Ideation Phase
Define the Problem Statements

Date	31 January 2026
Team ID	LTVIP2026TMIDS87521
Project Name	Rising Waters: A Machine Learning Approach to Flood Prediction
Maximum Marks	2 Marks

Customer Problem Statement Template:

In many flood-prone areas, people face serious challenges due to the lack of timely and accurate flood warnings. From a user's perspective, it is difficult to predict flood risks based on environmental changes such as heavy rainfall or rising humidity. Most communities rely on general weather forecasts, which do not always provide clear information about the actual flood risk in their specific region.

As a resident, farmer, or local authority member, I need a simple and reliable system that can analyze environmental conditions and inform me whether there is a high risk of flood occurrence. Without such a system, I may not be able to take preventive measures in advance, which can result in loss of property, crops, and even human life.

Therefore, I require an easy-to-use flood prediction application that allows me to enter environmental details and instantly receive a clear prediction of flood risk. This helps me make informed decisions, improve preparedness, and reduce potential disaster impact in real-world situations.

I am

A resident living in a flood-prone area / a farmer / a local disaster management officer who is responsible for ensuring safety and preparedness during heavy rainfall seasons.

I'm trying to

Predict whether there is a risk of flood occurrence based on environmental conditions so that I can take preventive actions in advance and reduce potential damage.

But

I do not have access to a reliable and easy-to-use system that can accurately analyze rainfall and climate data to provide clear flood risk predictions. General weather forecasts do not specifically indicate flood probability in my region.

Because

Flood prediction depends on multiple environmental factors, and traditional forecasting methods are either complex, manual, or not precise enough for real-time decision-making.

Which makes me feel

Anxious, uncertain, and unprepared during heavy rainfall seasons, as I may not receive timely warnings to protect property, crops, or human life.