Ideation Phase
Define the Problem Statements

Date	24 January 2026
Team ID	LTVIP2026TMIDS66676
Project Name	Online Payments Fraud Detection using Machine Learning
Maximum Marks	2 Marks

Customer Problem Statement Template:

Problem Statement:

As online payment volumes grow exponentially, traditional rule-based fraud detection systems are failing to catch sophisticated, evolving criminal patterns. This results in billions of dollars in losses and erodes consumer trust. There is a critical need for a proactive, adaptive system that can analyze millions of data points in real-time to distinguish between legitimate users and fraudulent actors without causing transaction delays.

I am	Describe customer with 3-4 key characteristics - *who are they?*	Describe the customer and their attributes here
I'm trying to	List their outcome or *"job"* the care about - what are they trying to achieve?	List the thing they are trying to achieve here
but	Describe what problems or barriers stand in the way – *what bothers them most?*	Describe the problems or barriers that get in the way here
because	Enter the "root cause" of why the problem or barrier exists – *what needs to be solved?*	Describe the reason the problems or barriers exist
which makes me feel	Describe the emotions from the customer's point of view – *how does it impact them emotionally?*	Describe the emotions the result from experiencing the problems or barriers

Reference: https://miro.com/templates/customer-problem-statement/

Example:

I am	I'm trying to	But	Because	Which makes me feel
An online shopper	Make a secure payment for my order	I'm unsure if my transaction is safe or if my data could be stolen	I've previously experienced suspicious charges after an online purchase	Anxious and hesitant to complete my transaction

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	An everyday online shopper	Make quick and secure payments for goods and services online without the fear of my money being stolen.	I often hear about data breaches and fraudulent withdrawals that go undetected until it is too late.	Current systems are reactive (reporting fraud *after* it happens) rather than proactive (stopping it *before* it happens)	Vulnerable, hesitant to use digital payment methods, and frustrated by the lack of intelligent security measures to protect my hard-earned money.
PS-2	A Digital Payment Provider	Process thousands of online transactions daily while keeping my platform secure from cyber-criminals.	Traditional security filters are too slow and fail to catch modern, sophisticated fraud patterns.	Criminals are constantly changing their tactics, and my current system cannot learn or adapt to new behaviors in real-time.	Anxious about financial losses, overwhelmed by manual transaction reviews, and worried about losing my reputation and my customers' trust.