

Project Design Phase
Proposed Solution Template

Date	26 June 2025
Team ID	LTVIP2025TMID51738
Project Name	Visualization Tool for Electric Vehicle Charge and Range Analysis
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Electric vehicle (EV) users struggle with range anxiety, inconsistent charging infrastructure, and limited visibility into battery health and energy costs. These challenges create uncertainty, reduce confidence in long-distance travel, and hinder broader EV adoption—especially among new or hesitant users.
2.	Idea / Solution description	A smart, interactive dashboard that helps EV users visualize, optimize, and confidently manage their vehicle usage across trips, charging, battery health, and savings
3.	Novelty / Uniqueness	Skateboard-style chassis enable flexible designs across sedans, SUVs, and even delivery vans. EVs evolve post-purchase—adding features, improving range, or tweaking performance remotely
4.	Social Impact / Customer Satisfaction	Cleaner Cities, Healthier Lives Energy Independence & Decentralization Urban Transformation 78% of EV buyers report high satisfaction Lower running and maintenance cost
5.	Business Model (Revenue Model)	Tiered access (Basic, Pro, Fleet) with features like advanced route planning, battery analytics, and offline mode. Micro-payments for premium simulations, trip exports, or charger reservations. Partner with EV manufacturers, charger networks, or insurance providers. Earn commissions for test drives, charger installations, or policy sign-ups. Offer anonymized usage analytics to city planners, OEMs, or energy companies. License the dashboard to dealerships, EV startups, or fleet operators under their brand.

6.	Scalability of the Solution	<p>tart with solo EV owners, then expand to fleet managers, rideshare drivers, and logistics operators.</p> <p>Plug into APIs from local networks (e.g., Tata Power, Ather Grid) and global ones (like ChargePoint or Ionity)</p> <p>Add new features (like V2G tracking or solar integration) without overhauling the core</p>
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