

# Ideation Phase

## Brainstorm & Idea Prioritization Template

**Date:** 31 January 2025

**Team ID:** LVTIP2026TMIDS81919

**Project Name:** Visualization Tool for Electric Vehicle Charge and Range Analysis

**Team Member Name:** K. Amrutha

**Maximum Marks:** 4 Marks

### Step-1: Team Gathering, Collaboration and Select the Problem Statement

**Problem Statement:** How might we develop a visualization tool that helps users analyze electric vehicle battery charge levels and predict travel range effectively?

**Objective:**

- Create an interactive visualization system for EV charge monitoring
- Help users estimate travel distance based on battery status
- Improve decision-making for charging and trip planning

### Step-2: Brainstorm, Idea Listing and Grouping

**Idea List:**

1. Real-time battery percentage display
2. Range prediction based on speed and terrain
3. Charging station locator integration
4. Graphical charts showing battery usage over time
5. Alerts for low battery and nearest charging point
6. Comparison of energy consumption patterns
7. Mobile-friendly dashboard design
8. Historical data analysis for performance tracking

**Grouping of Ideas:**

**Visualization Features:** Battery percentage display, Usage charts, Energy consumption graphs

**Prediction & Analysis:** Range prediction, Historical performance analysis

**User Assistance:** Charging station locator, Low battery alerts, Trip planning support

### Step-3: Idea Prioritization

**High Importance & High Feasibility:**

- Battery percentage visualization
- Range prediction system
- Low battery alerts

**High Importance & Medium Feasibility:**

- Charging station locator
- Energy consumption comparison

**Medium Importance & High Feasibility:**

- Historical usage charts
- Mobile dashboard