

Model Development Phase Template

Date	July 2024
Team ID	Team-739774
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</p> <p>LinearRegression()</p>	60.7561	<pre>[] lr_pred [] y_test array([[29.92428517], [49.78744507], [39.78339959], [50.75611161], [45.81371618], [58.34514115], [59.36339961], [53.37180075], [34.13976435], [38.8397465], [40.91704712], [55.33314186], [58.70481207], [26.73451534], [54.85091689], [37.80856176]]) array([[29.924285], [49.787445], [39.7854], [60.756112], [45.811716], [58.345141], [59.363399], [53.3718007], [34.139765], [38.839746], [40.917047], [55.333142], [59.704812], [26.734515], [54.850917], [37.808562]])</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([[0,0,0,0,1,0,0,0,70,4,1,130,10,5,6,200,25,3,1,0.33]])</pre> <pre>y_p</pre> <pre>array([[68.40297324]])</pre>
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