

Project Design Phase-I
Proposed Solution

Date	16 November 2022
Team ID	PNT2022TMID05968
Project Name	Project – Smart Farmer-IOT enabled smart farming application

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The better understanding of the soil, weather, humidity and water irrigation should be made easier. The automation would help farmers can do their farming from anywhere. The water level and pest control monitoring under application should be done.
2.	Idea / Solution description	The application is a embedded network of different devices which make a self configuring network. The new developments of Smart Farming with use of IoT, by day turning the face of conventional agriculture methods by not only making it optimal but also making it cost efficient for farmers and reducing crop wastage.
3.	Novelty / Uniqueness	Smart Farming application improves the entire Agriculture system by monitoring the field in real time using IOT devices. With the help of sensors and interconnectivity, the Internet of Things in Agriculture has not only saved the time of the farmers but has also reduced the vast use of resources such as Water and Electricity.
4.	Social Impact / Customer Satisfaction	Smart farming, the dependency on manual labour has reduced significantly. The processes like pest control, fertilizing, and irrigation are increasingly becoming automated, and farmers can control them remotely. The use of smart IoT sensors can maintain these processes, increasing crop production.
5.	Business Model (Revenue Model)	It is trying to execute this technique as we need to introduce an Arduino sensors which was modified with an Arduino that takes received signals from sensors. Easy operability and maintenance. Required low time for maintain. Cost is reasonable.
6.	Scalability of the Solution	The adaptability of a system to increase the capacity of smart farming. The sensors and actuators used here enables the efficiency of the system. The system is scalable for the usage and the monitoring of the crops.