Project Design Phase-I
Proposed Solution

Date	22 September 2022
Team ID	PNT2022TMID42568
Project Name	Smart Farmer – IOT Enabled Smart Farming Application
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To solve farmer issues like • Lack of Modernization and Mechanization • Invest in farm productivity and improving yield production. • Cope with climate change, soil erosion • Watering the field is a difficult process, Farmers have to wait in the field until the water covers the whole farm fieid. • Power Supply is also one of the problems. In Village Side, the power supply may vary. • The Biggest Challenges Faced by IoT in the Agricultural Sector are Lack of Information, High Adoption, Cost and Security Concerns, etc
2.	Idea / Solution description	• Smart Farming systems uses modern technology to increase the quantity and quality of agricultural products. • Livestock tracking and Geo fencing. Smart logistics and warehousing. Smart pest management. Smart Greenhouses.
3.	Novelty / Uniqueness	• Smart farming systems reduce waste, improve productivity and enable management of a greater number of resources through remote sensing • . In traditional farming methods, it was a mainstay for the farmer to be out in the field, constantly monitoring the land and condition of crops. • **REMOTE ACCESS –** It helps the farmer to operate the motor from anywhere.

		• **ALERT MESSAGE** – IoT sensor nodes collect information from the farming environment, such as soil moisture, air humidity, temperature, nutrient ingredients of soil, pest images, and water quality, then transmit collected data to IoT backhaul devices.
4.	Social Impact / Customer Satisfaction	• Reduces the wages for labors who work in the agricultural field. • It saves a lot of time. • IoT can help improve customer relationships by enhancing the customer's overall experience. • Easily identify maintenance needs, build better products, send personalized communications, and more. • IoT can also help e-commerce businesses thrive and increase sales. It make a wealthy society
5.	Business Model (Revenue Model)	It's a subscription model, where user have to pay for their internet. • Customer services are supported • It supports third party devices also • Reach customers via Referral, Agents, Third party applications
6.	Scalability of the Solution	• Scalability in smart farming refers to the adaptability of a system to increase the capacity, for example, the number of technology devices such as sensors and actuators, while enabling timely analysis. • Our product is scalable with our devices (extra addons) as well as third party devices also. Ability to provides various features in a application like reports generation etc.