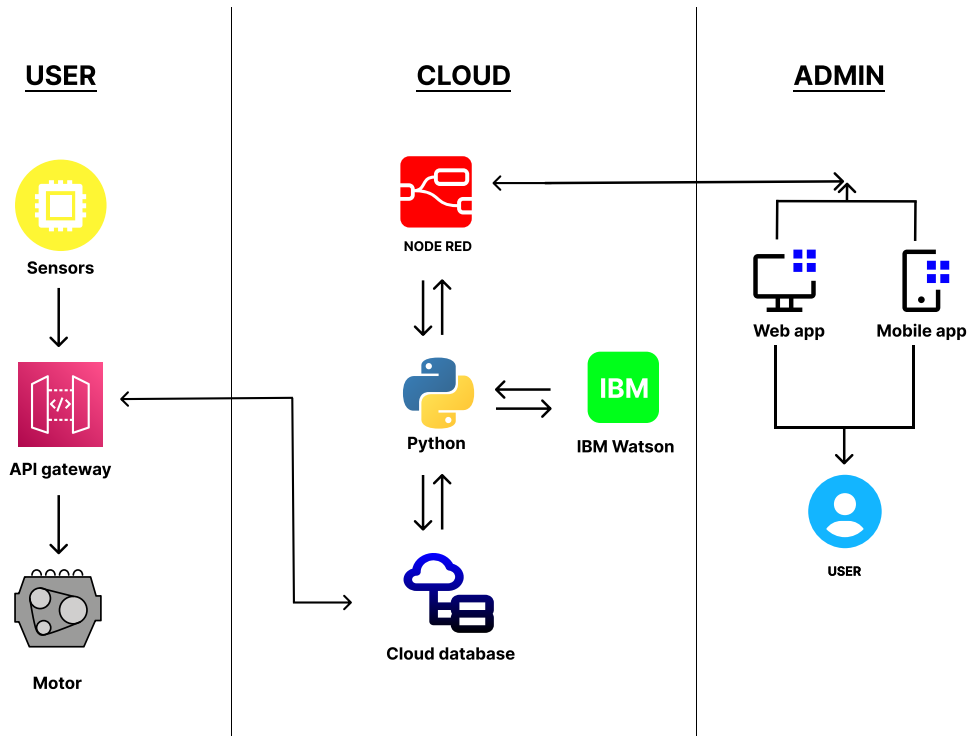


**Project Design Phase-II**  
**Technology Stack (Architecture & Stack)**

Date	23 October 2022
Team ID	PNT2022TMID04755
Project Name	Smart Famer – IoT Enabled Smart Farming Application
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	Mobile application	MIT app inventor
2.	Reading Parameters	Reading Field parameters like Soil moisture, Humidity, Temperature	Various Sensors nodes
3.	Hardware device	For use of sensor and value	Microcontroller/ Microprocessor Board
4.	Cloud connectivity	Connecting hardware to cloud	Wifi module or ESP32
5.	Cloud Database	Database Service on Cloud	IBM Watson
5.	External API-1	Purpose of External API used in the application	IBM Weather API
6.	Infrastructure (Server / Cloud)	Application Deployment on Cloud Server Configuration	Cloud Foundry.

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Python
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	User login Credentials
3.	Scalable Architecture	Every Cloud Services are hosted separately and make is scalable separately	IBM auto scaling
4.	Availability	To make use the application and data are available 24/7	IBM cloud load balancer
5.	Performance	To increase the performance the application in hosted in the high-performance instance	Can handle connected sensors data and Network connectivity simultaneously