Project Design Phase-II

Data Flow Diagram & User Stories

Date	15 October 2022
Team ID	PNT2022TMID00516
Project Name	Real-Time River Water Quality monitoring and Control System
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.

```
                    Start
                      |
                      v
        Establish connection between
           controller and network
                      |
                      v
         Read sensor value  ---->  Display on LCD
              ^       |
              |       v
              |  Upload data on the cloud
              |       |
              |       v
              |    Sensor         Yes    Send SMS to
              +--  value >       ---->     mobile
                   Threshold
                      |
                      v
                    Stop
```
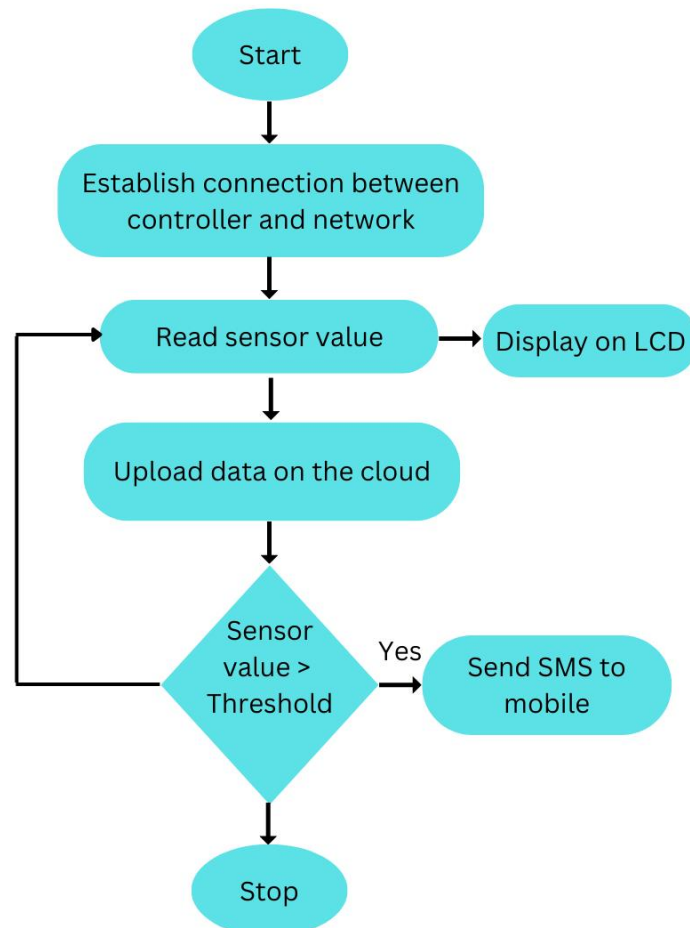
User Stories:

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 my email, password, and confirming my password.	I can access my account / dashboard.	High	Sprint-1
		USN-2	As a user, I will receive 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 Facebook.	I can register & access the dashboard with Facebook Login.	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.	I can receive login credentials.	High	Sprint-1
	Interface	USN-6	As a user, the interface should be user-friendly.	I can access it easily.	Medium	Sprint-1
Customer (Web user)	Dashboard	WUSN-1	As a web user, I can access the specific info (ph value, temp, humidity, quality).	I can able to know the quality of the water.	High	Sprint-1
Customer Care Executive	View manner	CCE-1	As a customer care, I can view data in visual representation manner(graph).	I can easily understand by visuals.	High	Sprint-1

	Taste	CCE-2	As a customer care, I can able to view the quality(salty) of the water.	I can easily know whether it is salty or not.	High	Sprint-1
	Color visibility	CCE-3	As a customer care, I can ably predict the water color.	I can easily know the condition by color.	High	Sprint-1
Administrator	Risk tolerant	ADMIN-1	An administrator who Is handling the system should update and take care of the application.	Admin should monitor the records properly.	High	Sprint-2