

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

Date	03October 2022
Team ID	PNT2022TMID35924
Project Name	Project – SmartFarmer - 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 for app	Registration through Form Registration through Gmail Registration through mobile number
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP Confirmation via SMS
FR-3	User verification/Authentication	Authentication through verifying email Authentication through user name and password
FR-4	Transaction facility	Payment through credit card Payment through Debit card Payment through UPI ID Payment through net banking
FR-5	Real time monitoring of various parameters present in the field	Monitoring of soil moisture content Monitoring of fire Monitoring of temperature Monitoring of Soil nutrients
FR-6	Forgot password	Reset link sent through gmail Reset link sent through mobile phone
FR-7	Log out	Exit the app using the function available inside the app

Non-functional Requirements:

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

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	Demo video/instruction PDF embedded in the mobile application
NFR-2	Security	Automatic log out of session if the app is not used by the user Transaction authentication

NFR-3	Reliability	Fast and efficient data transfer between sensors and app High accuracy of data
NFR-4	Performance	Minimum usage of mobile data and battery Immediate notifications about the field parameters
NFR-5	Availability	24/7 service availability Saved data in the app should be available even if the app is re-installed again
NFR-6	Scalability	App should be compatible for all platforms App should serve efficiently when multiple activities are performed by multiple users at the same time