

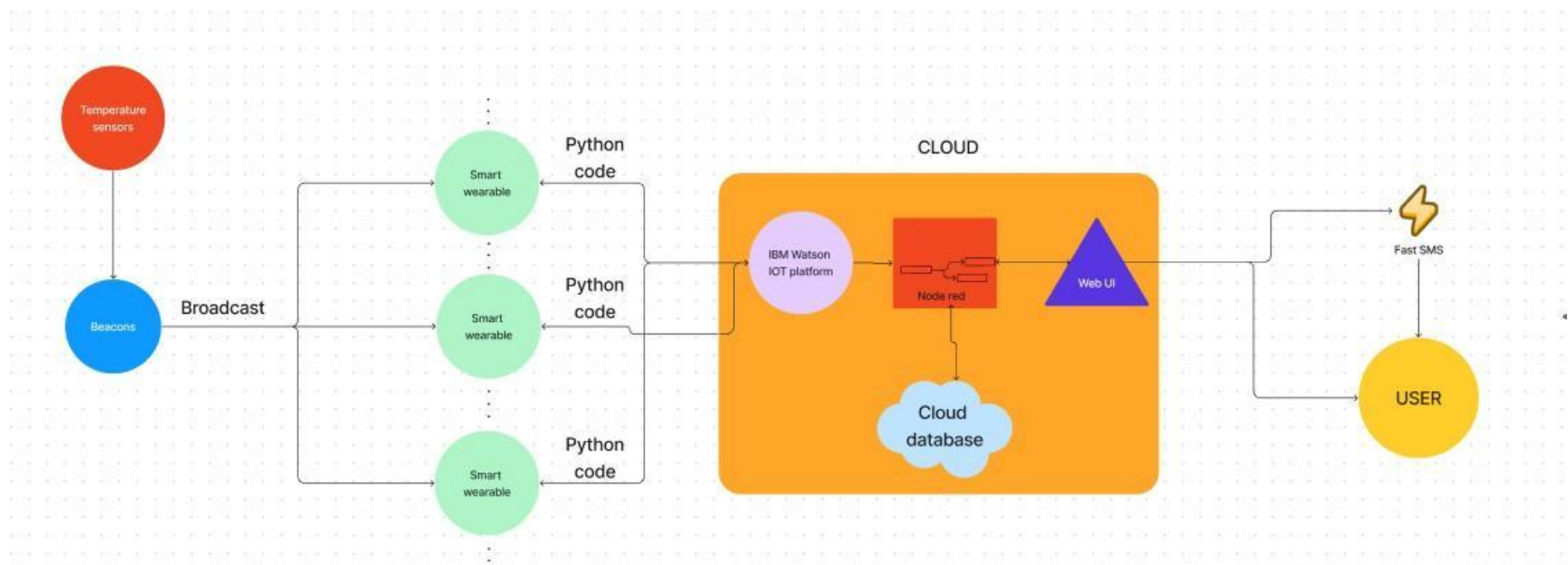
Project Design Phase-II Data Flow Diagram & User Stories

DATE	10 November 2022
TEAM ID	PNT2022TMID43363
PROJECT NAME	Project- Hazardous Area Monitoring for Industrial Plant powered by IoT
MAXIMUM MARKS	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

Data Flow



Work Flow:

1. Gas sensors which detects the presence of hazardous gases and Temperature sensor which measures the temperature are used.
2. Arduino controller which reads input and turns into an output.
3. Cloud services supports IoT devices and applications and used to store IoT data.
4. Servers and Database is used in data management functions.
5. The user is given the message alerts with the help of the internet and data is analyzed and area is monitored.

User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Technician	Installation	USN-1	As a user, I must install the smart beacons at points to ensure the entire area of the plant is covered.	A beacon can be found in every area of the plant.	High	Sprint-1
	Data Gathering	USN-2	The beacons obtain the temperature of their respective area using sensors.	The temperature of areas within the plant is obtained.	High	Sprint-1
	Data Sync	USN-3	The beacons send their data to the cloud in the real-time which is in turn sent to nearby wearable devices and the administrator's dashboard	Data is sent to the cloud successfully and synced with other devices.	High	Sprint-1
Mobile User	Registration	USN-4	As a user, I can register for the application by entering my email, and password and confirming my password.	I can access my account/ dashboard.	High	Sprint-1

		USN-5	As a User, I will receive a confirmation email once I have registered for the application.	I can receive a confirmation email & click confirm	High	Sprint-1
	Login	USN-6	As a User, I can login to the application by entering email & password	I can register and access my account	High	Sprint-1
	Dashboard	USN-7	As a User, I can monitor the temperature and humidity.	I can access the account for monitoring the hazardous area	Medium	Sprint-2
End User	Alerting through message	USN-8	I can receive message in the form of visual notification and voice message.	I can detect the hazard and receive notification	High	Sprint-1
	SMS Notification	USN-9	I can get the alert message if the area has any Hazards.	I can be alerted through the SMS notification	Medium	Sprint-2
Web User	Monitoring	USN-10	As a Web User, I can detect the hazard through the website.	I can monitor the hazards like temperature, humidity, toxic gases.	High	Sprint-1
Customer care executive	Maintenance	USN-11	As an executive, I manage a team of representatives offering customer support.	I need a team of workers to manage the data.	Low	Sprint-3
Administrator	Admin Dashboard	USN-12	As an Administrator, I can able to access the data through the cloud.	I can access the data sent by the beacon sensor	High	Sprint-2
	Dashboard Customization	USN-13	As an Administrator, I can customize the dashboard to suit their personal requirements and priorities.	The admin can customize the UI for their dashboard.	Medium	Sprint-2

