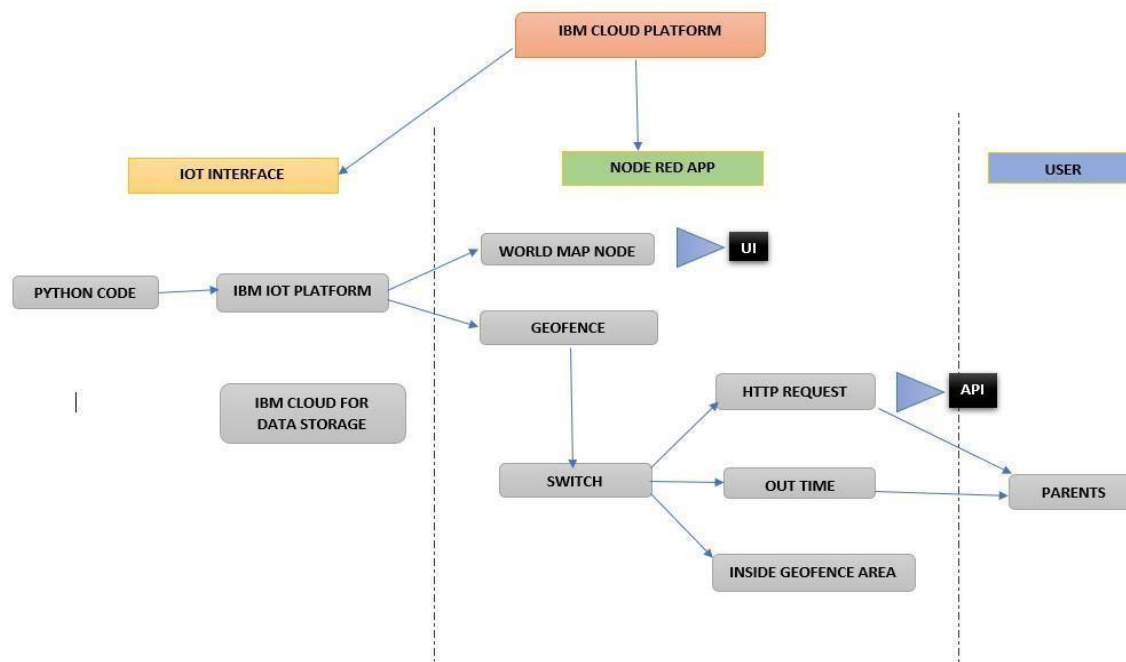# Project Design Phase-II
Technology Architecture

Team ID	PNT2022TMID04693
Project Name	Project – IoT Based Safety Gadget for Child Safety Monitoring and Notification

Technical Architecture:

Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Communication protocol is used in proposed solution act as a interface in the app by wifi and bluetooth	World Map in NODE RED facility MIT app inventor IBM Watson service (map)
2.	Application Logic-1	Updating geographical coordinates via GSM provides the GPS coordinates to easily locates the child	Python, Ardiuno IDE
3.	Application Logic-2	Checks if location in within Geo-fence and stored in the database	Geofence Node in NODE RED facility IBM Watson STT service (map)
4.	Cloud Database	IBM	IBM Cloudant

S.No		Description	
5.	File Storage	File storage requirements	IBM Block Storage
6.	External API-1	To send message to parents if the child crosses the geo-fence	fast2sms App
7.	Infrastructure (Server / Cloud)	Deployment of NODE RED app and further usage	IBM Cloud

Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Scalable Architecture	The proposed solution being framed in the form anandroid application providing the end user an easysurveillance of their children (preferably users are parents)	Internet Of Things UI/UX Development
2.	Availability	The developed application should be accessible inthe way it can only respond to the comments of the relevant users	IBM CLOUD
3.	Performance	Network conditions should be stable even at worst conditions	High speed network plays a major role
4.	Availability	The developed solution tends to be available in themarket at any time	Marketing online