Project Design Phase-I Proposed Solution Template

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| Date | 19 September 2022 |
| Team ID |  |
| Project Name | SmartFarmer - IoT Enabled Smart Farming Application |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

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

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| **S.No.** | **Parameter** | **Description** |
| 1. | Problem Statement (Problem to be solved) | There is a great need for a lot more food supply in the situation we are in right now. The farmers' current technology prevents them from providing food on demand. For a huge number of acres, it is difficult for them to remotely monitor and irrigate the area. They end up using more water and energy as a result of this. In order to efficiently produce more food, the farmers aim to utilise as little water and energy as possible. They need a way to access the pump for all of the lands with a single click in order to accomplish this, and they also require access to information regarding the soil's state wherever and whenever they like. |
| 2. | Idea / Solution description | The main objective of the project is to collect data from various sensors and provide to the Farmer in a mobile application. This will enable the Farmer to get all the necessary data with a minimal or no efforts. The sensors include soil moisture sensor, wind sensor and humidity sensor. The water requirement for each and every crop will vary. So, the farmer needs to enter the crop name and the optimum soil conditions. By analyzing the data from the above sensors, the Farmer will be notified for irrigation. |
| 3. | Novelty / Uniqueness | * Enabling the Farmer to use Cloud technology to get all the necessary data in his/her mobile phone. * Decision to irrigation based on crop type. |
| 4. | Social Impact / Customer Satisfaction | Increased crop yield, saves electricity, money and water, simplifies irrigation facilities, improves Sustainability. |
| 5. | Business Model (Revenue Model) | Targeted customers being Farmers, governments this increases the revenue in a steady way. |
| 6. | Scalability of the Solution | This is highly scalable since the requirement of sensors is less and easily deployable in large numbers. |