

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

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| Date | 13 march 2025 |
| Team ID | PNT2025TMID03012 |
| Project Name | Predicting Plant Growth Stages with Environmental 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 | Data collection | 1. Collect environmental data (temperature ,soil moisture,humidity) 2. Collect managerial data (fertilizer) |
| FR-2 | Data processing | Store raw data in .excel Clean and transform data |
| FR-3 | Power bi dashboard | Display predicted growth stages visually |
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Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|---|
| NFR-1 | Usability | The power dashboard should have an intuitive ui enabling farmers and agronomists to easily understand with data |
| NFR-2 | Security | Security in Power bi to protect sensitive agricultural data |
| NFR-3 | Reliability | Ensure data processing |
| NFR-4 | Performance | Optimize power bi queries and dashboards to ensure real time data visualization |
| NFR-5 | Availability | Power bi services for continue monitoring |
| NFR-6 | Scalability | System should handle increasing data |