Model Development Phase Template

Date	15 June 2025
Team ID	SWTID1749709340
Project Title	Predicting Co2 Emission by countries Using Machine Learning
Maximum Marks	5 Marks

Feature Selection Report Template

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

Feature	Description	Selected (Yes/No)	Reasoning
CountryName	Name of the country where CO_2 emissions data is recorded	**Yes**	Crucial for capturing country-specific emission patterns; encoded for model use.
Year	Year of the CO_2 emission observation	**Yes**	Temporal feature reflecting global/regional emission trends over time.
IndicatorName	Name of the metric (e.g., CO_2 emissions in kt)	**No**	Constant after filtering; provides no additional variation for prediction.
IndicatorCode	Unique code for the indicator (e.g., EN.ATM.CO2E.KT)	**No**	Redundant and constant; not useful once IndicatorName is filtered.
CountryCode	ISO 3-letter code for the country	**No**	Contains the same information as CountryName; unnecessary duplication.

Value	CO_2 emissions value in kilotonnes (kt) – target variable	**No (Target)**	This is the output variable the model predicts; not used as an input feature.