

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

Date	14 October 2022
Team ID	PNT2022TMID44926
Project Name	Smart farmer IOT Enabled Smart Farming Application
Maximum Marks	4 Marks

Technical Architecture:

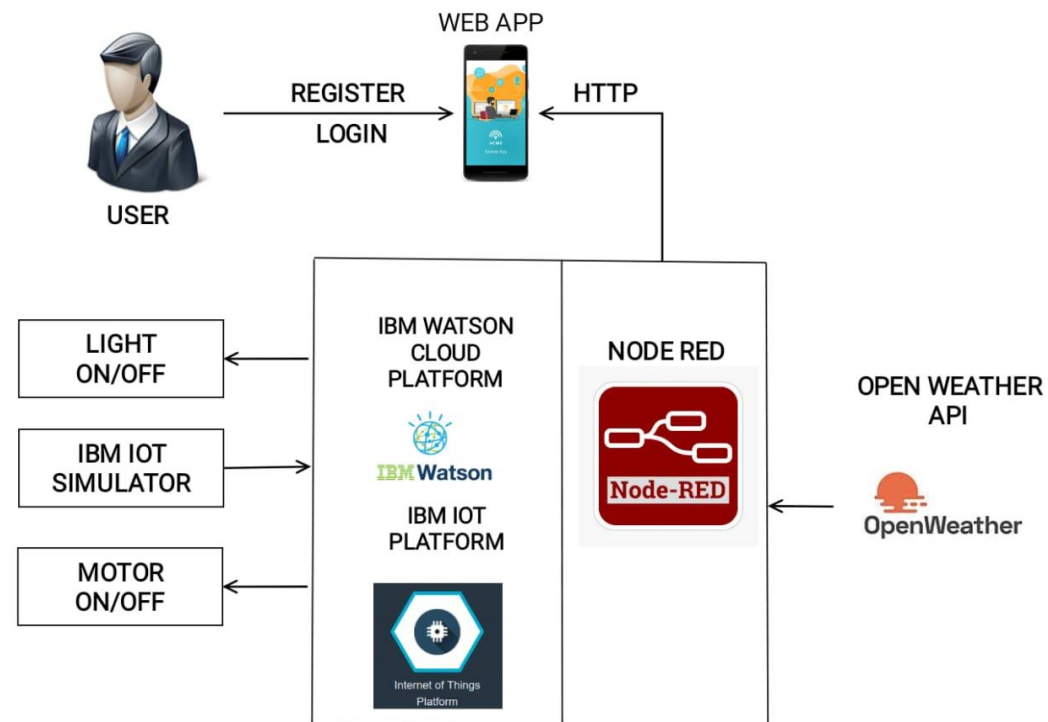


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web App or Web UI, Android app	Python
2.	Application Logic-1	Registration process in the application	Python
3.	Application Logic-2	Login process in the application	IBM Watson STT service
4.	Database	In the data base store the user's data	NoSQL
5.	Cloud Database	Database Service on Cloud using IBM Cloudant	IBM Cloudant
6.	File Storage	File storage requirements to save the user data's by using IBM Cloud storage	IBM Cloud Storage
7.	External API-1	The open weather API used to monitoring the weather conditions	Open Weather API.
8.	External API-2	Google Login API used to login to the application	Google Login API
9.	Infrastructure (Cloud)	Application Deployment on Cloud	Cloud Foundry

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	HTTP Server, Internet Browsers,	Andoid –Mobile phone platform
2.	Security Implementations	Risk assessment , Limit user acess to data, Encrypt the data , Update and patch regularly	Encryptions, Updates regularly
3.	Scalable Architecture	It supports higher workloads without any fundamental changes to it	Mit app Invertor
4.	Availability	In this application have to check weather conditions, temperature , Humidity	Open weather API
5.	Performance	Desighn consideration for the performance is for each request have 2 second to load the details in the application	Python