

## Model Development Phase

Date	1 July 2024
Team ID	740674
Project Title	Power Consumption Analysis for Households
Maximum Marks	5 Marks

### Feature Selection Report

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
datetime	Represents the date and time of the power consumed	No	Not required for predicting the power consumption
Global_active_power	The total active power consumed by the household.	Yes	This is the value we are predicting; this is total power consumed by households.

Global_reactive_power	The total reactive power consumed by the household.	Yes	Reactive power helps to regulate voltage levels which would be useful in analysis.
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Voltage	Average voltage (in volts)	No	The voltage has no direct relationship with the active power.
Global_intensity	Average current intensity	Yes	Strong correlation with the Global active power.
Sub_metering_1	Active energy for kitchen	Yes	Sub meters are important to measure the net consumption of households.
Sub_metering_2	Active energy for laundry	Yes	Sub meters are important to measure the net consumption of households.
Sub_metering_3	Active energy for climate control systems (waterheater and Ac)	Yes	Sub meters are important to measure the net consumption of households.