Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	16 October 2022
Team ID	PNT2022TMID02387
Project Name	IoT based smart crop protection system for agriculture
Maximum Name	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table2.

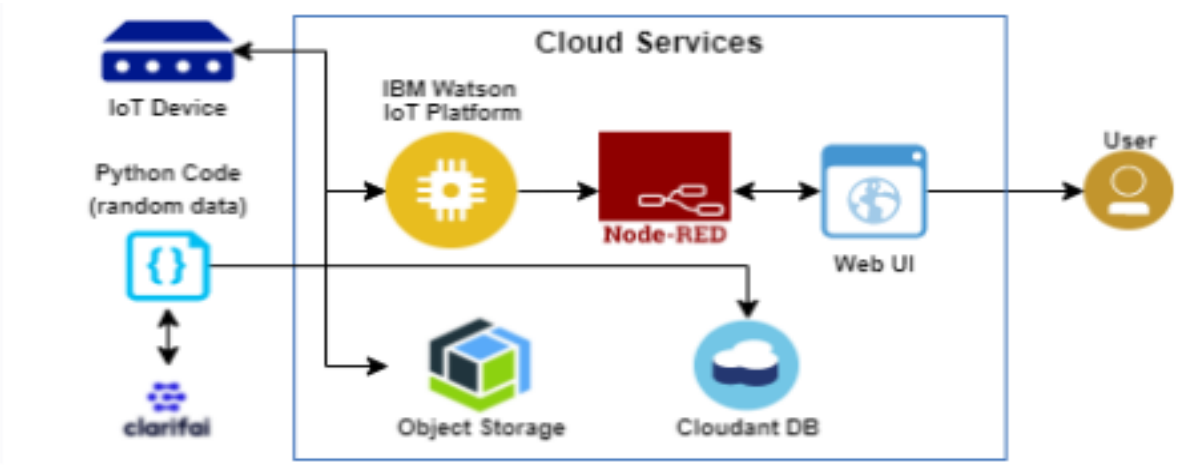

Table-1: Components & Technologies:

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 / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration:	Cloud Foundry

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