Feature	Description	Selected (Yes/No)	Reasoning
Motor_ID	Unique identifier for each electronic motor	No	Not relevant for predicting motor resistance
Motor_Type	Type or category of the electronic motor	Yes	Different motor types may have varying resistance patterns

Motor_Power	Power rating of the electronic motor	Yes	Higher power motors may exhibit different resistance behaviors.
Motor_Speed	Operating speed of the electronic motor	Yes	Speed can affect electrical characteristics including resistance

Date	20 June 2024
Team ID	739809
Project Title	Predicting Permanent Magnet Resistance Of Electronic Motor Using Machine Learning
Maximum Marks	5 Marks

Feature Selection Report Templat

The selected features provide a robust foundation for predicting permanent magnet resistance in electronic motors using machine learning techniques. They are essential for developing accurate models that contribute to optimizing motor performance and reliability.

This report template outlines a structured approach to selecting features critical for predicting permanent magnet resistance in electronic motors, ensuring clarity and effectiveness in the feature selection process.

Motor_Voltage	Self-employme nt status	Yes	Voltage affects electrical resistance in motors
Motor_Current	Operating temperature of the electronic moto	Yes	Current influences electrical resistance in operation
Motor_Temperature	Operating load or utilization of the motor	Yes	Temperature impacts resistance due to thermal effects.
Motor_Load	Manufacturer of the electronic motor	No	Load conditions affect resistance and efficiency.
Motor_Manufacturer	Ambient temperature during operation	Yes	Manufacturer details are generally not predictive of resistance.
Environment_Temperature	Credit history of the applicant	Yes	Ambient temperature affects motor performance and resistance
Environment_Humidity	Humidity levels during operation	Yes	Humidity can impact electrical characteristics of the motor