

**Project Design Phase-I**  
**Proposed Solution Template**

Date	17 February 2026
Team ID	LTVIP2026TMIDS40575
Project Name	Visualization Tool for Electric Vehicle Charge and Range Analysis
Maximum Marks	2 Marks

**Proposed Solution Template:**

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Electric vehicle users and researchers often find it difficult to analyze charging time, battery range, and performance data because the information is scattered and not presented in an easy-to-understand format. There is a need for a system that can clean, analyze, and visualize EV data clearly.
2.	Idea / Solution description	The proposed solution is a visualization tool that collects EV datasets, cleans the data using Excel/Python, and creates interactive dashboards in Tableau. Users can view charging trends, range comparisons, and performance insights through charts and filters.
3.	Novelty / Uniqueness	<ul style="list-style-type: none"><li>➤ Combines data cleaning, analysis, and visualization in one workflow</li><li>➤ Interactive dashboards for better understanding of EV performance</li><li>➤ Easy-to-use interface for students and researchers</li></ul>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"><li>➤ Helps people understand electric vehicles better</li><li>➤ Supports awareness of eco-friendly transportation</li><li>➤ Useful for students, researchers, and EV users to analyze trends easily</li></ul>
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"><li>➤ Free dashboard for basic users</li><li>➤ Advanced analytics or customized reports can be offered as a paid service</li><li>➤ Can be used by automobile companies or research organizations</li></ul>
6.	Scalability of the Solution	<ul style="list-style-type: none"><li>➤ Can handle larger datasets in the future</li><li>➤ Can be extended to real-time EV data</li><li>➤ Can integrate cloud storage and web dashboards for multiple users.</li></ul>

