

ProjectDesignPhase-II

TechnologyStack(Architecture&Stack)

Date	18October2022
TeamID	PNT2022TMID26579
ProjectName	Gasleakagemonitoringandalertingsystemfor industries
MaximumMarks	4 Marks

TechnicalArchitecture:

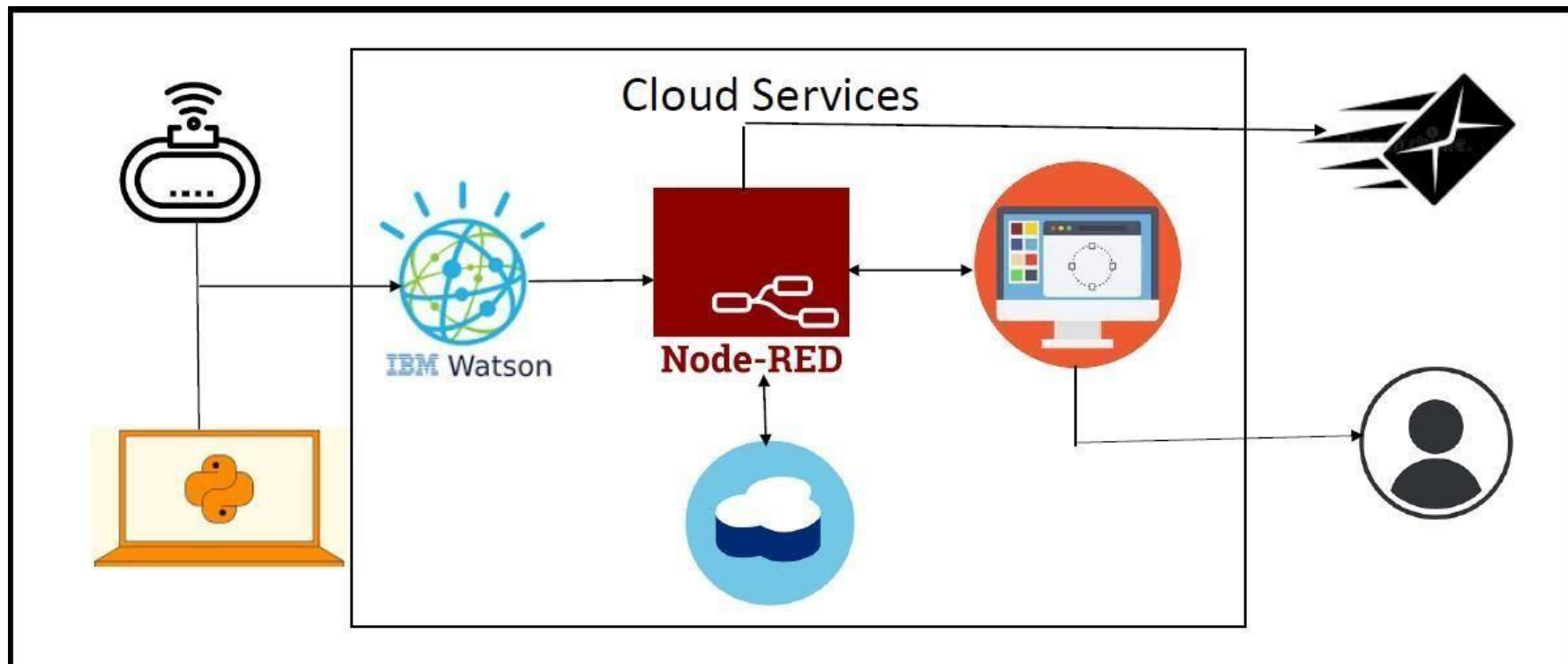


Table-1:Components&Technologies:

S.No	Component	Description	Technology
1.	UserInterface	WebUI	HTML,CSS,Javascript
2.	ApplicationLogic-1	Logicforaprocessintheapplication	Python
3.	ApplicationLogic-2	Logicforaprocessintheapplication	IBMWatsonSTTservice
4.	ApplicationLogic-3	Logicforaprocessintheapplication	IBMWatsonAssistant
5.	Database	DataType	MySQL,NoSQL,etc.
6.	CloudDatabase	DatabaseServiceonCloud	IBMCloudant.
7.	FileStorage	Filestoragerequirements	IBMBlock Storage
8.	ExternalAPI-1	PurposeofExternalAPIusedintheapplication	IBMWeatherAPI
9.	ExternalAPI-2	PurposeofExternalAPIusedintheapplication	AadharAPI
10.	MachineLearningModel	PurposeofMachineLearningModel	ObjectRecognitionModel
11.	Infrastructure(Server/Cloud)	ApplicationDeploymentonLocalSystem/CloudLo calServerConfiguration: CloudServerConfiguration:	CloudFoundry

Table-2:ApplicationCharacteristics:

S.No	Characteristics	Description	Technology
1.	Open-SourceFrameworks	Theopen-sourceframeworksused	MozillaFirefox
2.	SecurityImplementations	Thesecurity/accesscontrolsimplemented,useof firewallsetc.	IBMcloudEncryption
3.	ScalableArchitecture	The scalability of architecture (3 – tier, Micro-services)	IBMcloudarchitecture
4.	Availability	Theavailabilityofapplication(e.g.,useofload balancers,distributedserversetc.)	Webapplicationcanevenbeusedby theworkersintheindustry
5.	Performance	Considerationdesignfortheperformanceofthe application(numberofrequestsperec,useofCache,useofCDN's)etc.	Sincethewebapplicationishigheff icient, it can be used by theworkersirrespectiveoftime.

