## Ideation Phase Define the Problem Statements

| Date          | 20 June 2025                     |
|---------------|----------------------------------|
| Team ID       | LTVIP2025TMID29572               |
| Project Name  | Sustainable Smart City Assistant |
| Maximum Marks | 2 Marks                          |

## **Customer Problem Statement By Functionality:**

| Problem Statement (PS-1) |   |
|--------------------------|---|
| I am                     | A citizen living in a rapidly growing urban   |
|                          | area  |
| I'm trying to            | Live sustainably and contribute positively to |
|                          | my city's development                         |
| But                      | I face challenges like inefficient recycling, |
|                          | rising pollution, and uneven access to city   |
|                          | resources                                     |
| Because                  | I lack access to real-time environmental      |
|                          | data and city comparison tools                |
| Which makes me feel      | Disconnected, uninformed, and unable to       |
|                          | make meaningful, eco-conscious decisions      |

| Problem Statement (PS-2) |  |
|--------------------------|--|
| I am                     | A resident trying to dispose of household waste responsibly                      |
| I'm trying to            | Find the correct way to recycle different types of waste                         |
| But                      | I often don't know which materials go into which bins.                           |
| Because                  | There is no easily accessible tool that gives personalized recycling suggestions |
| Which makes me feel      | Confused and discouraged from recycling correctly                                |

| Problem Statement (PS-3) |  |
|--------------------------|--|
| I am                     | A curious citizen interested in urban innovation                                     |
| I'm trying to            | Visualize what a sustainable future city could look like                             |
| But                      | I have no way to generate visuals or models based on my ideas or text inputs         |
| Because                  | There are no tools that use AI to convert my imagination into visual representations |
| Which makes me feel      | Limited in creativity and less engaged in future city planning                       |

| Problem Statement (PS-4) |   |
|--------------------------|---|
| I am                     | A researcher or city planner  |
| I'm trying to            | Understand how my city compares to others in terms of sustainability                      |
| But                      | There's no platform that provides side-by-<br>side comparisons of urban health indicators |
| Because                  | Data is scattered and difficult to interpret without technical tools                      |
| Which makes me feel      | Frustrated and uncertain about prioritizing improvements                                  |