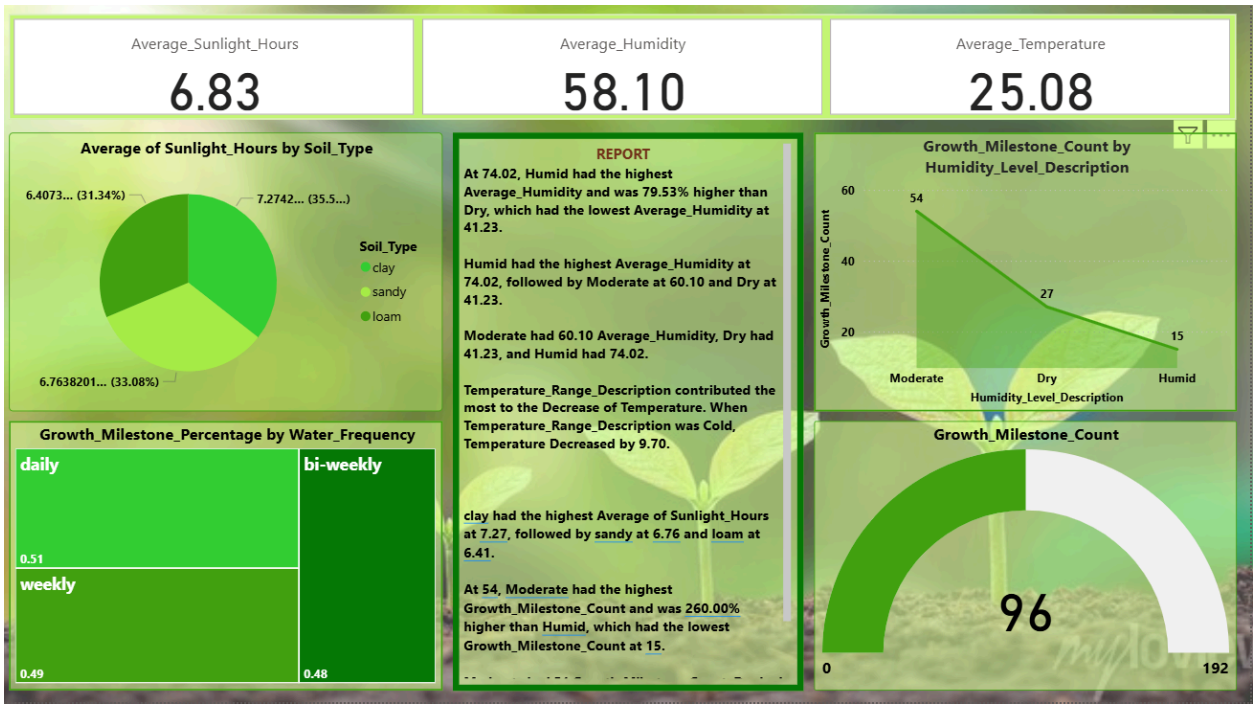
Project Report – Plant Growth Analysis



1. Average Sunlight Hours by Soil Type

- **Clay** → 7.27 hrs ↑
- **Sandy** → 6.76 hrs
- **Loam** → 6.41 hrs ↓
  Insight: Clay soil had the highest sunlight exposure. Loam received the least.

2. Growth Milestone Percentage by Water Frequency

- **Daily** → 0.51 (↑ highest)
- **Weekly** → 0.49
- **Bi-weekly** → 0.48 ↓
  Observation: Daily watering is most effective for plant growth.

3. Average Humidity by Humidity Level

- **Humid** → 74.02% (↑ highest)
- **Moderate** → 60.10%
- **Dry** → 41.23% (↓ lowest)
  Insight: Humid areas had 79.53% higher humidity than Dry zones. However, high humidity doesn't directly lead to higher growth.

4. Growth Milestone Count by Humidity Level Description

- **Moderate** → 54 (↑ highest)
- **Dry** → 27
- **Humid** → 15 (↓ lowest)
  Insight: Moderate humidity supported the highest growth. Humid regions showed the poorest performance in growth milestones.

5. Temperature Range Impact

- **Average Temperature**: 25.08°C
- **Cold** temperature reduced values by 9.70°C ↓
  Insight: Cold temperature conditions had a strong negative impact on plant growth.

6. Overall Growth Milestone Count

- **Total Count** → 96

- Moderate zones had 260.00% higher growth than Humid zones.
  Conclusion: Optimal growth occurs under:
    - Moderate humidity
    - Daily watering
    - Clay soil
    - Warm sunlight exposure