

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

Date	03 October 2022
Team ID	PNT2022TMID20174
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	<b>User Requirements</b>	The Crop Protection Automatic Sprinkler System monitors soil moisture, temperature, and humidity.
FR-2	<b>User Registration</b>	Registration Manual online registration Registration using a form Using Gmail for registration.
FR-3	<b>User Confirmation</b>	Required phone confirmation email confirmation Assurance through OTP.
FR-4	<b>Payment Options</b>	Net Banking, UPI Cards, Credit Cards, and ATMs are available upon cash delivery.
FR-5	<b>Product Delivery and Installation</b>	Delivery from door to door Take away Free installation, as well as a 12-month warranty.
FR-6	<b>Product Feedback</b>	Through a website Using phone calls and Google forms .

## Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Have a manual that is simple to understand. easier to use Even farmers without a formal education can utilise the product with ease.
NFR-2	<b>Security</b>	Two-step authorisation is required for application security. Passwords and passkeys will be assigned based on the user's requirements.
NFR-3	<b>Reliability</b>	Regular maintenance and inspections are required for hardware. Software updates could happen periodically. An immediate alarm will sound in the event of any system failure.
NFR-4	<b>Performance</b>	A nice user interface is necessary for the programme. It shouldn't require much energy at all. Both water and energy must be saved.
NFR-5	<b>Availability</b>	Every feature will always be available to the user. It depends on what the farmer needs and how much customisation the user has done.
NFR-6	<b>Scalability</b>	No matter how big or large a farm field is, the product needs to completely cover the ground.