

## Project Design Phase-II

### Technology Stack (Architecture & Stack)

Date	18 October 2022
Team ID	PNT2022TMID20342
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.

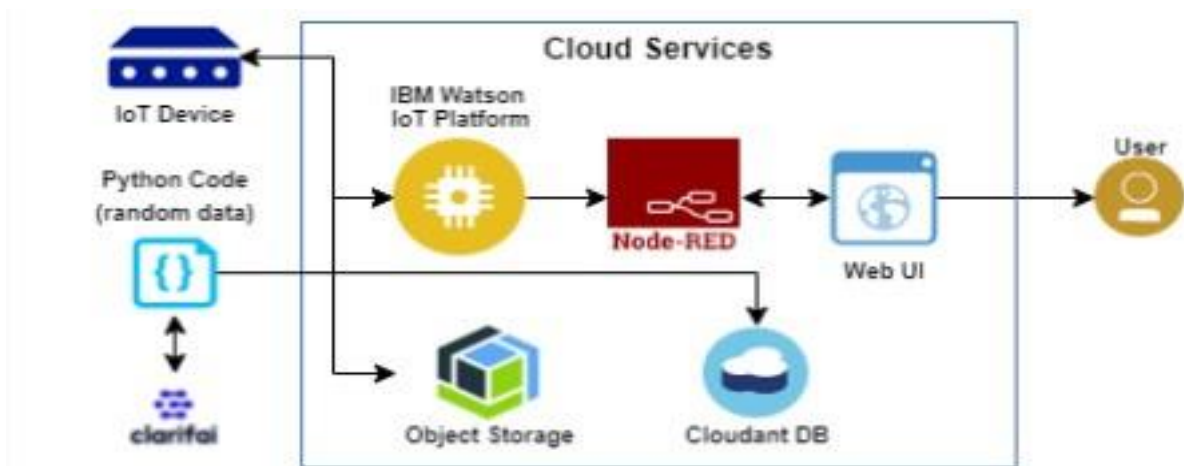


Table-1: Components & Technologies:

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

<b>6.</b>	Cloud Database	Database Service on Cloud	Cloud Object store service
<b>7.</b>	File Storage	File storage requirements	IBM Block Storage
<b>.</b>	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration:	Cloud Foundry

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