# BrainStorming

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| Date | 23 June 2025 |
| Team ID | LTVIP2025TMID48669 |
| Project Name | Visualization Tool for Electric Vehicle Charge and Range Analysis. |
| Maximum Marks | 4 Marks |

## TITLE :

Visualization Tool for Electric Vehicle Charge and Range Analysis.

## Team ID : LTVIP2025TMID48669

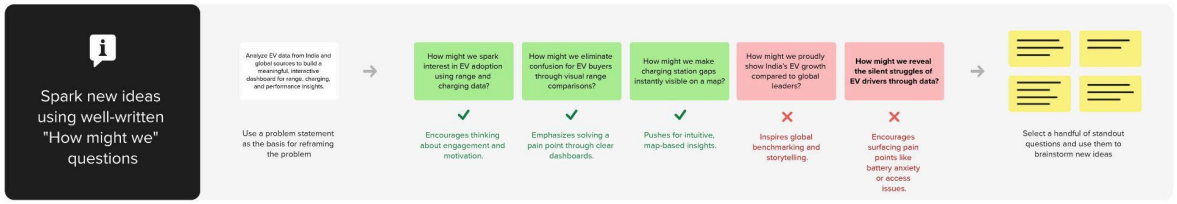
## Team Members :

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

During the brainstorming phase, the team explored various challenges faced by EV users, especially related to charging infrastructure and range planning. Multiple datasets were reviewed to identify potential analysis goals. Key focus areas included:

- Real-time visibility of charging station availability
- Understanding battery usage patterns
- Visual representation of charging trends
- Integration with web and mobile interfaces

This helped define a clear scope for building an interactive dashboard to serve EV users and stakeholders.




## Likitha Dadi

- How might we effectively merge data from Indian and global EV sources?
- How might we ensure consistency across datasets with varying formats?
- How might we automate data cleansing to improve analysis accuracy?
- How might we validate the reliability of global EV data sources?
- How might we standardize metrics for cross-country comparison?
- How might we handle missing or inconsistent charging data?

## Likhitha Ella

- How might we define the most impactful KPIs for EV performance?
- How might we highlight EV charging trends in a simple visual?
- How might we compare battery range across different EV models?
- How might we make range anxiety measurable in our dashboard?
- How might we track EV adoption growth by region?
- How might we include user satisfaction insights in visualizations?

## Dinesh Gandi

- How might we design an intuitive and interactive dashboard layout?
- How might we use color and design to highlight range/charge efficiency?
- How might we personalize dashboard views for different stakeholders?
- How might we simplify complex EV metrics without losing insights?
- How might we visualize EV data for both technical and non-technical users?
- How might we enable drill-down exploration for battery efficiency?

## Vasanth Allada

- How might we predict EV performance based on driving patterns?
- How might we visualize the impact of terrain on battery range?
- How might we identify charging infrastructure gaps?
- • How might we estimate future EV adoption rates with our data?
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- How might we use clustering to group EVs by range profile?
- How might we forecast battery life using historical usage data?

## Ganapathi Swamy Goona

- How might we compare India's EV readiness with global leaders?
- How might we visualize EV policy impacts across countries?
- How might we showcase environmental impact (CO ₂ saved)?
- How might we showcase environmental impact (CO ₂ saved)?
- How might we align vehicle types across regions for comparison?
- How might we use maps to display global charging station density?