PROJECT DESIGN PHASE-II

DATA FLOW DIAGRAM &USER STORIES

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| TEAM ID | PNT2022TMID17622 |
| PROJECT NAME | Real-Time River water Quality Monitoring and Control System |
| MAXIMUM MARKS | 4 MARKS |

DATA FLOW DIAGRAM:

A Data Flow Diagram (DFD) is a classic visual depiction of a system's information flows. A tidy and clear DFD may graphically display the appropriate quantity of system need. It demonstrates how data enters and exits the system, what alters the data, and where it is kept.

START

The outcome will be shown on a smartphone

Wi-Fi module sends data to the smartphone.

Is the value obtained

Gathered information is uploaded to the controller.

pH and turbidity sensors detect and calculate the value.

The controller and the network are integrated together

The sample is detected by a turbidity sensor and a pH sensor.

YES NO

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 may register for the application by providing my email address, password, and password confirmation. | I can access my account/dashboard | High | Sprint-1 |
|  |  | USN-2 | As a user, once I have registered for the application, I will receive a confirmation email. | I can receive e confirmation email & click confirm | High | Sprint-1 |
|  |  | USN-3 | As a user, I may sign up for the app using Google. | I can register & access the dashboard with Google | Low | Sprint-2 |
|  |  | USN-4 | As a user, I may sign up for the application using Gmail. | I can register through the mail. | Medium | Sprint-1 |
|  | Login | USN-5 | As a user, I can log into the application by entering email & password. | I can get login information. | High | Sprint-1 |
|  | User 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 | WUSN-1 | As a web user, you have access to the sensor inputs. | I can know quality of water | High | Sprint-1 |
| Customer Care Executive | View Manner | CCE-1 | As a customer service, data visualization must be easy to grasp. | I can understand the  various data comparisons  by visuals | High | Sprint-1 |
|  | Taste | CCE-2 | As a customer service representative, I can see the water's quality (saltiness). | I can easily know whether it is salty or not | High | Sprint-1 |
|  | Colour Visibility | CCE-3 | As a customer care , I can able predict the water color | I can easily know the condition of the water by color | High | Sprint-1 |
| Administrator | Risk Tolerant | ADMIN-1 | The administrator should manage the system, the server, and the application | Admin should monitor and store the records with caution | High | Sprint-2 |