Project Design Phase-II

Solution Requirements (Functional & Non-functional)

|  |  |
| --- | --- |
| Date | 24 March 2025 |
| Team ID | PNT2025TMID06665 |
| Project Name | **Prediction plant growth stages with environment and management data using Power BI** |
| 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 Registration | Registration through Form  Registration through Gmail Registration through LinkedIN |
| FR-2 | User Confirmation | Confirmation via Email  Confirmation via OTP |
| FR-3 | Data Integration | Connect Power BI to sensor ,Databases or manual entry source |
| FR-4 | Data Processing | Clean and Process Enviroment AI management data |
| FR-5 | Growth Stage Pridiction | Apply Machine learning or role-based algorithms to predict Plant growth |
| FR-6 | Visualization | Develop Power BI dashboard to display growth stage ytend and forcast |

# Non-functional Requirements:

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

|  |  |  |
| --- | --- | --- |
| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | Simple and intuitive UI/UX for non technices user |
| NFR-2 | **Security** | Implement authentication ,role-based access and data encryption |
| NFR-3 | **Reliability** | Ensure consistent data accuracy and uptime |

|  |  |  |
| --- | --- | --- |
| NFR-4 | **Performance** | Dashboard should load with in 5 sec for large data set |
| NFR-5 | **Availability** | System should beavailable99.9% of the time |
| NFR-6 | **Scalability** | Support increasedata volume and additional user without performance drops. |