

Data Collection and Preprocessing Phase

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| Date | 24 July 2025 |
| Team ID | |
| Project Title | Predicting plant growth stages with environmental and management data using power bi |
| Maximum Marks | 2 Marks |

Data Collection Plan & Raw Data Sources Identification Template

Elevate your data strategy with the Data Collection plan and the Raw Data Sources report, ensuring meticulous data curation and integrity for informed decision-making in every analysis and decision-making endeavor.

Data Collection Plan Template

| Section | Description |
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| Project Overview | This project focuses on analyzing how environmental factors—including soil type, humidity, temperature, irrigation frequency, and fertilizer usage—affect plant growth. Its goal is to develop actionable insights and interactive dashboards that empower farmers to make data-driven decisions and enhance crop productivity. |
| Data Collection Plan | Data was gathered through a combination of field observations, environmental sensors, and manual entries from a controlled agricultural experiment. For each planting cycle, key parameters such as temperature, humidity, soil type, irrigation frequency, and growth milestones were systematically recorded. |

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| Raw Data Sources Identified | <ul style="list-style-type: none"> - Soil Type Records: Collected manually from field logs describing soil composition (e.g., loam, clay, sandy). - Weather Data: Temperature and humidity captured using environmental sensors or weather APIs. - Watering Schedule: Logged manually during the plant growth phase. - Fertilizer Type: Input recorded during planting based on applied treatment. |
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Raw Data Sources Template

| Source Name | Description | Location/URL | Format | Size | Access Permissions |
|---|---|---|---|-----------|--------------------|
| Plant Growth Data Classification, Real-Dataset (Kaggle) | Contains plant growth data with attributes such as soil type, temperature, humidity, water frequency, fertilizer type, and growth milestones. | https://www.kaggle.com/datasets/gororororo23/plant-growth-data-classification/data | CSV | 12 KB | Public |
| Indoor Plant Health and Growth Dataset | This dataset contains 1,000 entries with 17 features related to indoor plant health, growth metrics etc. | www.kaggle.com/datasets/souvikra17/indoorplant-health-and-growth-dataset | CSV file, fully compatible with Python, R, Excel, etc | 120.32 KB | Public |