

Project Design Phase-I
Proposed Solution Template

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| Date | 19 September 2022 |
| Team ID | PNT2022TMID18367 |
| Project Name | Project – IoT Based Smart Crop Protection System 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) | An intelligent crop protection system helps the farmers in protecting the crop from the animals and birds which destroy the crop. This system also helps farmers to monitor the soil moisture levels in the field and also the temperature and humidity values near the field. The motors and sprinklers in the field can be controlled using the mobile application. |
| 2. | Idea / Solution description | We have come up with the idea of providing electrical fences, speakers and sprinklers in order to divert the animals. |
| 3. | Novelty / Uniqueness | We are using the blynk app. Blynk is an open-source platform designed for IoT which can control hardware remotely, can display sensor data, can store data, visualize it. The connection between the cloud and the app can be through Wi-Fi, Bluetooth, GSM, Ethernet etc. The state of hardware pins can be manipulated by the commands given in the blynk app through various kinds of widgets present. |
| 4. | Social Impact / Customer Satisfaction | This makes the farmers to be satisfied to their esteem. It provides protection for the crop against animals. It helps them to monitor the crop by providing soil moisture content, temperature content & humidity content. It helps the farmers to save water by automatically switching on and off the motor. |
| 5. | Business Model (Revenue Model) | Conversion of lead to customer through better experience and feasibility. |
| 6. | Scalability of the Solution | With farms being located in far-off areas and distant lands, farmers are seeking a better solution to their management issues. IoT technology provides a smart farming solution, enabling farmers to manage their fields remotely via smart gadgets. Remote management through smart technology provides transparency and real-time crop monitoring, which results in better yield. |