

## Model Development Phase

Date	1 July 2024
Team ID	739798
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.

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 (water-heater and Ac)	Yes	Sub meters are important to measure the net consumption of households.