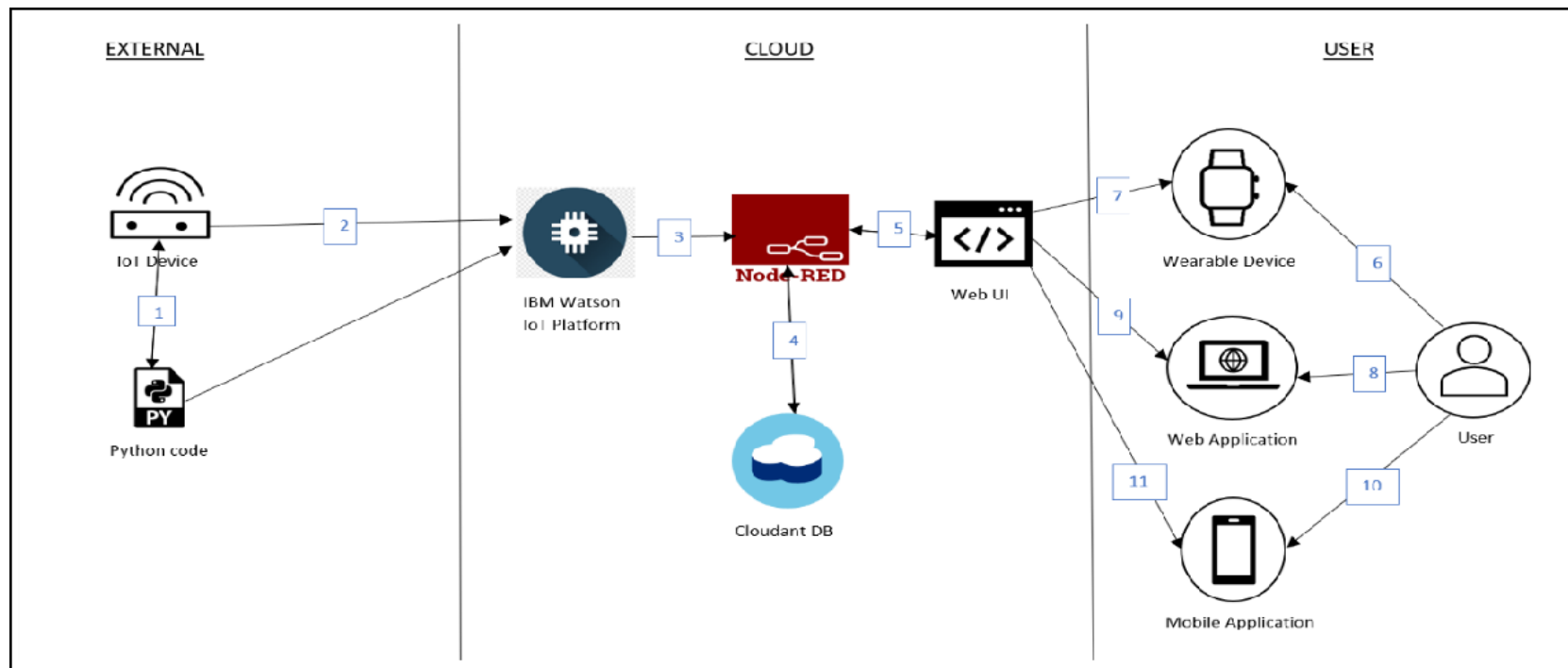


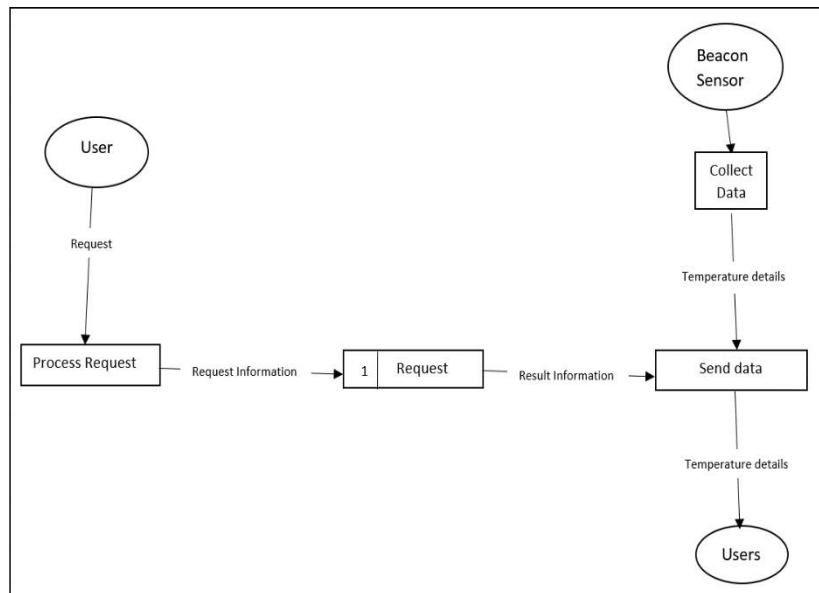
## Project Design Phase-II Data Flow Diagram

Date	05 NOVEMBER 2022
TeamID	PNT2022TMID48690
ProjectName	Project – Hazardous Area Monitoring for Industrial Plant Powered by IoT.
MaximumMarks	4Marks

### Data Flow Diagrams:



## DFDLevel0(IndustryStandard)



1. The necessary Python code is created to gather temp. information from an IoT device.
2. For data collection, IoT devices are linked to the IBM Watson IoT platform.
3. After the IoT platform is ready, the next stage employs Node-Red services.
4. Cloudant DB is utilised for data archiving and retrieval.
5. Web application and user interface (UI) designs are made using Node-Red services.
6. The user uses a mobile app, web, and smartwatch to get various informations and alerts

## User Stories:

UserType	FunctionalRequirement(Epic)	UserStory Number	UserStory/Task	Acceptancecriteria	Priority	Release
Technician	Installation	USN-1	To guarantee that the entire factory is covered, the technician must install the smart beacons at strategic locations.	Every location in the plant has a beacon.	High	Sprint-1
	DataGathering	USN-2	The beacons use sensors to measure the temperature in their respective areas.	The temperature of areaswithintheplantisobtained.	High	Sprint-1
	DataSync	USN-3	The administrators dashboard and neighbouring wearable devices receive the data that the beacons relay in real time to the cloud..	Data is sent to the cloudsuccesfully and syncedwith otherdevices.	High	Sprint-1
Worker	Wearable devicedisplay	USN-4	The data transmitted by beacons nearby should be displayed by the wearable device.	On their device, the user can view the local temperature.	High	Sprint-1
	Wearable deviceadjustments	USN-5	The wearable device's size can be changed by the user to fit their needs.	The device can be modified by the user to improve comfort while using it.	Low	Sprint-2
	Wearable displaycustomization	USN-6	On the device itself, the user can customise the display to fit their needs.	To make the device's display easier to read, the user can make changes to it.	Medium	Sprint-2
	SMSNotifications	USN-7	When the environment they are in reaches unsafe temperatures, the wearable gadget sends a notification to the user's phone via an API.	As soon as the beacons identify a potential threat, they send an SMS to the user to alert them to it.	High	Sprint-1
Administrator	AdminDashboard	USN-8	The administrator's dashboard receives the data from the beacons via the cloud.	The plant administrator has access to the data from every beacon.	High	Sprint-1
	DashboardCustomization	USN-9	The admin can modify the dashboard to meet their unique needs and goals.	The UI for the administrator's dashboard can be modified.	Medium	Sprint-2