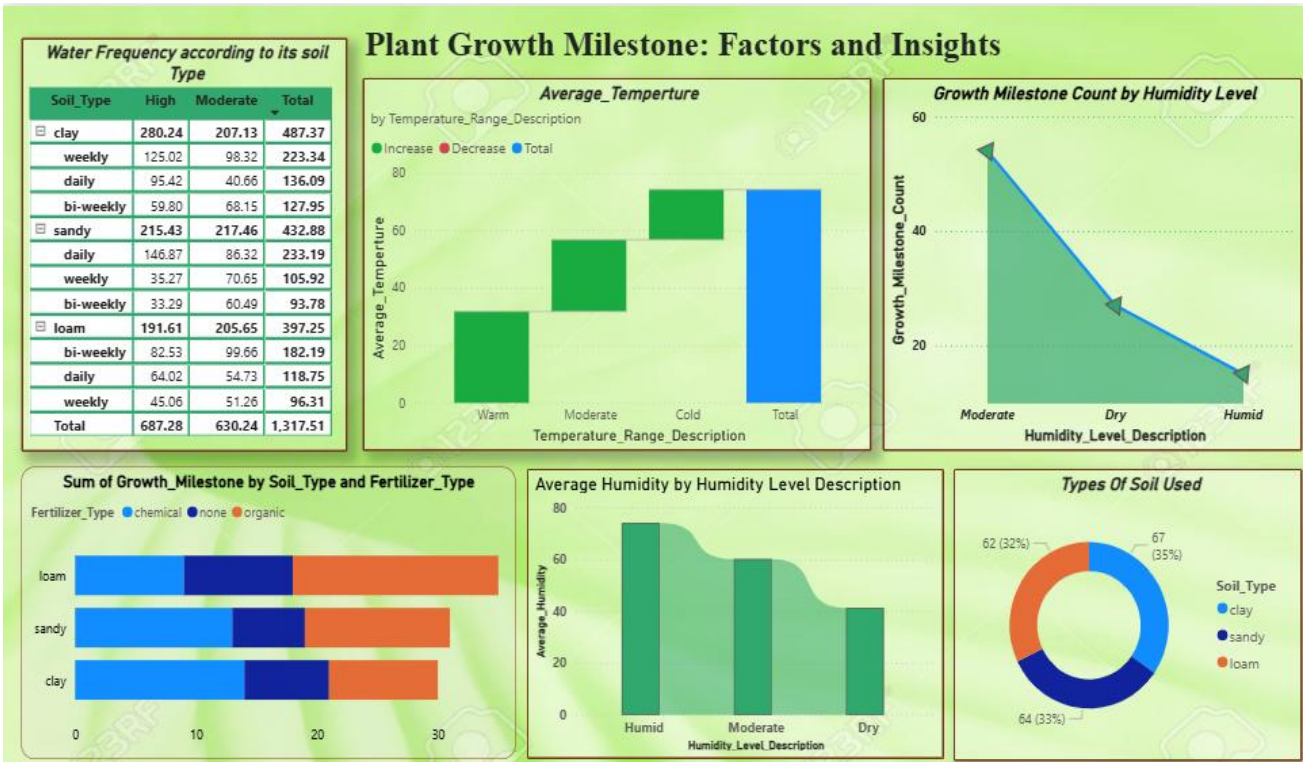
Report

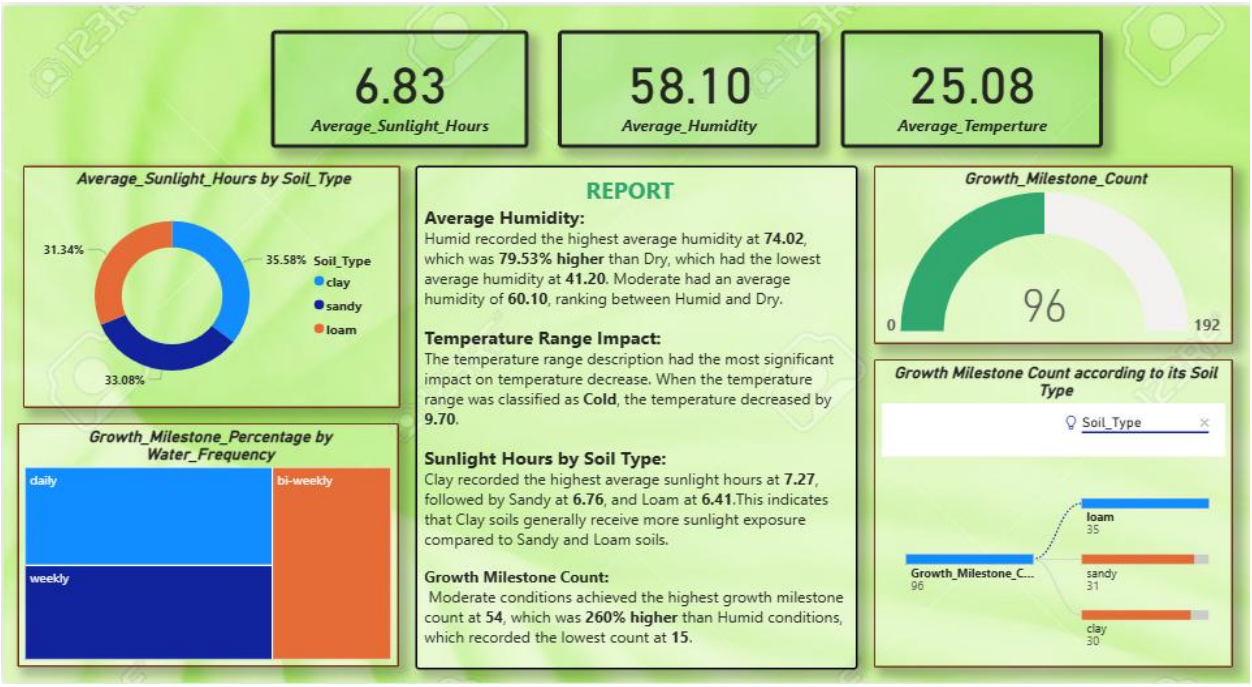
Date	27 July 2025
Team ID	
Project Name	Predicting plant growth stages with environmental and management data using power bi
Maximum Marks	5 Marks

Report is a comprehensive document that provides a detailed and structured account of data analysis, findings, and insights. It is typically used for in-depth analysis, documentation, and communication of results. Reports are suitable for a diverse audience, including decision-makers, analysts, and stakeholders who need a comprehensive understanding of the data.

About the Report:

This Power BI report provides a structured and detailed visual analysis of key environmental and growth factors influencing plant development. It combines KPIs, charts, and summaries to help stakeholders understand trends and patterns in temperature, humidity, sunlight, soil type, water frequency, and growth milestones. The report is designed to offer clarity,interactivity, and actionable insights for users involved in agricultural or botanical decision making.





Observations and Insights from the Report

1. **Environmental Summary (KPIs):**
   - Average Sunlight Hours: **6.83 hrs**
   - Average Humidity: **58.10%**
   - Average Temperature: **25.08°C**
     These values indicate a temperate climate, generally favorable for moderate plant growth.
2. **Impact of Humidity on Growth:**
   - Humid conditions resulted in the highest growth milestones (**54**), followed by dry (**27**) and moderate (**15**) conditions.
   - Highlights the importance of maintaining optimal humidity for better plant development.
3. **Growth Milestone Overview:**
   - A total of **96 milestones** were recorded, primarily influenced by favorable humidity and temperature ranges.
4. **Sunlight Hours by Soil Type:**
   - Clay soil received the most sunlight (**7.27 hrs**), while loam recorded the least (**6.41 hrs**).
   - Suggests soil type influences sunlight exposure, which can affect plant growth.
5. **Water Frequency and Growth:**
   - Daily watering achieved the highest growth milestone percentage (**0.51**), compared to weekly (**0.49**) and bi-weekly (**0.48**) schedules.

- Indicates consistent watering supports better growth outcomes.

6. **Descriptive Insights:**
   - Cold temperatures reduce plant growth by **9.7°C**, impacting productivity.
   - Humid regions recorded the highest humidity (**74.02%**).
   - Clay and sandy soils received more sunlight exposure compared to loam.

Conclusion:

The report provides data-driven insights into how temperature, humidity, soil type, and watering frequency influence plant growth. These findings can guide stakeholders in adopting optimal agricultural practices for improved yields.