## Initial Project Planning Report – Predicting Plant Growth Stages with Environmental and Management Data

## > Overview

• This document outlines the project planning timeline, task division, and phase-wise delivery structure for the "Plant Growth Prediction" Power BI dashboard project. Proper planning ensures efficient data collection, visualization, reporting, and documentation aligned with deliverable timelines and stakeholder expectations.

## ➤ Objectives of Planning

- Define all tasks clearly with start/end durations.
- Set up a feasible schedule for data gathering and visualization.
- Ensure documentation and dashboard development proceed in parallel.
- Allocate buffer time for testing and quality checks.

## ➤ Project Phases and Tasks

Phases	Task Description
Data Collection	Identify dataset source (e.g., Kaggle), download environmental and management data
Data Preprocessing	Clean data, remove nulls, categorize variables like temperature, sunlight, etc.
Feature Grouping	Classify growth stages, and group categorical values (e.g., soil type, water freq.)
Data Visualization	Create visuals: matrix, bar, pie, line, and KPI charts
Dashboard Development	Add slicers and filters for soil, fertilizer, sunlight, temperature, etc.
Report Writing	Prepare final report with insights and conclusions
Documentation	Draft problem statement, proposal, and planning documentation

GitHub Upload	Upload structured repository with PBIX, CSV, and PDF
	reports