

Project Design Phase-II
Technology Stack (Architecture & Stack)

Team ID	PNT2022TMID06322
Project Name	SMART FARMING-IoT ENABLED SMART FARMING APPLICATION
Maximum Marks	4 Marks

Technical Architecture:

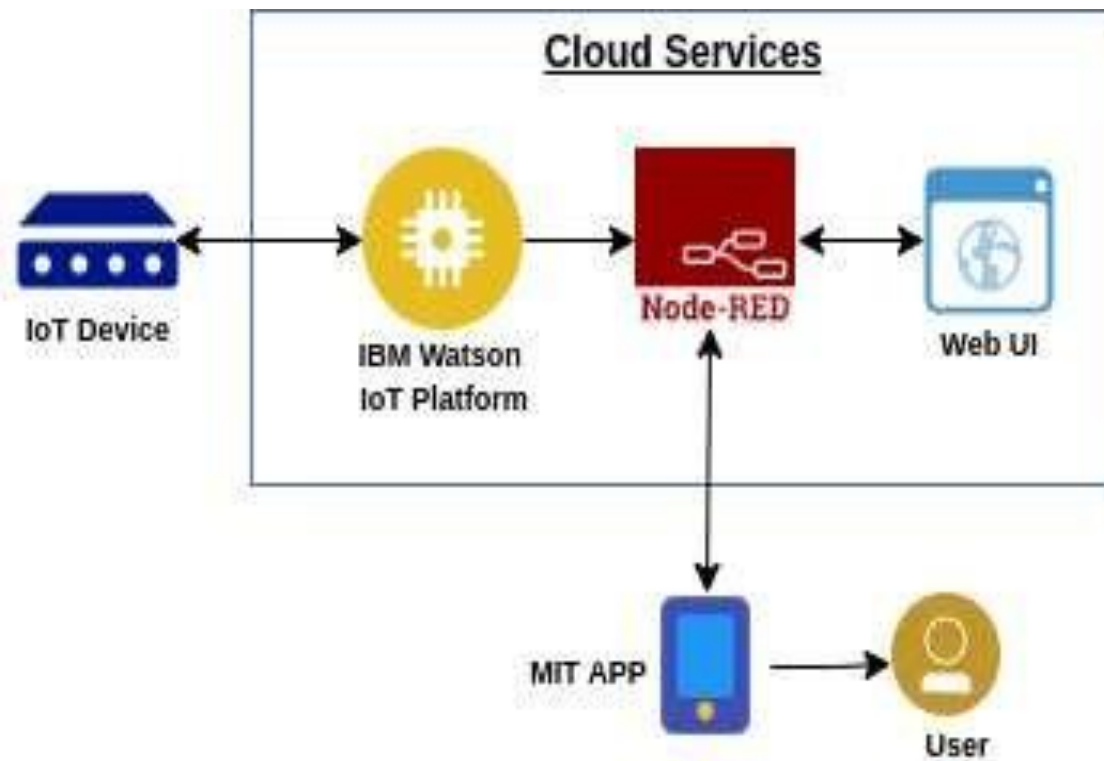


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App	Python, IBM Cloud ,IBM IoT Platform, IBM Nodered, IBM Cloudant DB
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic-2	Logic for a process in the application	IBM IoT platform
4.	Application Logic-3	Logic for a process in the application	IBM Nodered , MIT App
5.	Database	Data Type, Configurations etc.	Python
6.	Cloud Database	Database Service on Cloud	IBM Cloud, IBM Cloudant DB .
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API	Purpose of External API used in the application	IBM Weather API, etc.
9.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
10.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Technology of Opensource framework
2.	Security Implementations	List all the security or access controls implemented, use of firewalls etc.	Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture	Technology used
4.	Availability	Justify the availability of application	Technology used
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Technology used