the forthcoming Model Selection Report, various models will be outlined, detailing their descriptions, hyperparameters, and performance metrics, including Accuracy or F1 Score. This comprehensive report will provide insights into the chosen models and their effectiveness.

Model Selection Report:

Model	Description	Hyperparameters	Performance Metric (e.g., Accuracy, r2_Score)
Linear Regression	1.Simplicity and Interpretability 2.Efficiency 3.Foundation for More Complex Models,etc.	Hyperparameters no used	0.7908813330628066
Decision tree	1.Easy to Interpret 2.No Need for Feature Scalling	Hyperparameters no used	0.7052744252299563

	3.Handling Missing Values,etc.		
Random Forest	1.Improved r2_score 2.Reduced Overfitting 3.Handling High Dimensionality,etc.	Hyperparameters no used	0.844687065866765