Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	18 October 2022
Team ID	PNT2022TMID08383
Project Name Smart Farmer-IOT Enabled Smart Farming Application	
Maximum Name	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table 1 & table 2.

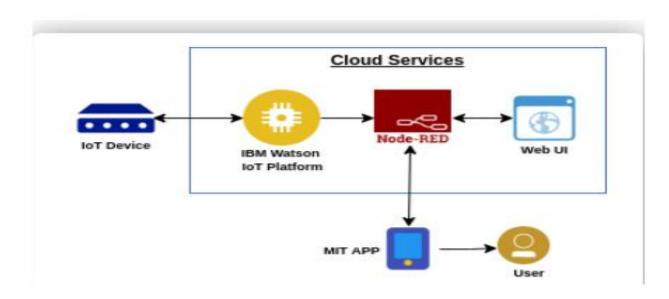


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with the Web UI	App development
2.	Application Logic-1	Logic for a process in the application	Python Objectives
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	Node-RED service

5.	Database	Data Type	Database
			Cloudant DB
6.	Cloud Database	Database Service on Cloud	Cloud Object
			store service
7.	File Storage	File storage requirements	IBM Block Storage
•	Infrastructure (Server /	Application Deployment on	Cloud Foundry
	Cloud)	Local System / Cloud Local	
		Server Configuration:	
		Cloud Server Configuration:	

S.No	Characteristics	Description	Technology
1.	Open-source	The open-source	SAN-SAF
	Frameworks	frameworks used	
2.	Security	List all the security /	IBM cloud
	Implementations	access controls implemented	encryptions
3.	Scalable Architecture	Justify the scalability of	IBM cloud
		architecture (3 – tier,	Architecture
		Micro-services)	
4.	Availability	Justify the availability	Web Application can
		of applications (e.g. use	even be used by the
		of load balancers,	framers in the
		distributed servers etc.)	horticulture
5.	Performance	Design consideration	Since the web
		for the performance of	application is high
		the application	efficient, it can be
			used by the farmers
			irrespective of time.