Project Design Phase-II
Data Flow Diagram & User Stories

Date	3 October 2022
Team ID	PNT2022TMID19515
Project Name	Project – Real time river water quality monitoring and Control System
Maximum Marks	4 Marks

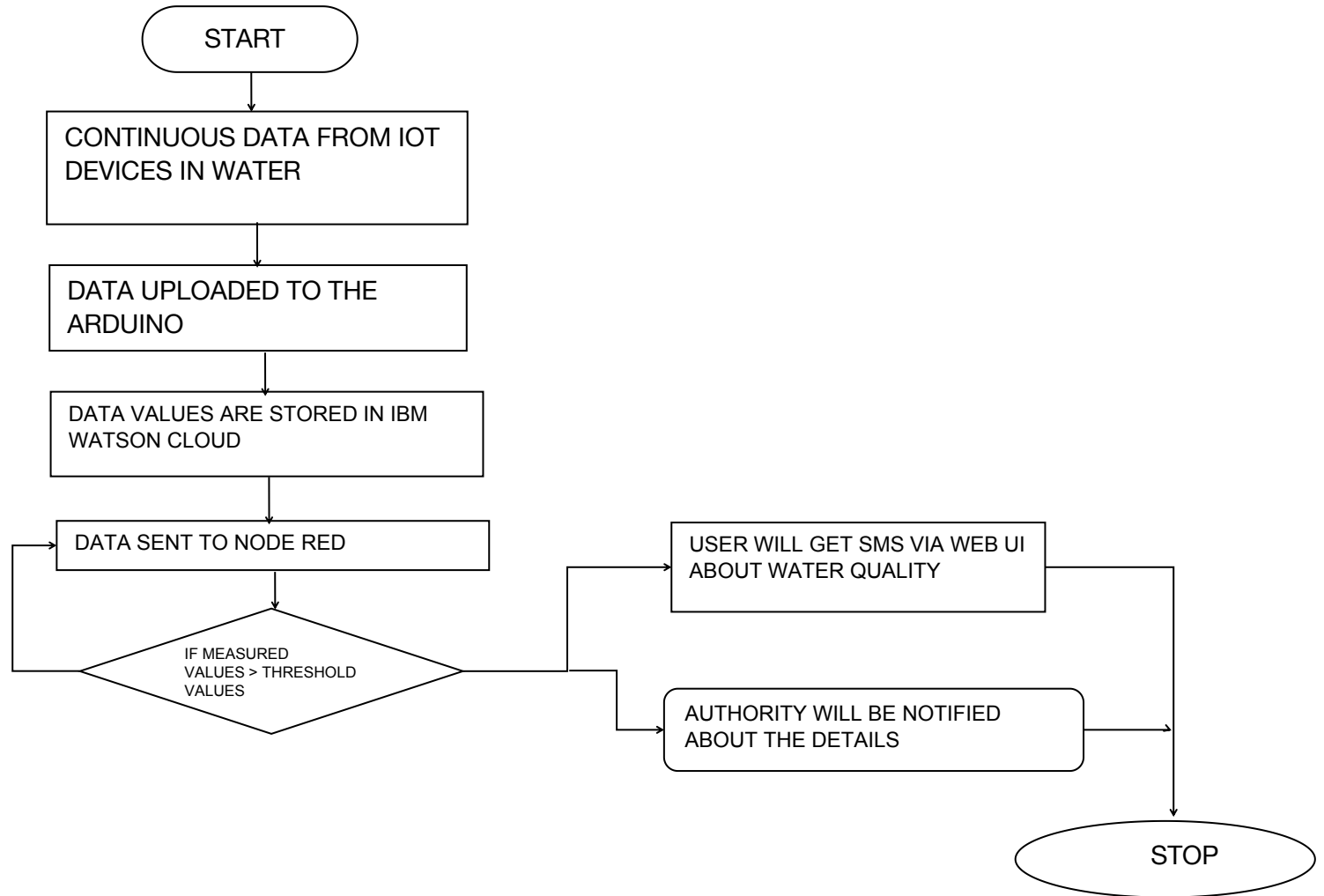Project Title : Real-Time River Water Quality Monitoring And Control

Faculty Mentor : Mohanapriya A

Team ID: PNT2022TMID19515

Team Members:

1.   Harish V - Team Leader

2.   Nirmalkumar V S - Team Member

3.   Mohammed Adhil H - Team Member

4.   Jaisherma J Team - Member

Data Flow Diagrams:

```
                        ( START )
                            |
                            v
              +---------------------------------+
              | CONTINUOUS DATA FROM IOT        |
              | DEVICES IN WATER                |
              +---------------------------------+
                            |
                            v
              +---------------------------------+
              | DATA UPLOADED TO THE            |
              | ARDUINO                         |
              +---------------------------------+
                            |
                            v
              +---------------------------------+
              | DATA VALUES ARE STORED IN IBM   |
              | WATSON CLOUD                    |
              +---------------------------------+
                            |
                            v
              +---------------------------------+
              | DATA SENT TO NODE RED           |
              +---------------------------------+
                            |
                            v
                      /           \
                     /  IF MEASURED \
                    <   VALUES >      >
                     \  THRESHOLD   /
                      \  VALUES    /
                       \         /
```

CONTINUOUS DATA FROM IOT DEVICES IN WATER

DATA UPLOADED TO THE ARDUINO

DATA VALUES ARE STORED IN IBM WATSON CLOUD

DATA SENT TO NODE RED

IF MEASURED VALUES > THRESHOLD VALUES

USER WILL GET SMS VIA WEB UI ABOUT WATER QUALITY

AUTHORITY WILL BE NOTIFIED ABOUT THE DETAILS

STOP

User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering email and correct user password	I can access my account/dashboard	High	Sprint-1
		USN-2	As a user, I will receive a confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-2
		USN-3	As a user, I can register for the application through Google	I can register & access the dashboard with Google	High	Sprint-1
		USN-4	As a user, I can register for the application through Gmail	I can register through the mail.	Medium	Sprint-2
	Login	USN-5	As a user, I can log into the application by entering email, password & captcha	I can receive login credentials.	High	Sprint-1
	Interface	USN-6	As a user, the interface should be user-friendly manner	I can able to access easily.	Medium	Sprint-1
Customer (Web user)	Dashboard	USN-7	As a user, I can access the specific info (pH value, temp, conductivity, turbidity).	I can able to know the quality of the water.	High	Sprint-1
Customer Care Executive	View manner	USN-8	As a user, I can view data in visual representation manner(graph)	I can easily understand by visuals.	High	Sprint-1
	Taste	USN-9	As a user, I can able to view the quality(salty) of the water	I can easily know whether it is salty or not	High	Sprint-1
	Colour visibility	USN-10	As a user, I can able to predict the water colour.	I can easily know the condition by colour	High	Sprint-1
Administrator	Risk tolerant	USN-11	An administrator who is handling the system should update and take care of the application.	Admin should monitor the records properly.	Medium	Sprint-2