Project Design Phase-I Proposed Solution

Date	10 November 2022
Team ID	PNT2022TMID00236
Project Name	SmartFarmer-IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

Proposed Solution:

S. No.	Parameters	Description
1.	Problem Statement (Problem to be solved)	Farmers experience several distractions as a result of the weather and rising water levels, which is bad for agriculture. Utilizing a wireless sensor network to develop an effective decision support system that manages various farm activities and provides useful information related to the content of soil moisture, temperature, and humidity.
2.	Idea / Solution description	It is a network of various devices that work together to form a self-configuring network. The new developments of Smart Farming with the use of IoT are changing the face of traditional agriculture methods by not only making them optimal but also cost efficient for farmers and improved crop growth
3.	Novelty / Uniqueness	Smart farming based on IoT improves the entire agricultural system by monitoring the field in real time. The Internet of Things in Agriculture, with the help of sensors and interconnectivity, has not only saved farmers' time but has also reduced costs. Irrigation can be done on a scheduled basis.
4.	Social Impact / Customer Satisfaction	With smart farming, the reliance on manual labor has been significantly reduced. Pest control, fertilization, and irrigation are all becoming more automated, and farmers can control them remotely. The use of smart IoT sensors can help to keep these processes going and increase crop production.
5.	Business Model (Revenue Model)	Crop based irrigation method and tips for the improved growth of the crop can be available if the user purchases the monthly subscription
6.	Scalability of the Solution	Scalability refers to the ability to develop from prototype to production in seamless way. The given solution can be implemented to build a smart farming application.