

Ideation Phase

Define the Problem Statements

Date	31 January 2025
Team ID	LTVIP2025TMID48398
Project Name	Visualization tool for EV charge& range analysis
Maximum Marks	2 Marks

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

Visualization tool for EV charge and range analysis

I am	I'm trying to	But	Because	Which makes me feel
<div style="background-color: #fff9c4; padding: 5px; margin-bottom: 10px;">a first time EV owner who is tech savvy but new to the realities of electric travel.</div> <div style="background-color: #fff9c4; padding: 5px;">an experienced EV driver planning a route through an unfamiliar area.</div>	<div style="background-color: #bbdefb; padding: 5px; margin-bottom: 10px;">plan a long family road trip with confidence.</div> <div style="background-color: #bbdefb; padding: 5px;">create an efficient and practical charging plan.</div>	<div style="background-color: #e1bee7; padding: 5px; margin-bottom: 10px;">I can't get a reliable estimate of my car's actual range for the trip.</div> <div style="background-color: #e1bee7; padding: 5px;">I can't get a reliable estimate of my car's actual range for the trip.</div>	<div style="background-color: #c8e6c9; padding: 5px; margin-bottom: 10px;">most planning tools use generic "test case" numbers and don't account for real-world variables like weather, terrain, or the extra weight of my family and luggage.</div> <div style="background-color: #c8e6c9; padding: 5px;">there is no single source of truth that combines a route plan with real-time, verified charger availability and user-reported status.</div>	<div style="background-color: #ffe0b2; padding: 5px; margin-bottom: 10px; text-align: center;">Anxious</div> <div style="background-color: #ffe0b2; padding: 5px; text-align: center;">Frustrated</div>

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	a first-time EV owner who is tech-savvy but new to the realities of electric travel.	plan a long family road trip with confidence.	I can't get a reliable estimate of my car's actual range for the trip.	most planning tools use generic 'best-case' numbers and don't account for real-world variables like weather, terrain, or the extra weight of my family and luggage.	Anxious
PS-2	an experienced EV driver planning a route through an unfamiliar area.	create an efficient and practical charging plan.	I'm worried that the chargers on my route will be broken, occupied, or much slower than advertised when I arrive.	there is no single source of truth that combines a route plan with real-time, verified charger availability	Frustrated