

Model Development Phase Template

Date	15 March 2024
Team ID	735799
Project Title	WORLD HAPPINESS REPORT
Maximum Marks	4 Marks

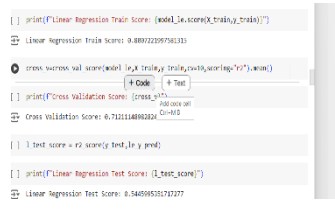

Initial Model Training Code, Model Validation and Evaluation Report

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
LINEAR REGRESSOR	 <pre> [] print(f'Linear Regression Train Score: {model.score(X_train,y_train)}') Linear Regression Train Score: 0.88072229758131 [] cross_validation_score(model,X_train,y_train,cross_val_score(y_train,X_train,model)) Cross Validation Score: 0.54059531702777 [] test_score = r2_score(y_test,y_pred) [] print(f'Linear Regression Test Score: {test_score}') Linear Regression Test Score: 0.54059531702777 </pre>	0.54	-
RANDOM FOREST REGRESSOR	 <pre> [] rf_model = RandomForestRegressor() [] rf_model.fit(X_train,y_train) [] print("Random Forest Model Train Score:",rf_model.score(X_train,y_train)) print("RF Cross Validation Score:",cross_val_score(rf_model,X_train,y_train,cv=5)) Random Forest Model Train Score: 0.9406040404040404 RF Cross Validation Score: 0.7336363636363636 </pre>	74	-

DECISION TREE	<pre>## Decision tree for testing data [03] r2_score(y_test,y_test_pred)*100 [04] ... 100.0</pre>	100	-
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