Project Design Phase-II Solution Requirements (Functional & Non-functional)

| Date | 14 October 2022 |
|---------------|---|
| Team ID | PNT2022TMID11003 |
| Project Name | Project - lot Based Real Time River Water Quality |
| | Monitoring and Control System |
| Maximum Marks | 4 Marks |

Functional Requirements:

Following are the functional requirements of the proposed solution.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|--------|-----------------------------------|---|
| FR-1 | User Requirements | River Water Protection pH,Turbitidy ,Humidity and Temperature |
| FR-2 | User Registration | Manual Registration Registration through webpage Registration through Form Registration through Gmail |
| FR-3 | User Confirmation | Confirmation Via Email Confirmation Via OTP Confirmation Via Phone |
| FR-4 | Payment Options | Cash on Delivery Net Banking/UPI Credit/Debit/ATM Card |
| FR-5 | Product Delivery and Installation | Door Step delivery Free Installation |
| FR-6 | Product Feedback | Through GoogleForms Through Phone calls Through Webpage |

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

| FR No. | Non-Functional Requirement | Description |
|--------|-------------------------------|---|
| NFR-1 | Usability | Have a clear and self-explanatory manual. Easier to use Even an illiterate farmer have to use the product without any difficulties |
| NFR-2 | Security | Application has to be secured with 2 step authorisation Passwords and passkeys will be assigned as per the users need. |
| NFR-3 | Reliability | Hardware requires a regular checking and service Software may be updated periodically Immediate alert is provided in case of any system failure |
| NFR-4 | Performance | The application must have a good user interface It should have a minimal energy requirement It has to save water and energy |
| NFR-5 | Availability | All the features will be available when the user requires. It depends on the need of the farmer and the customization the user has done. |
| NFR-6 | Scalability | The product has to cover all the space of land irrespective of the size or area of a farm field. |