Ideation Phase
Define the Problem Statements

Date	31 January 2026
Team ID	LTVIP2026TMIDS24126
Project Name	Rising Waters – A Machine Learning Approach to Flood Prediction
Maximum Marks	2 Marks

Customer Problem Statement Template:

Creating a clear problem statement helps us understand the needs and challenges of communities, authorities, and disaster management agencies affected by floods. The Flood Prediction Problem Statement template helps our team focus on what truly matters — developing an accurate and timely early warning system that protects lives and infrastructure.

A well-defined flood prediction problem statement enables our team to design an effective machine learning solution that addresses real-world flood risks. Throughout the process, we empathize with affected communities, emergency responders, and urban planners to better understand their concerns, response limitations, and need for reliable predictive insights. This approach ensures that our solution is practical, impactful, and aligned with societal needs.

I am	Describe customer with 3-4 key characteristics – *who are they?*	Local authorities, emergency responders, and community leaders in flood-prone regions
I'm trying to	*List their outcome or "job" they are about - what are they trying to achieve?*	Reduce flood damage and casualties by providing timely and accurate early warnings
but	Describe what problems or barriers stand in the way – what *bothers them*	Lack of reliable flood prediction tools makes it difficult to anticipate flooding events accurately
because	Enter the "root cause" of why the *problem or barrier exists – what needs to be solved?*	Current methods rely on outdated data, limited real-time monitoring, and insufficient predictive accuracy.
which makes me feel	Describe the emotions from the customer's point of view – *how does it impact them emotionally?*	Current methods rely on outdated, data, limited real-time monitoring, and insufficient predictive accuracy.
	Describe the emotions from the customer's point of view – *how does it impact them emotionally?*	Frustrated, anxious, and helpless when unable to effectively plan and respond to flood risks.

Example:


I am
Local authorities, emergency responders, and community leaders in flood-prone regions
I'm trying to
Reduce flood damage and casualties with early and accurate warnings
But
Our current prediction tools are unreliable
Because
They rely on outdated data, insufficient real--time monitoring
Which makes me feel
Helpless