**Ideation Phase**

**Define the Problem Statements**

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| --- | --- |
| 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.

Graphical user interface, text, application, email

Description automatically generated

**Example:**

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| --- | --- | --- | --- | --- | --- |
| **Problem Statement** | **I am (Customer)** | **I’m trying to** | **But** | **Because** | **Which makes me feel** |
| **PS-1** | 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air and water quality in real time | I can’t find a simple tool for live, trusted data | existing apps are technical, outdated, or unclear | frustrated and unaware of my city's actual conditions |
| **PS-2** | 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 |
| **PS-3** | 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 |
| **PS-4** | 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 |
| **PS-5** | 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 |
| **PS-6** | 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 |
| **PS-7** | 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 |
| **PS-8** | 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 |