



## **Project Initialization and Planning Phase**

Date	20 June 2025	
Team Id	SWTID1749705847	
Project Name	Rising water: A Machine Learning Approach to Flood Prediction	
Maximum Marks	3 Marks	

## **Define Problem Statements (Flood Prediction Problem Statement Template):**

The increasing unpredictability of weather patterns poses a serious challenge to both rural and urban communities, particularly in flood-prone regions. Residents, farmers, and local authorities face significant difficulties in anticipating floods, which leads to unpreparedness, property damage, and disruption of livelihoods. The lack of timely and accurate flood forecasting, compounded by the complexity of environmental data such as rainfall, humidity, and temperature, results in delayed response and higher risk.

This situation affects not only the safety and well-being of individuals but also the efficiency of disaster response systems. By leveraging machine learning to build predictive models based on key environmental indicators, we aim to provide early warnings for potential flood events. This solution will empower decision-makers, improve community preparedness, and minimize losses. Our goal is to create an intelligent, data-driven support system that enhances resilience and trust in flood management efforts.



Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	A local resident in a flood- prone area	Stay prepared for possible flood events	I don't receive any early warnings	Weather data is scattered and hard to interpret	Worried and unprepared