Project Design Phase-I
Proposed Solution Template

Date	1st October 2022
Team ID	PNT2022TMID27824
Project Name	Estimation of crop yield using data analysis
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	In the agriculture sector the farmers are facing difficulties in analyzing the demand and soil quality analysis to achieve high crop yield throughout technology. The main objective of this project is to predict crop-yield which can be extremely useful to farmers in planning for harvest and sale of grain harvest.
2.	Idea / Solution description	Our solution aims to analyze and mine this agricultural data to get useful results using technologies like data analytics and this result will be provided to farmers for better crop yield in terms of efficiency and productivity.
3.	Novelty / Uniqueness	This model can be used to select the most excellent crops for the region. By providing suggestions such as current demands, soil types, most profitable crop and also its yield thereby improving the values and gain of farming.
4.	Social Impact / Customer Satisfaction	The type of soil (i.e.) its fertility, is one of the main factors that affect crop yields. Higher and improved yield of crops. Most of the high yield crops are dwarf and hence, their plants are stronger and can withstand strong winds. As the production rate increases substantially and also improves the economical standard of farmers.
5.	Business Model (Revenue Model)	By providing the analysis for the farmers , we are balancing the current demands and it is beneficial for the farmers as they are able to make profit out of it.
6.	Scalability of the Solution	The scope of the project is to determine the crop yield of an area by considering a dataset with some features which are important or related to crop production such as soil type, temperature, rainfall, and production of the crop in previous years.