Project Design Phase - II
Solution Requirements(Functional & Non-Functional)

Date	**03 October 2022**
Team ID	**PNT2022TMID27433**
Project Name	**Smart Farmer - IoT Enabled Smart Farming Application**
Maximum Marks	**4 Marks**

Functional Requirements:

Following are the functional requirements of the proposed solution

FR NO.	Functional Requirement(Epic)	Sub Requirement(Story/Sub-Task)
FR - 1	User Registration	Registration through GMAIL Fill the details like Phone No. Etc. Create Username and Password
FR - 2	User Confirmation	Confirmation via EMAIL Confirmation via OTP
FR - 3	User Log in	User credentials like username and password are validated.
FR - 4	Sensors	Required sensors are connected.
FR - 5	Sensor value	Values that are obtained from sensor are verified and noted.
FR - 6	Irrigation system	Verify the amount of water for the crops and maintain the level.
FR - 7	Log out	Exit

Non - Functional Requirements:

Following are the non-functional requirements of the proposed solution

FR No.	Non-Functional Requirement	Description
NFR - 1	**Usability**	Smart farming is safe to use. User with low level of understanding can easily grasp the concept of the system. The quality of the output will be as expected by the user.
NFR - 2	**Security**	Smart farming system will have protection against malware as each user will be provided with a specific credentials to access data in IBM cloud. In case if the data is lost, using restore option the user can regain the data.

NFR - 3	**Reliability**	The Smart Farming System will give highly precise sensor data to the cloud, so that the user
NFR - 4	**Performance**	This system perform at topmost level, where user just need to monitor the system. The remaining job that are to be done by the system will be as fixed in the system.
NFR - 5	**Availability**	The Smart Farming System is flexible with any type of devices like PC, mobile phone etc,. as the customer can view it in the cloud platform and also through a mobile app.
NFR - 6	**Scalability**	This system will be very useful to the maximum extent that the user can use. Apart from irrigation system, some sensors to display weather parameters are also connected to the irrigation system by which user know the temperature, pressure and humidity values based on that also watering the crops is managed.