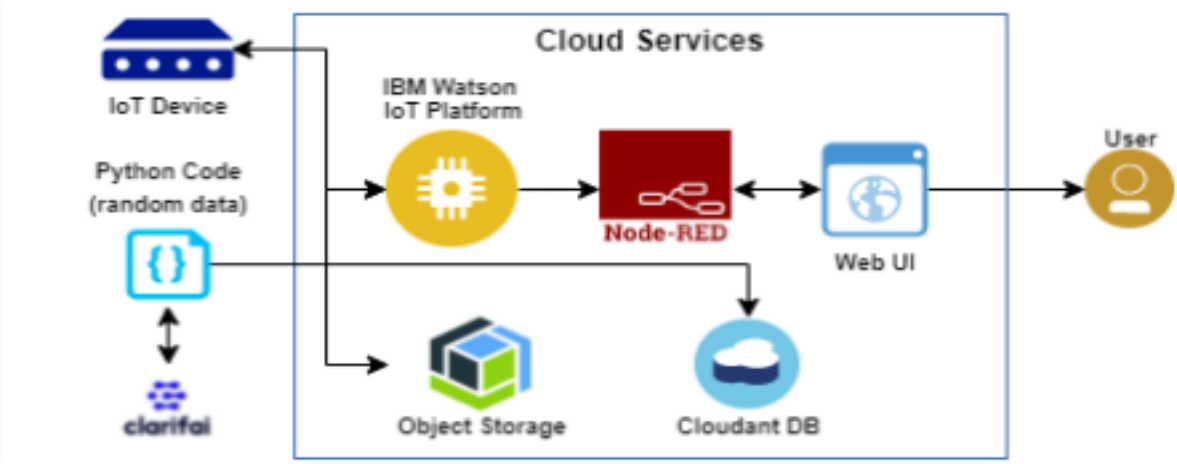
Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	**15 October 2022**
Team ID	**PNT2022TMID38557**
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 Cloud 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

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.**