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

Date	03 October 2022
Team ID	PNT2022TMID18367
Project Name	Project - IoT Based Smart Crop Protection System for Agriculture.
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

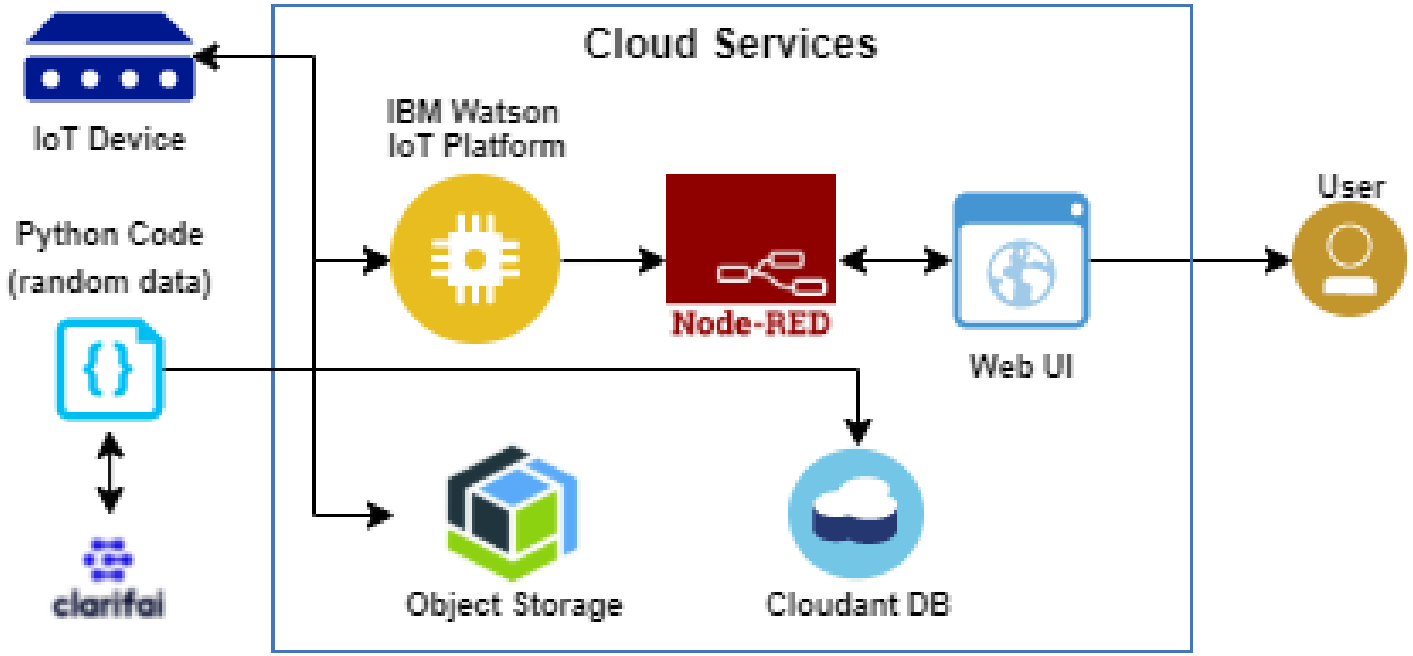

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with Web UI and Mobile app.	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 Services
5.	Database	Data Type, Configurations etc.	Database Cloudant DB
6.	Cloud Database	Database Service on Cloud	Cloud Object store service
7.	File Storage	File storage requirements	IBM Block Storage
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Cloud Foundry

Table-2: Application Characteristics:

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 encryption
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	IBM Cloud Architecture
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Web Applicaton can even be used by the framers in the horticulture.
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Since the web applicaton is high efficient it can be used by the farmers irrespective of time.