Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID25913
Project Name	Project - Exploratory Data for Rainfall Analysis in India for Agriculture
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Climate Change especially Rainfall rate impacts Agriculture and food production. The uncertainty in predicting Rainfall leads to poor food production and loss for Farmers.
2.	Idea / Solution description	Using ML techniques like Classification Algorithm (Decision tree, Random Forest,KNN) will help in conducting a study of Rainfall data and predicting Rainfall rate.
3.	Novelty / Uniqueness	● This idea is different from use of IoT and Sensors to predict rainfall which is quite expensive and time consuming ● Instead we are going to collect the Rainfall data ,which is unstructured and analyze and train it with ML techniques on IBM Watson. ● It will help us in getting an efficient prediction in shorter duration and less expenses.
4.	Social Impact / Customer Satisfaction	Farmers will be able to predict rainfall which in turn will help them greatly to take necessary precautions and have a well planned and profitable production.
5.	Business Model (Revenue Model)	● India is country strongly depends on agriculture. It accounts to 17% to GDP and provides employment to 60% of population. ● So using technology and boosting agriculture will help in rising food production which will lead to growth in economy and profitable exports.

6.	Scalability of the Solution	• Analysis of this Rainfall Data will help greatly in boosting Agriculture sector not only in India but on a worldwide basis. • Also this data can be used in other sectors like Disaster Management , i.e predicting flood or draught.