**Project Development Phase**

**Model Performance Test**

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| Date | 10 February 2025 |
| Team ID | PNT2022TMIDxxxxxx |
| Project Name | Project - xxx |
| Maximum Marks |  |

**Model Performance Testing:**

Project team shall fill the following information in model performance testing template.

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| **S.No.** | **Parameter** | **Screenshot / Values** |
|  | Data Rendered | Plant growth data including soil type,fertilizer type ,water frequency,temperature ,humidity and growth milestone |
|  | Data Preprocessing | Cleaned missing values ,standardized data formats and remove duplicates |
| 3. | Utilization of Data Filters | Filters applied for temperature range,fertilizer type ,soil type and water frequency |
| 4. | DAX Queries Used | 1.Average\_Humidity = AVERAGE(plant\_growth\_data[Humidity])  2.Average\_Sunlight\_Hours = AVERAGE(plant\_growth\_data[Sunlight\_Hours])  3.AVERAGE(plant\_growth\_data[Sunlight\_Hours])  4,Average\_Temperatue = AVERAGE(plant\_growth\_data[Temperature])  5.Growth\_Milestone\_Count =  COUNTROWS(      FILTER(          plant\_growth\_data,          plant\_growth\_data[Growth Milestone]=1      )  )  6.Growth\_Milestone\_Percentage =  DIVIDE(      [Growth\_Milestone\_Count],      COUNTROWS(plant\_growth\_data),      0  )  7.Water Frequency Numeric =  SWITCH(      [Water\_Frequency],      "daily",1,      "bi-weekly",2,      "weekly",3,      BLANK()  )  8.Temprature Range =  SWITCH(      TRUE(),      [Temperature]<15,"Low",      [Temperature]>=15 && [Temperature]<25,"Moderate",      [Temperature]>=25,"High"  )  9.Humidity range =  SWITCH(      TRUE(),      [Humidity]<40,"Low",      [Humidity]>=40 && [Humidity]<60,"Moderate",      [Humidity]>=60 , "High"  )  10.Humidity Level Description =  SWITCH(      TRUE(),      [Humidity]<30,"Very Dry",      [Humidity]>=30 && [Humidity]<50,"Dry",      [Humidity]>=50 && [Humidity]<70,"Moderate",      [Humidity]>=70 && [Humidity]<90,"Humid",      [Humidity]>=90,"Very Humid"  )  11.Temperature Range Description =  SWITCH(      TRUE(),      [Temperature]<10,"Very Cold",      [Temperature]>=10 && [Temperature]<20,"Cold",      [Temperature]>=20 && [Temperature]<30,"Moderate",      [Temperature]>=30 && [Temperature]<40,"Warm",      [Temperature]>=40,"Hot"  )  12.Growth Milestone Description =  SWITCH(      [Growth Milestone],      0,"Early Stage",      1,"Mature Stage",      "Unknown Stage"  )  13.Plant Growth Category =  SWITCH(      [Growth Milestone],      0,"Initial Growth",      1,"Advanced Growth",      "Uncategorized"  ) |
| 5. | Dashboard design | **No. of Visualizations / Graphs –**   * **KPI Card** – Average Humidity * **KPI Card** – Average Temperature * **Clustered Bar Chart** – Growth by Soil Type and Fertilizer Type * **Line Chart** – Growth by Humidity Range and Water Frequency * **Clustered Bar Chart** – Growth by Temperature Range * **Donut Chart** – Growth by Water Frequency * **Scatter Plot** – Sunlight Hours vs Growth Milestone * **Clustered Column Chart** – Average Temperature by Temperature Range * **Slicer** – Temperature Range * **Slicer** – Fertilizer Type * **Slicer** – Soil Type * **Slicer** – Water Frequency   Plant Growth Prediction Dashboard Sceenshot |
| 6 | Report Design | **No. of Visualizations / Graphs –**   * **Card** – Average Humidity (58.10) * **Card** – Average Sunlight Hours (6.83) * **Card** – Average Temperature (25.08) * **Line Chart** – Growth by Humidity Level and Water Frequency * **Stacked Bar Chart** – Growth Milestone by Fertilizer Type and Soil Type * **Pie Chart** – Humidity by Water Frequency * **Gauge Chart** – Growth Milestone Count (96 out of 192) * **Text Box** – Plant Growth Report summarizing insights from the data   Report Screenshot |