

## Ideation Phase

### Define the Problem Statements

Date	31 May 2025
Team ID	LTVIP2025TMID60699
Project Name	Sustainable Smart City Assistant Using IBM Granite LLM
Maximum Marks	2 Marks

#### Customer Problem Statement Template – Sustainable Smart City Assistant

Creating a clear and empathetic problem statement helps us truly understand our city users' needs. Our Sustainable Smart City Assistant project focuses on building meaningful, intelligent, and localized experiences that empower individuals to live more sustainably within their urban environments.

A well-defined customer problem statement ensures that we build solutions that genuinely address the environmental, informational, and lifestyle challenges faced by our target users. It also strengthens our ability to empathize with diverse users — from everyday commuters to environmentally conscious citizens — helping us view the smart city through their eyes.

By crafting these statements, we framed real pain points such as lack of access to live environmental data, absence of personalized eco-guidance, limited language support, and confusing dashboards. These insights guided our key features: real-time AQI and water tracking, smart notifications, visual eco-score dashboards, localized eco-tips, city selector, and AI-powered summaries.

<b>I am</b>	Describe customer with 3-4 key characteristics - <i>who are they?</i>	Describe the customer and their attributes here
<b>I'm trying to</b>	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
<b>but</b>	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
<b>because</b>	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
<b>which makes me feel</b>	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

**Example:**

<b>Problem Statement</b>	<b>I am (Customer)</b>	<b>I'm trying to</b>	<b>But</b>	<b>Because</b>	<b>Which makes me feel</b>
<b>PS-1</b>	a city resident concerned about pollution	monitor air and water quality in real time	I can't find a simple tool for live, trusted data	existing apps are technical, outdated, or unclear	frustrated and unaware of my city's actual conditions
<b>PS-2</b>	an eco-conscious individual	take meaningful daily steps to live sustainably	I get only generic tips that don't fit my city or habits	most apps lack personalized, local recommendations	demotivated and overwhelmed
<b>PS-3</b>	a busy commuter	plan my daily travel with the environment in mind	I don't know which options are greener	no apps show local eco-friendly travel insights	guilty and confused about my impact
<b>PS-4</b>	someone who likes data but not complexity	track my sustainability in a clear visual way	apps give raw numbers, not actionable visuals	dashboards are cluttered or non-existent	disconnected from progress and discouraged

<b>PS-5</b>	a working professional with limited time	get notified only when something relevant happens	I get spammed or miss important updates	alerts are not smart or personalized	annoyed and less likely to engage
<b>PS-6</b>	a non-English speaking user	use a smart sustainability tool in my own language	most apps don't support my language	localization is ignored in design	excluded from digital eco-tools
<b>PS-7</b>	an urban dweller without constant internet	access environmental tools on the go	I lose access when offline	most apps don't support offline usage	helpless and disconnected in poor network areas
<b>PS-8</b>	a person interested in learning more	understand how my city is performing	I can't make sense of scattered reports	the data isn't summarized or simplified	confused and uninformed about urban health