Project Design Phase-IITechnologyStack
(Architecture &Stack)

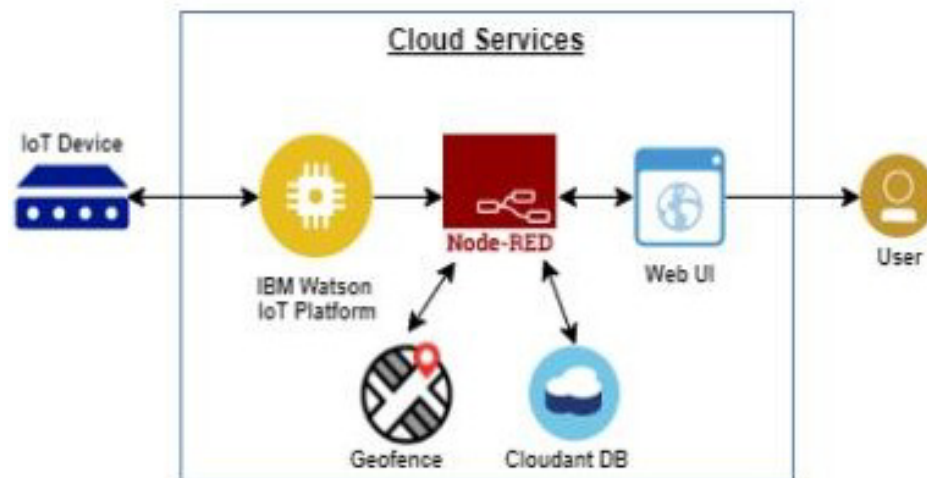| Date	03October2022
TeamID	PNT2022TMID19077
ProjectName	Project-− IOTbasedsafetygadgetforchildsafety monitoringandnotification
MaximumMarks	4 Marks

TechnicalArchitecture:

Table-1: Components&Technologies:

S.No	Component	Description	Technology
1.	UserInterface	The communication protocol being used in theproposedsolutionmightactasaninterface thewaylike WiFi,BluetoothandZigBee	MITapp
2.	ApplicationLogic	Thedatatobe collectedandsenttothe authenticator's(parent) via GSM providing the GPScoordinatestoeasily locateaccess andmonitorthe child	IBMWatsonSTT service, pythonetc
3.	Database	Datato be segregatedandsecuredintheformof relationalDBMS	.MySQL
4.	CloudDatabase	IBM	IBMCloudant
5.	FileStorage	Filestorage requirements	IBMBlockStorageorOtherStorageService orLocalFilesystem
6.	ExternalAPI	To accessthechildren location	GPSlocationmonitoringetc
7.	Infrastructure(Server/Cloud)	ApplicationDeploymentonLocalSystem/ CloudLocal ServerConfiguration	CloudFoundry

Table-2:ApplicationCharacteristics:

S.No	Characteristics	Description	Technology
1.	Open-SourceFrameworks	The proposed solution being framed in the form anandroid application providing the end user an easysurveillanceoftheirchildren(preferablyusers are parents)	UI/UXdesigndevelopement
2.	SecurityImplementations	The developed application should be accessible in theway it canonlyrespondtothe commentsof the relevantusers	Encryptions,IAMControls.
3.	ScalableArchitecture	Theappformatcomesthewayeasiertohandleand operate	Notyetdetermined
4.	Availability	Thedevelopedsolutiontends to be availableinthe marketatanytime	Notyetdetermined
5.	Performance	Highly properandbettermentfunctionalitiesaretobe ensuredinthedesignedsolution	Notyetdetermined