Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	**21 October 2022**
Team ID	**PNT2022TMID40841**
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.

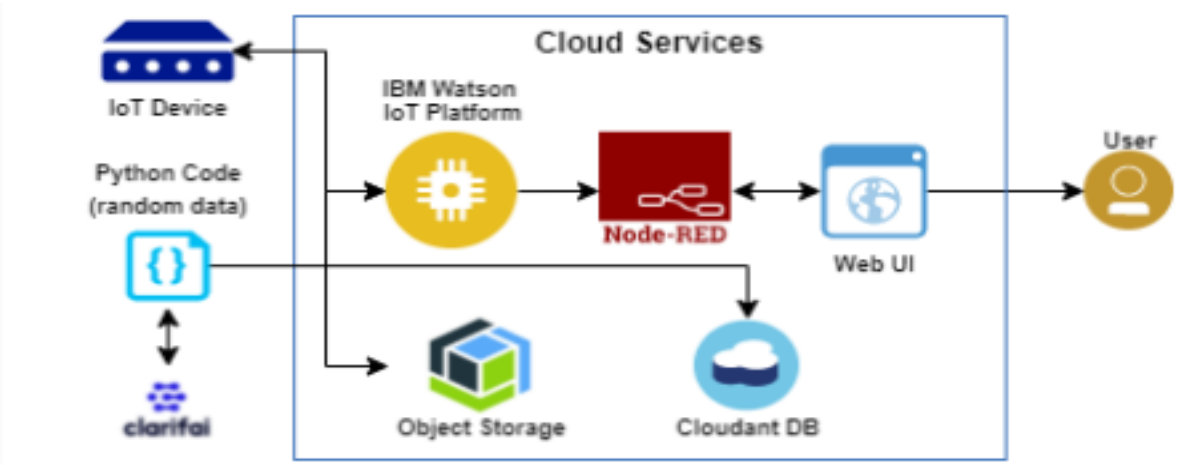

Table-1: Components & Technologies:

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.**