

Project Design Phase-I
Proposed Solution Template

Date	10 October 2022
Team ID	PNT2022TMID54368
Project Name	Smart Farmer-IoT Enabled smart Farming Application
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none"> • Watering the field is a difficult process, Farmers have to wait in the field until the water covers the whole farm field. • 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	<ul style="list-style-type: none"> • As is the case of precision Agriculture Smart Farming Technique Enables Farmers better to monitor the fields and maintain the humidity level accordingly. • The Data collected by sensors, In terms of humidity, temperature, moisture, and dew detections help in determining the weather pattern in Farms. So cultivation is done for suitable crops.
3.	Novelty / Uniqueness	<p>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.</p> <p>REMOTE ACCESS – It helps the farmer to operate the motor from anywhere.</p>

4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> • 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)	<p>Revenue (No. of Users vs Months)</p> <p>The graph shows a coordinate system for plotting user growth over time. The vertical axis is labeled 'User' and ranges from 0 to 800 in increments of 100. The horizontal axis is labeled 'Months' and ranges from 0 to 5 in increments of 1. The grid consists of 10 horizontal lines and 6 vertical lines.</p>
6.	Scalability of the Solution	<p>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.</p>