

## Model Development Phase Template

Date	20 JUNE 2024
Team ID	740094
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      15065       1       0.92      0.94      0.93      15019   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      15865      1       0.94      0.95      0.94      15819   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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