

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	13 October 2022
Team ID	PNT2022TMID01830
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	❖ The system must allow the user to register by leaving their email.
FR-2	User Confirmation	❖ The system must send a confirmation email to the User.
FR-3	User Login	❖ The system must allow the registered user to login by using their email.
FR-4	Dashboard	❖ The system will show the apps features in the dashboard to the user.
FR-5	Weather Monitoring	❖ The system shall provide the following weather parameters: Temperature , pressure, Wind speed & direction , rain fall and humidity .
FR-6	Motor Controls	<ul style="list-style-type: none">❖ The system must provide when user give the Motor ON command then the system provide Motor ON to the User.❖ The system must provide when user give the Motor OFF command then the system provide Motor OFF to the User.
FR-7	User feedbacks	❖ The system must allow the user to submit the feedback through a contact in the application.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	<ul style="list-style-type: none">❖ An user friendly and simple web application .❖ It is simply used by the help of tutorials.
NFR-2	Security	<ul style="list-style-type: none">❖ Only registered person can access the web application.❖ User can only share the data to another, no one can stolen their data.❖ Data's are more secured.
NFR-3	Reliability	<ul style="list-style-type: none">❖ If a data collection is slow for user it will check immediately to resolve that problem.❖ Provide accuracy of data to the user
NFR-4	Performance	<ul style="list-style-type: none">❖ Fast to monitoring the field❖ It is used to turn on /turn off the motor within a second❖ It shows the values of temperature , humidity , weather conditions at every time.
NFR-5	Availability	<ul style="list-style-type: none">❖ Every where at any time available on the web application.❖ It can be found on search engines like google, YouTube etc....
NFR-6	Scalability	<ul style="list-style-type: none">❖ It can be multiple command is given to act at a time it perform priority based.❖ Reduced traffic in case of multiple user interaction