Project Design Phase-I
Proposed Solution Template

Date	30 September 2022
Team ID	PNT2022TMID53609
Project Name	Project - IOT ENABLED SMART FARMING APPLICATION
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To overcome the lack of awareness and control of soil parameters such as temperature, moisture, humidity thereby improving quality of crops and plants, by implementing automated watering of plants.
2.	Idea / Solution description	• To provide clear awareness about the soil, crop, weather parameters and improving controllability of the farming process through remote monitoring using sensors and controlling using an application.
3.	Novelty / Uniqueness	• Usage of Raspberry Pi for increased processing power and user-friendly programming using Python. • Usage of Servo motors to properly direct the water flow according to the needs.
4.	Social Impact / Customer Satisfaction	• Improvisation in control of farming which ultimately leads to increased number of plants and trees. • Effective reduction of greenhouse effect and global warming.
5.	Business Model (Revenue Model)	• Based on the scale of application and the sophistication of the motors, the cost of the model will vary.
6.	Scalability of the Solution	• Variables of the entire field can be monitored using a single cloud account. • Small scale farming (gardening) applications for domestic purposes can use small scale model and large scale farming can include more sophisticated sensors such as rain sensor, TDS sensor, etc.