**Project Initialization and Planning Phase**

| Date | 26 January 2025 |
| --- | --- |
| Team ID | NIL |
| Project Name | Online Payments Fraud Detection Using ML |
| Maximum Marks | 3 Marks |

**Define Problem Statements (Customer Problem Statement Template):**

As a financial institution, I struggle to accurately detect fraudulent online transactions in real-time, resulting in significant revenue loss and decreased customer trust. Current rule-based systems are too rigid, often flagging legitimate transactions as fraud (false positives) or missing actual fraud (false negatives). This inefficiency forces us to rely on costly manual reviews, slowing down transactions and frustrating customers.

I need a machine learning-based solution that can analyze transaction patterns, adapt to new fraud tactics, and minimize errors—so I can reduce fraud losses by at least 25% while keeping false positives under 1%. Without this, my business risks financial damage, reputational harm, and customer churn.

