

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

Date	28 January 2025
Team ID	PNT2025TMID07064
Project Name	Prediction plant growth stages with environment and management data using power BI
Maximum Marks	4 Marks

**Functional Requirements:**

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Simple and intuitive UI/UX for non techniques user
NFR-2	<b>Security</b>	Implement authentication ,role-based access and data encryption

NFR-3	<b>Reliability</b>	Ensure consistent data accuracy and uptime
-------	--------------------	--

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.

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