

Model Development Phase Template

Date	15 July 2024
Team ID	739756
Project Title	Unveiling Baldness: Genetic And Environmental Dynamics
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	Description	Hyperparameters	Performance Metric (e.g., Accuracy, F1 Score)
Random Forest	Ensemble of decision trees; robust, handles complex relationships, reduces overfitting, and provides feature importance for hairloss prediction.	-	Accuracy score = 81%

Decision Tree	Simple tree structure; interpretable, captures non-linear relationships, suitable for initial insights.	-	Accuracy score = 73%
KNN	Classifies based on nearest neighbors; adapts well to data patterns, effective for local variations in hair loss criteria	-	Accuracy score = 77%
Ada Boost	Gradient boosting with trees; optimizes predictive performance, handles complex relationships, and is suitable for accurate hairloss predictions.	-	Accuracy score = 81%