**Ideation Phase**

**Define the Problem Statements**

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| --- | --- |
| Date | 28 june 2025 |
| Team ID | LTVIP2025TMID60863 |
| Project Name | Revolutionizing liver care; Predicting liver cirrhosis using advanced machine learning techniques |
| Maximum Marks | 2 Marks |

**Revolutionizing liver care; Predicting liver cirrhosis using advanced machine learning techniques Template:**

Here's a specifically tailored for the scenario of **predicting liver cirrhosis using advanced machine learning techniques**. This will help you view the problem from the perspective of your target users—patients, healthcare providers, or researchers.

**🔍 Customer Problem Statement (PS-1)**

| **Field** | **Statement** |
| --- | --- |
| **I am** | a healthcare provider (e.g., doctor, hepatologist, or medical researcher) |
| **I’m trying to** | accurately diagnose and predict the progression of liver cirrhosis in patients at an early stage |
| **But** | current diagnostic tools are either invasive, time-consuming, or often miss early signs |
| **Because** | they rely heavily on manual interpretation, expensive tests (like biopsies), and sometimes produce inconclusive results |
| **Which makes me feel** | frustrated, uncertain, and concerned about providing the best possible care in time |

**🔍 Customer Problem Statement (PS-2)**

| **Field** | **Statement** |
| --- | --- |
| **I am** | a patient at risk of liver cirrhosis |
| **I’m trying to** | understand my health status and take preventive steps early |
| **But** | I don’t have access to accurate, easy-to-understand diagnostic tools that give me peace of mind |
| **Because** | the current healthcare system often reacts too late, and the signs are hard to interpret without specialist support |
| **Which makes me feel** | anxious, helpless, and worried about my future health and well-being |

These problem statements highlight **why advanced machine learning models for predicting liver cirrhosis** can be incredibly valuable—by improving early detection, reducing dependency on invasive procedures, and offering data-driven insights that benefit both clinicians and patients.