

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

Date	03 October 2022
Team ID	PNT2022TMID23529
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	<ul style="list-style-type: none"><li>• Registration through Form</li><li>• Registration through Gmail</li><li>• Registration through Website</li></ul>
FR-2	User Confirmation	<ul style="list-style-type: none"><li>• Confirmation via Gmail</li><li>• Confirmation via OTP</li></ul>
FR-3	Login Credentials	<ul style="list-style-type: none"><li>• The login credentials will be sent to Gmail as well as smart card are used</li><li>• Password and username will be given sent personally</li><li>• Login into application by entering username &amp; password or by personal smart card</li></ul>
FR-4	Dashboard	<ul style="list-style-type: none"><li>• User profile will be displayed</li><li>• Instruction will be provided in dashboard</li><li>• The entire working model will be displayed</li><li>• The function of components will be displayed as well as working principle and procedures are provided</li></ul>
FR-5	Platform	<ul style="list-style-type: none"><li>• The output will be shown and the function of all equipment can be seen</li></ul>
FR-6	Query	<ul style="list-style-type: none"><li>• The queries and doubts can be asked and solved by the administrator mentor</li></ul>

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	<ul style="list-style-type: none"><li>• The goal of this project is always been to apply newest potential results and practise</li><li>• The product is compactible, economical, reliable and useful in practical</li><li>• The usage of project is eco-friendly and easy to operate and manage</li><li>• The replacement of the defected components are easy and familiar</li></ul>
NFR-2	<b>Security</b>	<ul style="list-style-type: none"><li>• This project will simulate research to solve platitude of security and data privacy issues in fast growing and economically important in smart farming sector</li><li>• Camera is used to displayed for security and in addition of high protection vault is created in software basis so it is difficult to crack and steal the information.</li></ul>
NFR-3	<b>Reliability</b>	<ul style="list-style-type: none"><li>• The main reliability parameters have been monitoring and evaluating based on real experimental farming environment</li><li>• The life span of project will be long and implementation cost is low</li></ul>
NFR-4	<b>Performance</b>	<ul style="list-style-type: none"><li>• The process of the system is fast and accurate results will be provided.</li><li>• The modern technology and software is implemented so the performance will be good compared to others</li></ul>
NFR-5	<b>Availability</b>	<ul style="list-style-type: none"><li>• In the existing method we created new ideas with modern technology and software</li></ul>
NFR-6	<b>Scalability</b>	<ul style="list-style-type: none"><li>• The adaptability of a system to increase the capacity.</li><li>• Performance optimization of system components</li></ul>