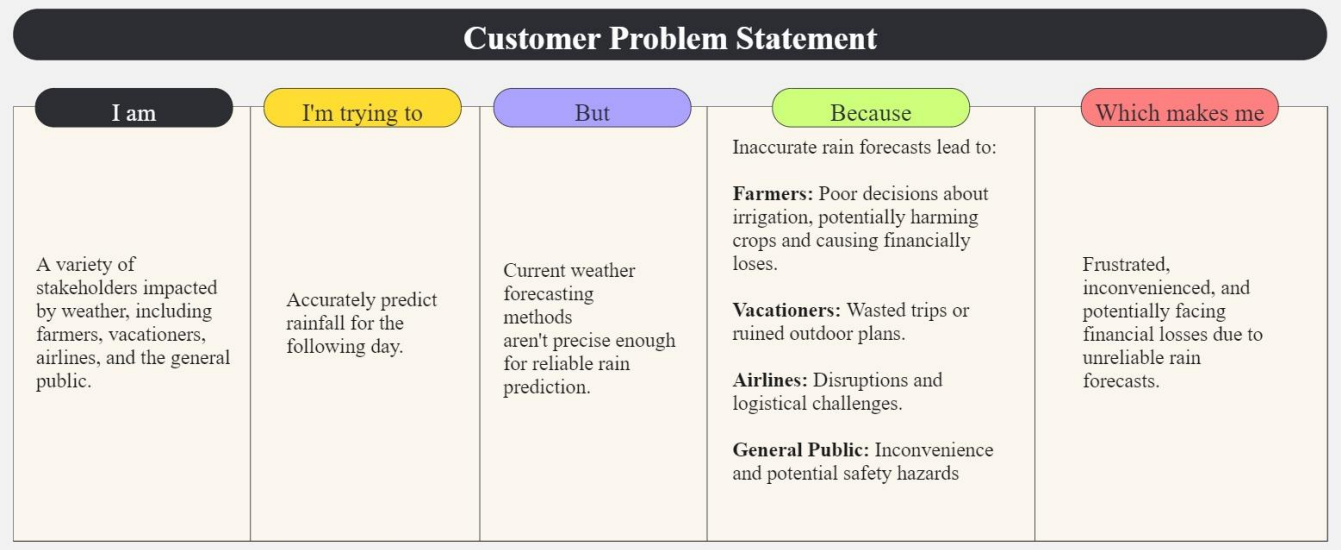
Define Problem Statements

Date	15 April 2024
Team ID	Team-738164
Project Name	Rainfall Prediction Using Machine Learning
Maximum Marks	3 Marks

Define Problem Statement:

Weather, and humankind's ability to accurately predict it, plays a critical role in many aspects of life. From farmers growing crops to a family planning a weekend vacation to logistical decision making within airlines, rain in particular is highly influential regarding plans. In some instances, the impact of rain can have large financial consequences. As a result, there is a strong interest from a plethora of stakeholders in the ability to accurately forecast rain. The goal of this project is to use the available data to create a next-day prediction model for whether or not it will rain. Such a model could be utilized in a weather app for the benefit of the public at large.



Who	Goal	Challenge	Impact	Feeling
Stakeholders (Farmers, Vacationers, Airlines, Public)	Predict Next-Day Rain	Inaccurate Weather Forecasts	Disrupted Plans, Financial Loss, Safety Hazards	Frustration and Inconvenience

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	A variety of stakeholders impacted by weather, including farmers, vacationers, airlines, and the general public.	Accurately predict rainfall for the following day.	Current weather forecasting methods aren't precise enough for reliable rain prediction.	Inaccurate rain forecasts lead to: **Farmers:** Poor decisions about irrigation, potentially harming crops and causing financially loses. **Vacationers:** Wasted trips or ruined outdoor plans. **Airlines:** Disruptions and logistical challenges. **General Public:** Inconvenience and potential safety hazards	Frustrated, inconvenienced, and potentially facing financial losses due to unreliable rain forecasts.