Project Design Phase-I
Proposed Solution Template

Date	25 September 2022
Team ID	PNT2022TMID30802
Project Name	SmartFarmer - IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement	Watering the crop is one of the important tasks for the farmers when they were not present in the field, even the automated irrigation is used but it will result in overirrigation so how to make the irrigation automated including with the decision of a farmer either to irrigate or not even the farmer is not present near the field.
2.	Idea / Solution description	To avoid the automated irrigation system result in overirrigation, we as a team proposing a solution that when moisture in field falls and temperature rises, the automated irrigation will be activated but before the activation of automated irrigation system, the alert will be sent to the farmer using mobile application and let the farmer to decide whether to irrigate or not. In a situation when the farmer is not in field, if he needs to irrigate, the farmer can use mobile or web application to activate the water pump to irrigate and also by using some sensors, the fertilizer deficiency can be monitored.
3.	Novelty / Uniqueness	❖ Letting the farmers to decide to activate water pump ❖ Allows to control from remote location ❖ Allow to do perfect fertilization
4.	Social Impact / Customer Satisfaction	By using this application, farmers can get an alert when the field is dry and can control the water pump from remote location. For overirrigating issue of automated pump, the farmers can make a decision of irrigation before the automation process begins.

5.	Business Model (Revenue Model)	The main drawback of the automated irrigation, the overirrigation is moreover prevented by this method.
6.	Scalability of the Solution	It is easy and simple process. This will lead to save crops and will be much more benefits for farmers. It will save water and time. It helps farmers to monitor and control from remote location.