

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

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| Date | 28 January 2025 |
| Team ID | PNT2025TMID06954 |
| 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 Environment AI management data |
| FR-5 | Growth Stage Prediction | Apply Machine learning or rule-based algorithms to predict Plant growth |
| FR-6 | Visualization | Develop Power BI dashboard to display growth stage trend and forecast |

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 technical user |
| NFR-2 | Security | Implement authentication ,role-based access and data encryption |
| NFR-3 | Reliability | Ensure consistent data accuracy and uptime |

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|-------|---------------------|--|
| NFR-4 | Performance | Dashboard should load with in 5 sec for large data set |
| NFR-5 | Availability | System should be available 99.9% of the time |
| NFR-6 | Scalability | Support increased data volume and additional user without performance drops. |