

Model Development Phase Template

Date	15 July 2024
Team ID	739921
Project Title	Smartwatch Price Prediction
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)
Gradient Boosting	Gradient boosting with trees; optimizes predictive performance, handles complex relationships, and is suitable for accurate loan approval predictions.	-	Accuracy score =0.89
Decision Tree	Simple tree structure; interpretable, captures nonlinear relationships, suitable for initial insights into loan approval patterns	-	Accuracies score=0.90
Linear Regression	Linear regression is a statistical method used to model the relationship between a dependent variable and one or more independent variables. When applied to predict the price of smart watches, linear regression can help understand how various factors influence the price.	-	Accuracies score=0.85

Random Forest	Ensemble of decision trees; robust, handles complex relationships, reduces overfitting, and provides feature importance for loan approval prediction	-	Accuracies score=0.92
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