

**ProjectDesignPhase-
IITechnologyStack(Architecture&Stack)**

Date	28October2022
TeamID	PNT2022TMID19258
ProjectName	Project–Signs withsmart connectivityforbettersafety.
MaximumMarks	4 Marks

TechnicalArchitecture:

TheDeliverableshallinclude the architecturaldiagram asbelowandtheinformationasper the table1&table 2

Reference: <https://developer.ibm.com/patterns/ai-powered-backend-system-for-order-processing-during-pandemics/>

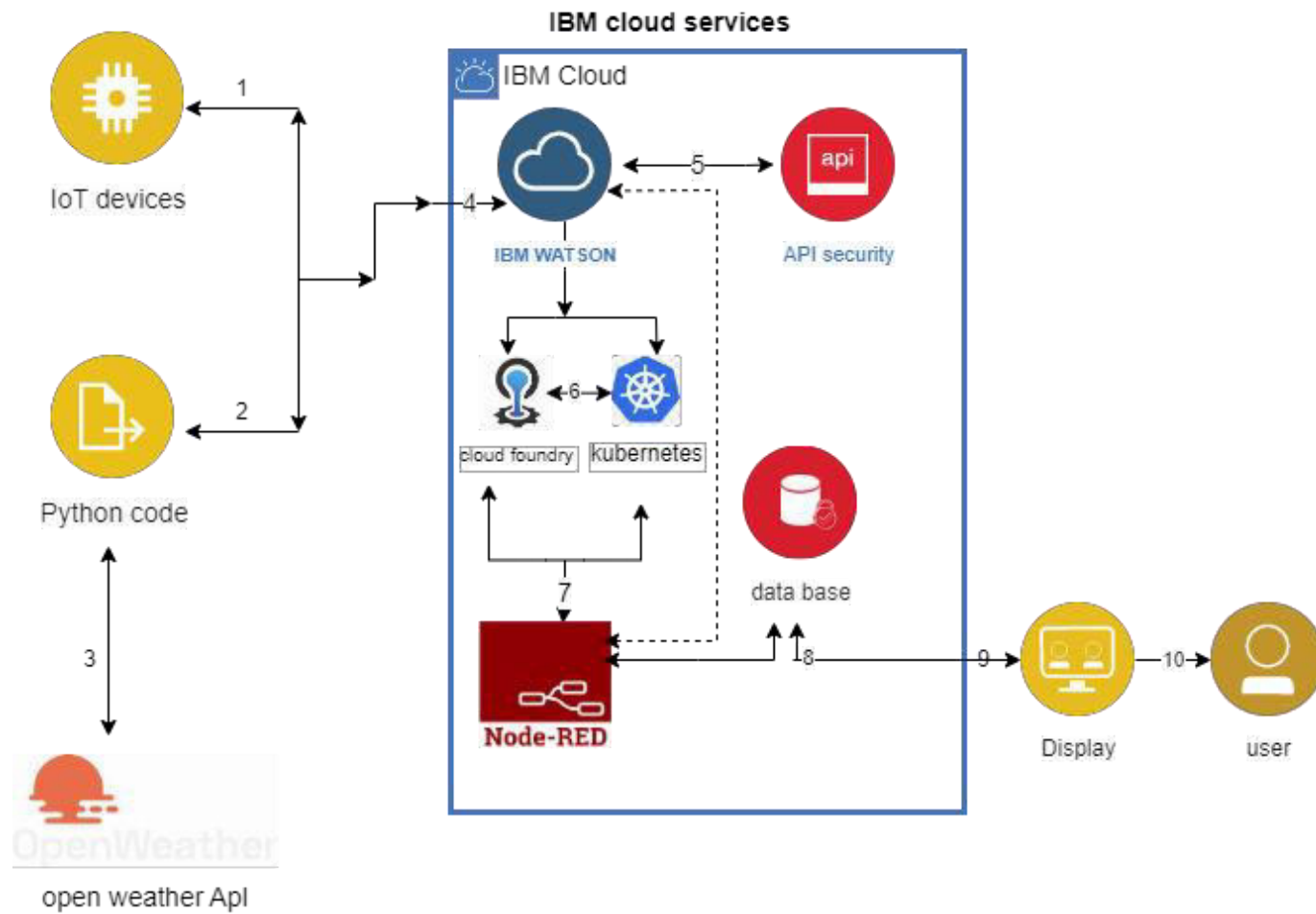


Table-1 : Components&Technologies:

S.No	Component	Description	Technology
9.	UserInterface	Howuserinteractswith applicatione.g.WebUI,MobileApp,Chatb	HTML,CSS,JavaScript / AngularJs/ReactJsetc.
2.	Application Logic-1	Logicfor a processintheapplication	Java /Python
7.	Application Logic-2	Logicfor a processintheapplication	Node-RED services
5.	Application Logic-3	APIsecurity	IBMdatapowergateway
4.	Database	DataType,Configurationsetc.	MySQL,NoSQL, etc.
8.	Cloud Database	Database Serviceon Cloud	IBMDB2,IBMCloudantetc.
3.	ExternalAPI-1	Purpose ofExternal APIusedintheapplication	IBMWeather API, etc.
6.	Infrastructure(Server /Cloud)	Application DeploymentonLocal System /CloudLocalServerConfiguration: Cloud ServerConfiguration :	Local,CloudFoundry, Kubernetes,etc.
1.	IoTcomponent	What typeofcomponentsused	Sensors, actuatorsconnectedwithWIFI module

Table-2:ApplicationCharacteristics:

S.No	Characteristics	Description	Technology
1.	Security Implementations	Listallthesecurity/ accesscontrolsimplemented,use offirewallsetc.Using firewallno thirdpartypersonscantloginwithout theproper	Firewall
2.	Scalable Architecture	It isvery comfortableandeasytoexpandtheproductat anytimeandanywhere.Evenwe canmade	IOT devices,properinternetconnection
3.	Availability	It is madeavailable to 24/7aslongthedeviceconnectedto internetand	Internetconnection, IBMcloudservices(Watson).

S.No	Characteristics	Description	Technology
4.	Performance	It supportstomany people.Cloudis havingcapabilityto havedifferentclusters andabletomaintaintheservice requests from	IBMcloud ,Kubernetes services.

References:<https://c>

[4model.com/](https://c4model.com/)

<https://developer.ibm.com/patterns/online-order-processing-system-during->

[pandemic/https://www.ibm.com/cloud/architecture](https://www.ibm.com/cloud/architecture)

<https://aws.amazon.com/architecture>

<https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d>