

Model Development Phase Template

Date	20 JUNE 2024
Team ID	739689
Project Title	Human Resource Management:Predicting Employee Promotions Using ML
Maximum Marks	4 Marks

Initial Model Training Code, Model Validation and Evaluation Report

The initial model training code will be showcased in the future through a screenshot. The model validation and evaluation report will include classification reports, accuracy, and confusion matrices for multiple models, presented through respective screenshots.

Initial Model Training Code:

Paste the screenshot of the model training code

Model Validation and Evaluation Report:

Model	Classification Report	Accuracy	Confusion Matrix
Decision tree classifier	<pre> Classification report precision recall f1-score support 0 0.94 0.92 0.93 15865 1 0.92 0.94 0.93 15819 accuracy 0.93 0.93 0.93 30084 macro avg 0.93 0.93 0.93 30084 weighted avg 0.93 0.93 0.93 30084 </pre>	93%	<pre> confusion_matrix [[13877 1188] [867 14152]] </pre>

Random Forest Classifier	<pre> Classification report precision recall f1-score support 0 0.95 0.94 0.94 15065 1 0.94 0.95 0.94 15019 accuracy 0.94 30084 ... accuracy 0.86 30084 macro avg 0.87 0.86 0.86 30084 weighted avg 0.87 0.86 0.86 30084 </pre>	94%	<pre> Confusion matrix [[14169 896] [776 14243]] </pre>
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