PROJECT DESIGN PHASE-II

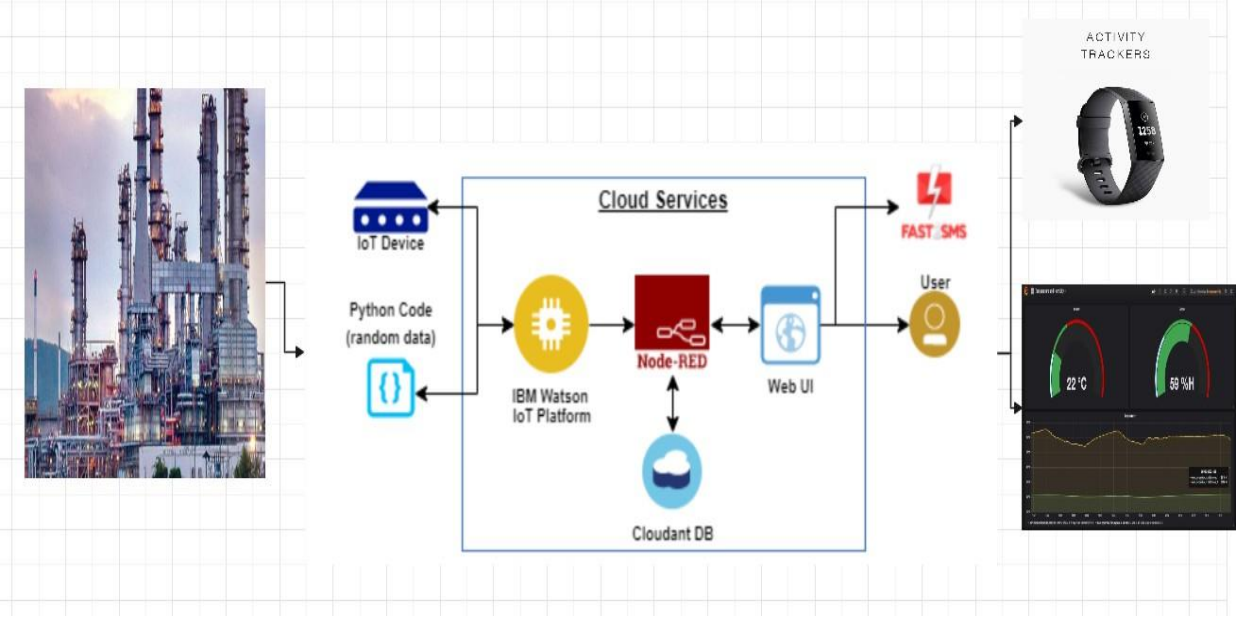
DATA FLOW DIAGRAM & USER STORIES

TEAM ID	PNT2022TMID03488
PROJECT NAME	Hazardous Area Monitoring for Industrial Plants powered by IoT.

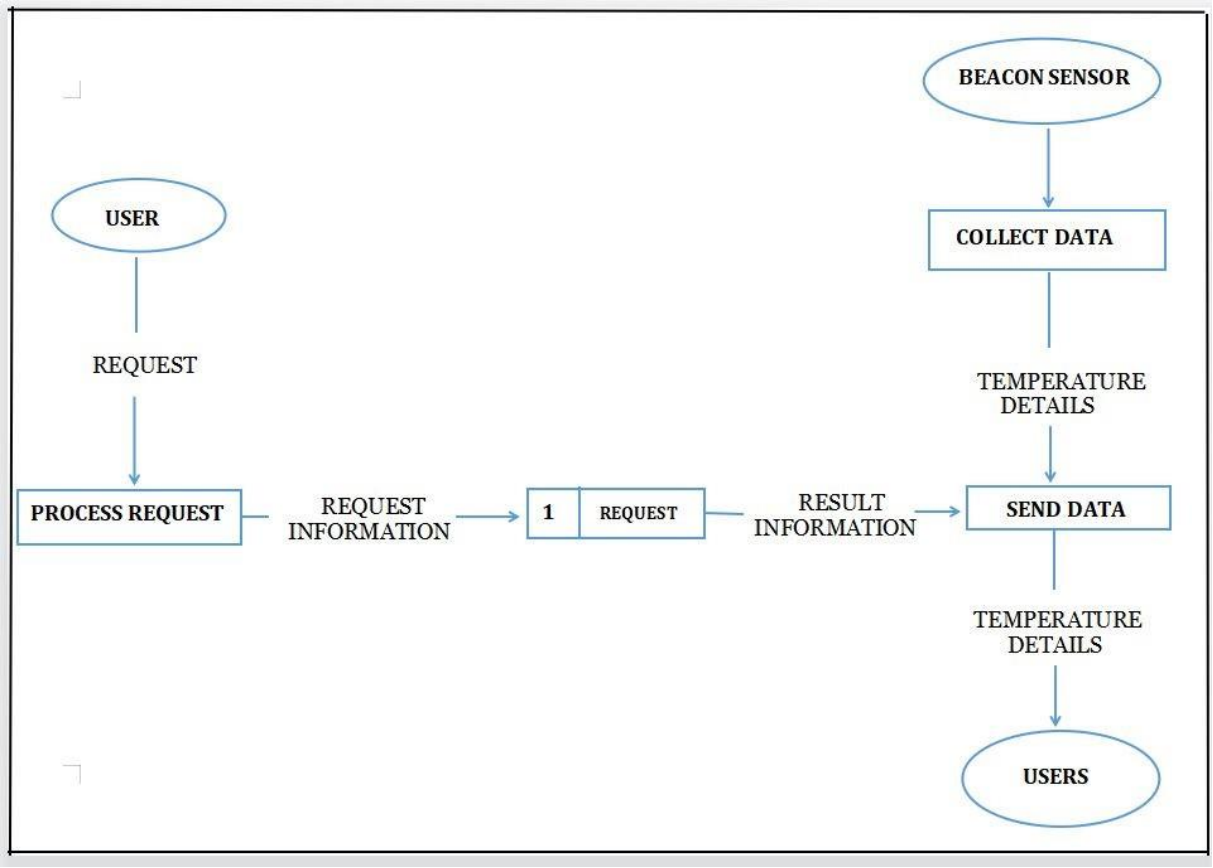
DATA FLOW DIAGRAM:

A data flow diagram (DFD) is a traditional visual representation of the information flows within the system. A neat and clear DFD can depict the rightamount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored respectively.

FLOW:



DFD LEVEL 0 (INDUSTRY STANDARD):



EXPLANATION:

- Write an appropriate python code for the designated IOT system
- IOT system is integrated with Watson cloud service for data collection
- IBM Watson IOT platform provides many services and connected to node red
- With the help of cloud service, temperature is displayed on the wearable device's dashboard
- Then the incidents in the industries can be avoided

USER STORIES:

USER TYPE	FUNCTIONAL REQUIREMENTS	USER STORY NUMBER	USER STORY/TASK	ACCEPTANCE CRITERIA	PRIORITY	RELEASE
INITIALIZATION	Registration	USN-1	Registration of the user using their credentials	Registration should be easily available to all the workers in the industries	High	Sprint-1
	User Confirmation	USN-2	Confirm the user by sending a verification link and OTP to the mobile number.	The link should be working perfectly and OTP should be sent and within one minute	Medium	Sprint-2
	Rule and Regulations	USN-3	Share the guidelines to be followed during the initialization process	Guidelines help even ordinary people to aware of the installment and working	Medium	Sprint-3
MONITOR THE ENVIRONMENT	Installation	USN-4	The beacon devices should be installed all around the industrial places	The smart beacon devices should cover the entire industries with some distance between them	High	Sprint-1
	Collection of data	USN-5	The ability of the beacon devices is to monitor the temperature of the industrial areas	The temperature parameter is the important parameter to identify the environment condition	High	Sprint-1
	Catalog data	USN-6	The temperature of the industrial area is stored in IBM cloud services and in wearable devices and monitors.	Data should be synchronized between cloud and the wearable devices	High	Sprint-1

EMPLOYEES	Wearable devices	USN-7	The wearable devices display the temperature of the industrial area when they go near the beacon devices	The devices should be available to all workers and be worn when they enter the industrial area	High	Sprint-1
	Wearable device customization	USN-8	Devices systemized based on their ability of knowledge such as language, font, size, etc.	Customization help the workers to have a better understanding and act according to it	Medium	Sprint-2
	SMS Intimation	USN-9	If the observed data for an area is found to be risky for the workers, then they shall be notified via SMS	The workers is notified through the SMS if the beacon device identify any rise in temperature in the environment	High	Sprint-1
ADMIN	Monitor	USN-10	The temperature absorbed by the beacon devices will be displayed in the monitor through the cloud	The temperature changes are analyzed and monitored	High	Sprint-1
	Monitor Systemization	USN-11	The dashboard can be customized based on the administrator such as alert button, message to the help counter	The admin can systemize the UI based on their needs	Medium	Sprint-2