

## FUNCTIONAL AND PERFORMANCE TESTING:

### 6.1 Performance Testing:

#### Model Performance Test

Date	19 June 2025
Team ID	LTVIP2025TMID47771
Project Name	Visualization Tool For Electric Vehicle Charge And Range Analysis
Maximum Marks	2 Marks

#### Model Performance Testing:

S.No.	Parameter	Screenshot / Values
1	Data Rendered	Data includes: Vehicle ID, Battery Level (%), Distance Travelled (km), Time of Charge, Location, Charging Type, Efficiency, Weather Data, etc.
2	Data Preprocessing	Null values removed, date-time formatted, distance converted (if needed), data grouped by vehicle and date, units standardized (e.g., km, %)
3	Utilization of Filters	Filters applied on: Battery level %, Location, Vehicle type, Date range, Charging station, Weather conditions
4.	Calculation fields Used	<ul style="list-style-type: none"><li>- Estimated Range = <math>(\text{Battery Level} \div 100) \times \text{Max Range}</math></li><li>- Charge Efficiency = <math>\text{Distance Travelled} \div \text{Charge Time}</math></li><li>- Cost Estimation based on kWh</li></ul>

5	Dashboard design	<b>No of Visualizations / Graphs – 5</b> <ol style="list-style-type: none"> <li>1. Line Chart (Battery % over Time)</li> <li>2. Map (Charging Locations)</li> <li>3. Bar Chart (Efficiency by Vehicle)</li> <li>4. KPI Cards</li> <li>5. Scatter Plot (Charge vs Range)</li> </ol>
6	Story Design	<b>No of Visualizations / Graphs – 5</b> <ol style="list-style-type: none"> <li>1. Line Chart (Battery % over Time)</li> <li>2. Map (Charging Locations)</li> <li>3. Bar Chart (Efficiency by Vehicle)</li> <li>4. KPI Cards</li> <li>5. Scatter Plot (Charge vs Range)</li> </ol>