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

Date	03October 2022
Team ID	PNT2022TMID12127
Project Name	Smart Farming-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	Phone Application And Wifi Module
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Login/App	Check Id/ Username And Check Roles access
FR-4	User Dashboard	Learn to access the application
FR-5	Monitoring of climate conditions	Using gadgets to map the climate conditions
FR-6	Agricultural drones	Using gadgets to agriculture spraying, crop monitoring
FR-7	Greenhouse automation	Use of IOT sensors enables them to get accurate real-time information
FR-8	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**	Early detection and application of inputs only in the affected region, saving costs Uses satellite imagery to detect the different zones in farms
NFR-2	**Security**	IOT and smart communication technologies introduce a vast exposure to cyber security threats and vulnerabilities in smart farming environments
NFR-3	**Reliability**	Reliable weather forecasts to maximize resource usage and minimize losses
NFR-4	**Performance**	IOT devices and sensors capture various types of data from all over the field that can then be analyzed through big data tools
NFR-5	**Availability**	**Tanzania and Vietnam** are among the countries that will work towards climate smart agriculture – an

		approach aimed at transforming food systems
NFR-6	**Scalability**	Scalability is the ability to increase available resources and system capability without the need to a major system redesign or implementation, we can increase the capacity for data processing by increasing the cloud resources in the second layer and computation resources in the third layer