## **Dashboard Design**

Date	26 july 2025
Team ID	Samant saini
Project Name	Predicting plant growth stages
Maximum Marks	5 Marks

Creating an effective dashboard involves thoughtful design to ensure that the presented information is clear, relevant, and easily understandable for the intended audience. Here are some key principles and best practices for dashboard design

## Activity 1: Interactive and visually appealing dashboards

Creating interactive and visually appealing dashboards involves a combination of thoughtful design, effective use of visual elements, and the incorporation of interactive features. Here are some tips to help you design dashboards that are both visually appealing and engaging for users so take care of below points

- Clear and Intuitive Layout
- Use Appropriate Visualizations
- Colour and Theming
- Interactive Filters and Slicers
- Drill-Down Capabilities
- Responsive Design
- Custom Visuals and Icons
- Use of Infographics



Note: Highlight the major outcomes in form of bullet points

## Here are eight potential outcomes from the dashboard image provided:

- Average Humidity Level: The dashboard indicates an average humidity of **58.10**, which reflects the general environmental condition affecting plant growth stages.
- Soil and Fertilizer Variety: There are 3 types of soil and 3 types of fertilizer used, suggesting a moderate range of experimental conditions for plant development.
- Average Growth Milestone: The overall average growth milestone is 0.50, providing a baseline metric for comparing the effectiveness of various treatments.
- **Growth by Soil Type**: The **sandy soil** shows the highest growth milestone (**35**), outperforming loam (**31**) and clay (**31**) soils, indicating its greater suitability for plant growth in this dataset.
- **Fertilizer Type Distribution: Organic fertilizer** is the most utilized and effective, followed by **chemical**, with **no fertilizer** showing the least contribution to growth milestones.
- Humidity Influence on Growth: A fluctuating line trend shows that growth milestones tend
  to increase with rising humidity levels, peaking at certain humidity intervals, confirming a
  positive correlation.
- Impact of Water Frequency and Fertilizer: The bar chart reveals that daily watering
  combined with organic fertilizer results in the highest growth milestones (up to 15),
  emphasizing this combination's effectiveness.
- Water Frequency and Soil Interaction: The stacked bar chart shows that sandy soil with daily watering contributes the most (up to 47.37%) to plant growth, followed by loam and clay, guiding optimal resource allocation.