ProjectDesignPhase-

IISolutionRequirements(Functional)

Date	12October2022
TeamID	PNT2022TMID30465
ProjectName	SMARTFARMER-IOTENABLEDSMARTFARMINGAPPLICATIONSYSTEM.
MaximumMarks	4Marks

FunctionalRequirements:

Followingarethefunctionalrequirementsoftheproposedsolution.

FRNo.	FunctionalRequirement(Epic)	SubRequirement(Story/Sub-Task)
FR-1	UserRegistration	RegistrationthroughGmail
FR-2	UserConfirmation	Confirmation via EmailConfirmationvia OTP
FR-3	Log in tosystem	CheckCredentialsCheck RolesofAccess.
FR-4	ManageModules	Manage System AdminsManage Roles of UserManageUserpermission
FR-5	Checkwhetherdetails	Temperature detailsHumiditydetails
FR-6	Logout	Exit

Non-functionalRequirements:

Followingarethenon-functionalrequirementsoftheproposedsolution.

FRNo.	Non-FunctionalRequirement	Description
NFR-1	**Usability**	Usabilityincludeseasylearnability,efficiencyinuse,remembrability,lackoferrorsinoperationandsubjectiveplea sure.
NFR-2	**Security**	Sensitiveandprivatedatamustbeprotectedfromtheirproductionuntilthedecision-makingandstoragestages.

NFR-3	**Reliability**	Thesharedprotectionachievesabettertrade-offbetweencostsandreliability. The model uses dedicated and shared protectionschemestoavoidfarmserviceoutages.

NFR-4	**Performance**	theideaofimplementingintegratedsensorswithsensingsoil and environmental or ambient parametersin farmingwillbemoreefficientfor overallmonitoring.
NFR-5	**Availability**	Automaticadjustmentoffarmingequipmentmadepossi ble by linking information like crops/weather andequipmenttoauto-adjusttemperature, humidity,etc.
NFR-6	**Scalability**	ScalabilityisamajorconcernforIoTplatforms.Ithasshown that different architectural choices of IoTplatforms affect system scalability and thatautomaticrealtimedecision-makingisfeasiblein anenvironmentcomposedofdozensofthousand.