

Project Design Phase-I
Proposed Solution

Project Name	Smart farmer - IoT Enabled Smart Farming Application.
Team ID	PNT2022TMID40121

Proposed Solution:

S.No	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none">Farmers are under pressure to produce more food & use less energy and water in the process. A remote monitoring and control system will help farmers deal effectively with these pressures.IoT applications may assist in controlling the irrigation pump, opening and closing water flowing gates and also data logging the soil health conditions for present and future purpose, each field should get just the right amount of water at just the right time.Smart Farm's systems can be retrofitted on existing sites and provide immediate impact with a very short return on investment time period.
2.	Idea / Solution description	It collects the data from different types of sensors and it sends the value to the Cloud server. It also collects the weather data from the Open weather Map. Watering to plants in the right period of time automatically.
3.	Novelty / Uniqueness	Various eminent researchers have been making efforts for smart farming by using IoT concepts in agriculture. Smart Farming based IoT technologies to reduce waste and enhance productivity.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none">Increased production, the optimisation of all the processes related to agriculture increases production with limited lose.Water saving , weather forecasts and sensors that measure soil moisture means watering only when necessary and for the right length of time.
5.	Business Model (Revenue Model)	<ul style="list-style-type: none">IoT can connect every unit, device, asset, machinery or equipment to a single network. With smart sensors, businesses can then track assets and control equipment .A popular IoT business model is the data-driven model powered by the data generated by your devices, that provide value to customers.Even small farmers can gather dat from various sources ,which helps them with decision making that will help lower cost and increase yields.
6.	Scalability of the Solution	<ul style="list-style-type: none">Smart farming can make agriculture more profitable for the farmers. Decreasing resources input will save the farmer money and labor and increased reliability of spatially explicit data will reduce risks.The goals is to increase the quality and quantity of crops while decreasing the human labor used for such purposes.