

PROJECT DESIGN PHASE-II
SOLUTION REQUIREMENTS (FUNCTIONAL & NON-FUNCTIONAL)

TEAM ID	PNT2022TMID26689
PROJECT DOMAIN	INTERNET OF THINGS
PROJECT TITLE	IoT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE
DATE	15 OCTOBER 2022
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 Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Profile	Log in Access the Profile.
FR-4	User dashboard	Enter the user details . Change the password.
FR-5	Analyze	Data from smart sensors can be analyzed for predictive analysis and automated decision-making.
FR-6	User Select The category	Select Display Option click IBM , consultant,Logout,Messenger.
FR-7	Recommend	Based on the farming the software recommends the automated irrigation practices and protection from birds and animals .

NON-FUNCTIONAL REQUIREMENTS:

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

NFR NO	NON-FUNCTIONAL REQUIREMENT	DESCRIPTION
NFR-1	USABILITY	<ul style="list-style-type: none">• Users can know the real-time status of the crops by capturing the data from sensors.• Also monitor and control their connected farm using IOT applications on their smartphones or tablets.
NFR-2	SECURITY	<ul style="list-style-type: none">• Smart based agriculture can improve agricultural processes in a more productive, efficient and sustainable way.• User information will keep securely and safely.
NFR-3	RELIABILITY	<ul style="list-style-type: none">• The smart farm, embedded with IOT systems, could be called a connected farm, which can support a wide range of devices from diverse agricultural device manufactures and make easier for farmers.
NFR-4	PERFORMANCE	<ul style="list-style-type: none">• It is a user-friendly software and have high performance.
NFR-5	AVAILABILITY	<ul style="list-style-type: none">• Available for every user, visible for all users and farmer in an easy manner.
NFR-6	SCALABILITY	<ul style="list-style-type: none">• The proposed precision farming structure allows the implementation of a flexible methodology to preserve and protect the crops.