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

Date	4 November 2022
Team ID	PNT2022TMID10305
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	Software	Web UI, Node-red, IBM Watson, MIT app
FR-2	IoT devices	Sensors and Wifi module.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Usability is defined as the ability to learn quickly, use something effectively, remember something, operate something without making a mistake, and enjoy something.Time consumability is less, Productivity is high.
NFR-2	**Security**	Private and confidential information must be kept secure at all times, including during collection, processing, and storage.It has low level of security features due to integration of sensor data.
NFR-3	**Reliability**	A superior cost-to-reliability trade-off is achieved with shared protection. To prevent agricultural service interruptions, the approach employs specialised and shared protection methods.Accuracy of data and hence it is Reliable.
NFR-4	**Performance**	It will be more effective to monitor farming operations overall if integrated sensors are used to measure soil and ambient characteristics.Performance is high and highly productive.
NFR-5	**Availability**	By tying information about crops, weather, and equipment together, it is feasible to automatically alter temperature, humidity, and other factors in farming equipment. farming equipment.
NFR-6	**Scalability**	For IoT platforms, scalability is a big challenge. It has been demonstrated that different IoT platform

		architectural decisions impact system scalability and that automatic real-time decision-making is possible in a setting with thousands of users.