

## Project Design Phase-I Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID11120
Project Name	IOT Enabled Smart Farming Applicaton
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)	Smart Farming Application for Farmers Based on IOT
2.	Idea / Solution description	This work helps us to know the values of various parameters such as humidity, moisture and temperature of plants and water them accordingly. The system consists of three sensors which sense the values of humidity, moisture and temperature of plants.
3.	Novelty / Uniqueness	This is done using Arduino board, voltage regulator and relay which controls the motor. WIFI module is used to inform the user about the exact field condition. The various sensors send the values to the Arduino board which has been coded with if else conditions will further pass the commands to the relay which turns on or off the motor according to the conditions given
4.	Social Impact / Customer Satisfaction	In general, traditional watering methods can waste as much as 50% of the water used due to inefficiencies in irrigation, evaporation and overwatering.
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> <li>➤ Monitor soil moisture</li> <li>➤ GPFARM [24], GRAZPLAN [25], and EcoMod [26]</li> <li>➤ ESP8266 IoT Automatic irrigation system to modernize and improve the productivity of the crop.</li> </ul>
6.	Scalability of the Solution	<ul style="list-style-type: none"> <li>• Considering the quantity of sensors, these IoT-based systems were successful in simulating a large-scale smart agricultural setting.</li> <li>• One of the greatest advantages of this smart irrigation system is its ability to save water.</li> </ul>