Model Development Phase Template

Date	July 2024
Team ID	Team-740101
Project Title	Power consumption analysis for households
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
Date	The date of the measurement.	No	The date does not significantly impact the analysis of household energy consumption.
Time	The time of the measurement.	no	The time may introduce noise and variability without adding substantial value to the energy analysis.
Global_active_power	The household global active power (in kilowatts).	Yes	Active power is crucial for understanding the overall energy consumption in the household.
Global_reactive_power	The household global reactive power (in kilowatts).	Yes	Reactive power provides insights into the efficiency of the household's electrical system.
Voltage	The voltage (in volts).	Yes	Voltage levels can indicate potential issues in the power supply and affect energy consumption patterns.
Global_intensity	The household global current intensity (in amperes).	Yes	Current intensity is directly related to the power consumption and can highlight peaks in usage.

Sub_metering_1	Energy sub-metering (in watt-hours) in different areas of the household.	Yes	Sub-metering helps to identify specific areas of high energy consumption within the household.
Sub_metering_2	Energy sub-metering (in watt-hours) in different areas of the household.	Yes	Sub-metering helps to identify specific areas of high energy consumption within the household.
Sub_metering_3	Energy sub-metering (in watt-hours) in different areas of the household.	Yes	Sub-metering helps to identify specific areas of high energy consumption within the household.
Sub_metering_4	Calculated feature representing other energy consumption areas not covered by the first three sub-meterings.	Yes	It is important to include this data to have a comprehensive understanding of the total energy consumption in the household.