**Project Design Phase-II**

**Solution Requirements (Functional & Non-functional)**

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| Date | 03 October 2022 |
| Team ID | PNT2022TMID50823 |
| Project Name | Project-IOT based smart crop protection system for agriculture |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

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| --- | --- | --- |
| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | User Registration | Registration through Form  Registration through Gmail  Registration through LinkedIN |
| FR-2 | User Confirmation | Confirmation via Email  Confirmation via OTP |
| FR-3 |  |  |
| FR-4 |  |  |
|  |  |  |
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**Non-functional Requirements:**

Following are the non-functional requirements of the proposed solution.

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | The smart crop protection system senses animals nearing the crop field and sounds alarm to woo them away as well as sends SMS to farmer using PIC . |
| NFR-2 | **Security** | This system uses a motion sensor to detect wild animals approaching near the field. |
| NFR-3 | **Reliability** | The IOT device is used to indicate the farmer by a message while someone enter into the farm and we are used SD card module that helps to store a specified sound to fear the animals. |
| NFR-4 | **Performance** | The agricultural sector plays an important role in contributing to the economics of a country. The IoT-based agriculture leads to lucrative yields and there are several types of platforms used by farmers in increasing agricultural yields |
| NFR-5 | **Availability** | Remote Management. With farms being located in far-off areas and distant lands, farmers are seeking a better solution to their management issues. ... |
| NFR-6 | **Scalability** | Smart farming can make agriculture more profitable for the farmer. Decreasing resource inputs will save the farmer money and labor, and increased reliability of spatially explicit data will reduce risks. |