**Project Design Phase-II**

**Data Flow Diagram & User Stories**

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| Date | 2 NOVEMBER 2022 |
| Team ID | PNT2022TMID31045 |
| Project Name | Real Time Water Quality monitoring And Control Systems |
| Maximum Marks | 4 Marks |

**Data Flow Diagrams:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Turbidity**  **sensor to**  **sense clarity**    **Ph sensor**  **sense the Ph**  **level**    **TDS sensor**  **sense the**  **dissolved**  **solid** | |  | | --- | | **Mapping the data** | | |  | | --- | | **Monitoring and**  **Controlling** | | |  | | --- | | **IOT Cloud** | | |  | | --- | | **Message**  **Through**  **SMS Or Mail** | |

**Authority**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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, 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-1 |
|  |  | 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 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 manner | I can be able to access the webpage easily | Medium | Sprint-2 |
| Customer (Web  user) | Dashboard | USN-7 | As a user,I can access the information of water like Ph level,Turbidity level,Total dissolved solid,Temperature | I can able to know the quality of water and monitor | High | Sprint-1 |
| Programmer | Creating program for water quality monitoring | USN-8 | As a user,I can create program in a user understandable manner | I can create a simple program | Medium | Sprint-2 |
| Customer(Data  Input) | View manner | USN-9 | As a user,I can view data in a Visual representation manner like graphs,tables | I can easily understand by visual manner | High | Sprint-1 |
|  | Taste | USR-10 | As a user,i can able to view the quality of water like salty or nor | I can easily know whether it is salty or not | High | Sprint-1 |
|  | Color visibility | USR-11 | As a user,I can predict the water color | I can easily know the condition by color | High | Sprint-1 |
|  | Algae control | USR-12 | As a user, I can Monitor the presence of algae in water | I can easily know whether the water contains algae or not and take some preventive measures using ultrasound | High | Sprint-1 |
| Authority | Checks the water  alert | USR-13 | As a user,I check the quality values of the water that is sent to me | I can make sure that the people in my zone gets quality water and take neccessary actions if required | High | Sprint-1 |