**Project Design Phase-II**

**Data Flow Diagram & User Stories**

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| Date | 22 October 2022 |
| Team ID | PNT2022TMID22872 |
| Project Name | Real-time River water quality monitoring and control system |
| Maximum Marks | 4 Marks |

**Data Flow Diagram:**

Runs the circuit between controller and sensors in the network

Sample from PH and turbidity

start

Sensors

Controller receives the data

Samples are compared with threshold value

Final report is fetched

Analysis is performed

NO

YES

End

Report is sent to authorities through Wi-Fi to their mobile phones or smart devices

**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 |
| Customer  (Mobile user) | Registration | 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-1 |
| Customer  (Mobile user) | Registration | USN-3 | As a user, I can register for the application through Face book | I can register & access the dashboard with Face book Login | Low | Sprint-2 |
| Customer  (Mobile user) | Registration | USN-4 | As a user, I can register for the application through Gmail | I can register through the mail | Medium | Sprint-1 |
| Customer  (Mobile user) | Login | USN-5 | As a user, I can log into the application by entering email & password | I can receive login credentials | High | Sprint-1 |
| Customer  (Mobile user) | User Interface | USN-6 | As a user, I should not need any pre requisites to handle the UI | I can use it in a friendly manner. | Medium | Sprint-1 |
| Customer (Web user) | Dashboard | WUSN-1 | As a web user, able to access the inputs from the sensors | I can know quality of water. | High | Sprint-1 |
| Executive Customer Care | View Manner | CCE-1 | As a customer care, Data visualization must be in good understandable view. | I can understand the various data comparisons by visuals. | High | Sprint-1 |
| Executive Customer Care | Taste | CCE-2 | As a customer care, I can able to view the composition of water (e.g. Minerals, etc.) | I can know the composition and determine whether it is healthy to drink or not. | High | Sprint-1 |
| Executive Customer Care | Color Visibility | CCE-3 | As a customer care, I should know the water color | I can Know its color. | High | Sprint-1 |
| Administrator | Risk Tolerant | ADMIN-1 | Administrator should handle the system, server and take care of the application. | Admin should monitor and store the records with caution. | High | Sprint-2 |