**Project Design Phase-II**

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

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| Date | 03 October 2022 |
| Team ID | PNT2022TMID15129 |
| Project Name | SmartFarmer - IoT Enabled Smart Farming Application |
| 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 Gmail |
| FR-2 | User Confirmation | Confirmation via Email  Confirmation via OTP |
| FR-3 | User Login | Login with Email Id and Password |
| FR-4 | Forgot Password | Login with Email Confirmation Of OTP |
| FR-5 | Query Form | Make a note of the problems and issues faced by user when using the application |
| FR-6 | Weather | To find the climate information of a particular area |
| FR-7 | Agro Note | To list of agriculture related information like how to plant, how much litres of water that plant need in a day etc |
| FR-8 | Sensors | To show various data from different sensors like temperature, humidity, soil moisture |
| FR-9 | Database Management | To show various agriculture related data are stored |
| FR-10 | Exit | After user checked every information, user can exit the application |

**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** | Effective and Easy to Use |
| NFR-2 | **Security** | The process of protecting data from Unauthorized Access |
| NFR-3 | **Reliability** | Consistency and Accuracy and the shared protection achieves a better trade-off between costs and reliability |
| NFR-4 | **Performance** | Measured and estimate the performance of the Productivity |
| NFR-5 | **Availability** | 24/7 services |
| NFR-6 | **Scalability** | Scalability is main concern for IoT platforms. It supports third party sensors. It can be easily scalable for large farming. |