

ProjectDesignPhase-II
SolutionRequirements(Functional&Non-functional)

Date	15October 2022
TeamID	PNT2022TMID49497
ProjectName	Smart Farmer-IoT Enabled Smart Farming Application.
MaximumMarks	4Marks

FunctionalRequirements:

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 Gmail Create an account Follow the instructions
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Interface sensor	Interface sensors and the applications are used to monitor the crops activities like soil moisture, temperature & humidity and send information to farmers
FR-4	Accessing data sets	Data sets are retrieved from Cloudant DB
FR-5	Mobile application	Motors and sprinklers in the field can be controlled by mobile application.

Non-functionalRequirements:

Followingarethenon-functionalrequirements of theproposedsolution.

FRNo.	Non-FunctionalRequirement	Description
NFR-1	Usability	Use of fertilizers, Irrigation, and scheduled planting operation
NFR-2	Security	Crops could be protected from these diseases use pesticides and biocontrol agents.
NFR-3	Reliability	This project will help farmers with high production of crops and prevent the crops from abnormal growth. This will also help them in achieving better crop yields thus leading to their economic well being
NFR-4	Performance	Agricultural productivity depends on the quality of the seeds with which farmers show their fields.
NFR-5	Availability	Farming methods require growers' appropriate plant protection strategy and training
NFR-6	Scalability	The application of sensors and automated irrigation practices can help monitor agricultural land