Proposed Solution

Date	28 June 2025
Team ID	LTVIP2025TMID48669
Project Name	Visualization Tool for Electric Vehicle Charge and Range Analysis.
Maximum Marks	2 Marks

TITLE :

Visualization Tool for Electric Vehicle Charge and Range Analysis.

Team ID : LTVIP2025TMID48669

Team Members :

Team Leader : Likitha Dadi
Team member : Ella Likhitha
Team member : Gandi Dinesh
Team member : Allada Vasanth
Team member : Goona Ganapathi Swamy

The project aims to develop a **data-driven dashboard** using **MySQL** and **Tableau** to analyze and visualize EV charge and range data. It connects datasets from various sources, transforms them into actionable insights, and presents them in a user-friendly dashboard.

Key Highlights:

- Real-time charge station analysis
- Range prediction based on battery usage trend.
- Dashboard and story integration in a web app
- User-focused visuals to aid daily planning and decision-making.

S.No.	Parameter	Description
1.	**Problem Statement (Problem to be solved)**	EV users often face difficulties in locating available charging stations and estimating range accurately, leading to range anxiety and inefficiencies in trip planning.

2.	**Idea / Solution Description**	A real-time EV dashboard using MySQL and Tableau that visualizes charging station availability, usage trends, and battery range analysis to support smarter travel and energy decisions.
3.	**Novelty / Uniqueness**	Combines real-time data analytics and visualization in a user-friendly format; unlike basic maps, it offers predictive insights and customizable dashboards for deeper planning.
4.	**Social Impact / Customer Satisfaction**	Reduces EV user anxiety and frustration, encourages EV adoption by improving infrastructure usability, and contributes to eco-friendly transportation habits.
5.	**Business Model (Revenue Model)**	Freemium model with basic dashboard access free for users; premium analytics offered to fleet operators, EV rental companies, and city planners as a subscription service.
6.	**Scalability of the Solution**	Can scale to include multiple cities, integrate with IoT sensors for live station data, and expand to other smart mobility applications or electric public transport systems.