

## Model Development Phase Template

Date	8 July 2024
Team ID	SWTID1720104754
Project Title	Cereal Analysis Based On Rating By Using Machine Learning Techniques
Maximum Marks	6 Marks

### Model Selection Report

In the forthcoming Model Selection Report, various models will be outlined, detailing their descriptions, hyperparameters, and performance metrics, including Accuracy or F1 Score. This comprehensive report will provide insights into the chosen models and their effectiveness.

### Model Selection Report:

Model	Description	Hyperparameters	Performance Metric (e.g., Accuracy, F1 Score)
Decision Tree	Simple tree structure; interpretable, captures non-linear relationships, suitable for initial insights into loan approval patterns.	max_depth, min_samples_split	<pre>[39]: lr_pred = lr.predict(x_test) lr_pred [39]: array([[29.92428543], [49.78744497], [39.70339961], [60.75611146], [45.81171595], [58.3451415 ], [59.36399367], [53.3710073 ], [34.13976436], [38.83974536], [40.91704684], [55.33314224], [93.70491166], [26.73451543], [54.85091723], [37.03056128]])</pre> <pre>6]: from sklearn.metrics import r2_score r2_score(y_test,lr_pred)</pre> <pre>6]: 0.9999999999999992</pre>