Project Design Phase
Proposed Solution Template

Date	15 February 2025
Team ID	PNT2025TMID07064
Project Name	Prediction plant growth stages with environment and management data using power BI
Maximum Marks	2 Marks

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Farmers often struggle with optimizing plant growth due to varying environmental conditions and improper management practices. A data-driven approach is needed to predict plant growth stages effectively.
2.	Idea / Solution description	This project utilizes Power BI to analyze environmental data (temperature, humidity, soil moisture) and management factors (fertilization, irrigation) to predict plant growth stages. The system will provide insights through interactive dashboards.
3.	Novelty / Uniqueness	Integrates real-time data from IoT sensors and historical datasets. - Uses machine learning-based predictive analytics within Power BI. - Provides dynamic visualizations for easy decision-making.
4.	Social Impact / Customer Satisfaction	Helps farmers optimize resources like water and fertilizers, reducing costs. - Increases agricultural productivity and sustainability. - Provides an easy-to-use tool for data-driven farmin

5.	Business Model (Revenue Model)	Subscription-based access to advanced analytics dashboards. - One-time licensing fee for enterprise users. - Custom consulting for large-scale agricultural projects.

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

6.	Scalability of the Solution	Can be expanded to different crops and climatic conditions. - Integrates with cloud services for large-scale deployment. - Can be enhanced with AI-driven recommendations for farm management.