Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID50334
Project Name	IOT based smart crop protection for agriculture.
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)	Agriculture assumes a significant job for advancement in nourishment creation and crop protection in India. Here, agriculture relies upon disproportionate rain which thereby affects India's agriculture. There arises a need for effective irrigation for the agricultural production. The protection is done through the voice detection and movement detection methods to enable high frequency sound, hence protecting the crops from insects, pests and small animals.
2.	Idea / Solution description	To control over how much water is to be supplied and when it is to be applied determines the uniformity which is key to maximizing the irrigation efforts. The proper irrigation management takes careful consideration and vigilant observations. Irrigation framework would automatically begin/stop water siphons, on the agricultural site depending upon the dampness content obtained by the moisture sensor as soon as it senses the level of water in the reservoir. The deliberate sensor estimates are sent to the Arduino Uno microcontroller for arranging the controlled calculation.
3.	Novelty / Uniqueness	It help formers grow more food on less land by protecting crops from pests ,diseases and weeds as well as raising productivity per hectare.
4.	Social Impact / Customer Satisfaction	In rural parts of India, farmers encounter severe threats such as damage done by animals. Hence, to overcome this issue we have designed a system in which sound is played and by using LDR it detects light intensity, if it is less, it will focus the light. So that wild animals will not enter into the farm. It will run away.

		GSM module sends message to the farmer to alert him. From this it is concluded that the design system is very useful and affordable to the farmer. The design system will not be dangerous to animal and human being, and it protects farm.
5.	Business Model (Revenue Model)	**Behavior model:** Wildlife tracking involves acquiring information about the behavior of animals in their natural habitat. This information is used both for scientific and conservation purposes. **Proposition of model:** The primary form of information that needs to be obtained is the location of the animal at certain points in time and this is generally referred to as tracking or radio–tracking. However, due to the similarities in obtaining the information, the terms are frequently used interchangeably. There are remote methods that can be used to track and identify animals visually and through acoustic signals.
6.	Scalability of the Solution	Agriculture is the main livelihood for majority of people living in rural areas .It contributes 17-18% of GDP at present. India is a majorproducer or wheat,rice and barley however in comparison with china the yield is low.