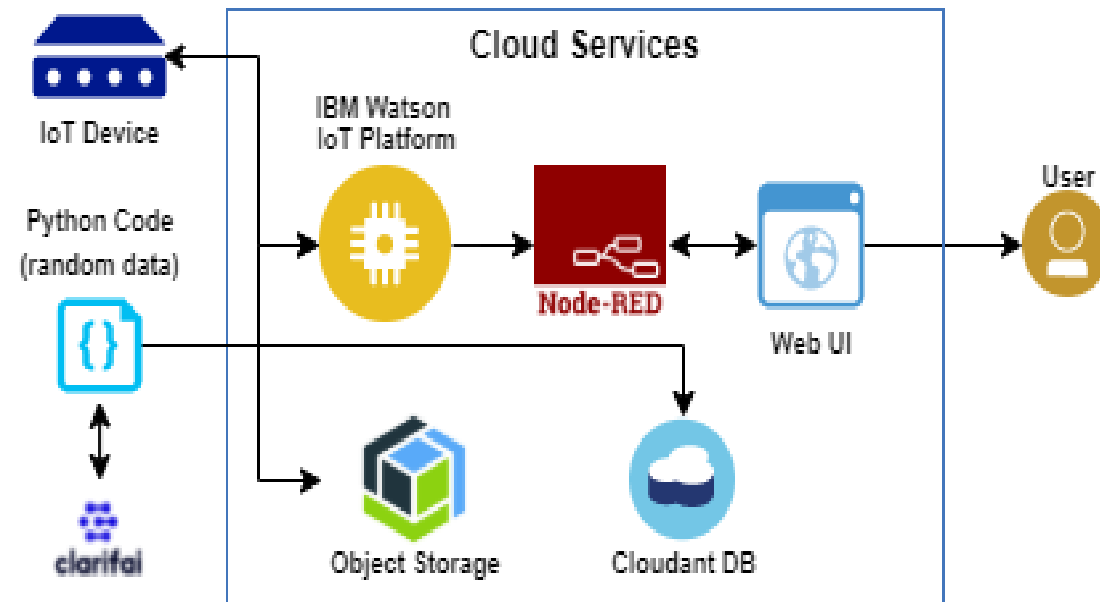


**Project Design Phase-II**  
**Technology Stack (Architecture & Stack)**

Date	03 November 2022
Team ID	PNT2022TMID48639
Project Name	Project – IOT Smart crop protection system for agriculture
Maximum Marks	4 Marks



**Table-1 : Components & Technologies:**

<b>S.No</b>	<b>Component</b>	<b>Description</b>	<b>Technology</b>
1.	User Interface	user interacts with mobile device.	HTML, CSS, JavaScript
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic-2	Logic for a process in the application	Cloud
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM Cloud
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9.	IOT model	Purpose of IOT Model for integrating the sensors with the user interface.	Object Recognition Model, etc.
10.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

**Table-2: Application Characteristics:**

<b>S.No</b>	<b>Characteristics</b>	<b>Description</b>	<b>Technology</b>
1.	Open-Source Frameworks	Open-source frameworks used	python
2.	Security Implementations	Authentication using encryption	Encryption
3.	Scalable Architecture	The scalability of architecture (3 – tier, Micro-services)	Web UI Application server,python, IBM cloud services Technology.
4.	Availability	It is increased by cloud and database.	IBM cloud services.