Project Design Phase-I
Proposed Solution Template

Date	15-10-2022
Team ID	PNT2022TMID50933
Project Name	Estimate the crop yield using data analytics
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

S.No.	Parameter	Description
1	Problem Statement (Problem to be solved)	● the datasets are collected and refined based on the commonality ● The input prameters are given. ● By analysing and predicting using KNN algorithm,the results are produced.
2	Idea / Solution description	● The datasets have been collected and refined based on the commonality such as location , crop ,area ,soil type,temperature,humidity etc. ● From these parameters name of the crop and net yield rate of the crop can be predicted. ● based on the various analyses the parameters location, soil type and area are taken as input and prediction have been undertaken ● The attribute soil type specifies the type of soil in a particular region such as Coastal alluvials, Laterite soil and Dark brown alayey soil and the attribute location specifies the 4 different areas such as Mangalore, Kodagu, Hassan, Kasargod. ● By using KNN algorithm, the particular crop has been analysed

		and predicted by taking various parameters into an account such as soil type area and location. ● By analysing and predicting the crop name and price of particular crop can be found out. This helps the farmers to take the correct decision to sow the crops such that yield rate can be increased.

3	Uniqueness	● profitable crop ● Multiple Linear Regression algorithm ● user is provided with multiple suggestions of crop conferring to the duration of crop ● Applying Data Mining Techniques
4	proposed system	● collection of agricultural datasets ● selection of parameters ● prediction based on parameters ● result and suggestions
5	Hardware requirements	● Processor : Intel Pentium/Core – 1.7GHz and above ● Memory :1GB and above ● Storage :80GB minimum fee space ● Graphics : 1GB and above
6	software requirements	● Operating System(s) :Windows 7, 8, 10 ● Programming Language: Python ● Framework :Pycharm