

Model Development Phase Template

Date	21 June 2024
Team ID	739954
Project Title	Ceralal analysis based on ratings by using meachine learning techniques
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 Regression model	<p>✓ LINEAR REGRESSION MODEL</p> <pre>[] from sklearn.linear_model import LinearRegression lr = LinearRegression() lr.fit(x_train,y_train)</pre> <p>LinearRegression LinearRegression()</p>	60.7561	<pre>[] lr_pred [] y_test array([[29.02418517, 49.78744507], array([[29.024185, 49.787445], [39.78339959], [39.7834], [60.75611161], [60.756112], [45.81171618], [45.811716], [58.3451415], [58.345141], [59.36399361], [59.363993], [53.37180755], [53.371807], [34.13976491], [34.139765], [38.8397463], [38.839746], [40.91704712], [40.917047], [55.33314186], [55.333142], [59.70401267], [59.704012], [26.73451534], [26.734515], [54.85091089], [54.85091], [37.83896175]])])</pre>
R2_score Model	<p>R2_SCORE MODEL</p> <pre>from sklearn.metrics import r2_score r2_score(y_test,lr_pred)</pre> <p>0.9999999999999992</p>	68.4029	<pre>y_p = lr.predict([[0,0,0,0,1,0,0,0,70,0,1,130,10,5,6,200,25,3,1,0.33]]) y_p array([[68.40297324]])</pre>