

## Ideation Phase

### Define the Problem Statements

Date	31 January 2026
Team ID	LTVIP2026TMIDS91295
Project Name	Visualization Tool for Electric Vehicle Charge and Range Analysis
Maximum Marks	2 Marks

#### Customer Problem Statement Template:

Create a problem statement to understand your customer's point of view. The Customer Problem Statement template helps you focus on what matters to create experiences people will love.

A well-articulated customer problem statement allows you and your team to find the ideal solution for the challenges your customers face. Throughout the process, you'll also be able to empathize with your customers, which helps you better understand how they perceive your product or service.

<b>I am</b>	<small>Describe customer with 3-4 key characteristics - who are they?</small>	Describe the customer and their attributes here
<b>I'm trying to</b>	<small>List their outcome or "job" the care about - what are they trying to achieve?</small>	List the thing they are trying to achieve here
<b>but</b>	<small>Describe what problems or barriers stand in the way - what bothers them most?</small>	Describe the problems or barriers that get in the way here
<b>because</b>	<small>Enter the "root cause" of why the problem or barrier exists - what needs to be solved?</small>	Describe the reason the problems or barriers exist
<b>which makes me feel</b>	<small>Describe the emotions from the customer's point of view - how does it impact them emotionally?</small>	Describe the emotions the result from experiencing the problems or barriers

#### Example:

<small>I am</small>	<small>I'm trying to</small>	<small>But</small>	<small>Because</small>	<small>Which makes me feel</small>
I am a data analyst working on electric vehicle datasets.	I'm trying to analyze charging station availability and compare EV range performance using visual dashboards.	But I don't have a centralized platform that connects database storage, preprocessing, and visualization together.	Because most tools require manual data handling and do not provide integrated analytics with interactive visuals.	Which makes me feel frustrated and slows down my ability to present clear EV insights.

<b>Problem Statement (PS)</b>	<b>I am (Customer)</b>	<b>I'm trying to</b>	<b>But</b>	<b>Because</b>	<b>Which makes me feel</b>
PS-1	An electric vehicle user or researcher who wants to analyze EV charging infrastructure and vehicle range.	Understand charging availability, compare vehicle range, and analyze EV performance using reliable data.	The data is scattered across multiple platforms and mostly presented in raw or static formats.	Existing tools do not provide centralized interactive dashboards that combine charging and range analysis.	Confused, time-consuming, and difficult to make data-driven decisions about EV usage and planning.
PS-2	A data analyst or student working on EV analytics projects.	Create meaningful visualizations to explore EV datasets and present insights clearly.	Preparing data, connecting tools, and building interactive dashboards requires multiple complex steps.	There is no simple integrated platform that connects SQL, Python preprocessing, Tableau visualization, and web deployment.	Overwhelmed and limited in presenting professional EV analytics solutions.