Project Design Phase-
IProposedSolutionTemplate

Date	19September2022
TeamID	PNT2022TMID08508
ProjectName	SmartFarmer-IoTEnabledsmartFarmingApplication
MaximumMarks	2Marks

ProposedSolutionTemplate:

S.No.	Parameter	Description
1.	Problem Statement (Problem to besolved)	• Watering the field is a difficult process,Farmershavetowaitinthefieldunti lthewatercovers thewholefarm field. • Power Supply is also one of theproblems.InVillageSide,thepower supplymay vary. • TheBiggestChallengesFacedbyIoTinthe Agricultural Sectorare Lack of Information, HighAdoption,CostandSecu rity Concerns,etc
2.	Idea/Solutiondescription	• AsisthecaseofprecisionAgricultureSm artFarming TechniqueEnablesFarmersbettertom onitor the fields and maintain thehumiditylevel accordingly. • The Data collected by sensors, In termsof humidity, temperature, moisture, anddew detections help in determining theweather pattern in Farms. So cultivationis doneforsuitablecrops.
3.	Novelty/Uniqueness	**ALERT MESSAGE** – IoT sensor nodes collectinformation from the farming environment, suchas soil moisture, air humidity, temperature,nutrient ingredients of soil, pest images, andwaterquality,thentransmitcollecteddatatoIoT backhauldevices. **REMOTEACCESS –** Ithelpsthefarmertooperatethemotor from anywhere.

4.	SocialImpact/CustomerSatisfaction	• Reducesthewagesforlaborswhoworkint heagricultural field. • Itsavesalotof time. • IoT can help improve customerrelationshipsbyenhancingthecus tomer'soverallexperience. • Easily identify maintenance needs, buildbetter products, send personalizedcommunications,and more. • IoTcanalsohelpe-commercebusinessesthriveand increasesales. • Itmakeawealthysociety
5.	BusinessModel (RevenueModel)	The project involvesThermography sensors which ischeaperthanthe existingideas
6.	ScalabilityoftheSolution	Scalability in smart farming refers to theadaptabilityofasystemtoincreasethecapacity,f or example, the number of technology devicessuch as sensors and actuators, while enablingtimelyanalysis.