

## Data Collection and Preprocessing Phase


Date	1 July 2024
Team ID	SWTID1720176710
Project Title	Visual Diagnostics: Detecting Tomato Plant Diseases Through Leaf Image Analysis
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
Project Overview	Develop a deep learning model for detecting tomato plant diseases from leaf images. By analyzing leaf characteristics and symptoms, this project aims to accurately classify various diseases, enabling early detection, targeted treatment, and crop management practices for tomato farmers, ensuring crop health and yield.
Data Collection Plan	<p>Downloaded the Dataset from Kaggle through the link mentioned in the skill wallet platform under the section dataset.</p> <p>You can download the dataset used in this project using the below link-</p> <p>Dataset: <a href="https://www.kaggle.com/datasets/kaustubhb999/tomatoleaf">https://www.kaggle.com/datasets/kaustubhb999/tomatoleaf</a></p>

<p>Raw Data Sources Identified</p>	<p>Collect images of Tomato Leaves. Images are then organized into subdirectories based on their respective names as shown in the project structure.</p> <p>In this project, we have collected images of 10 types of Tomato Leaf images like Heatly, Spider Mites, Yellow leaf curl, etc. and they are saved in the respective sub directories with their respective names.</p> <p>You can download the dataset used in this project using the below link-</p> <p>Dataset: <a href="https://www.kaggle.com/datasets/kaustubhb999/tomatoleaf">https://www.kaggle.com/datasets/kaustubhb999/tomatoleaf</a></p> <div data-bbox="548 909 1417 1197">  <p>Tomato leaf disease detection   Kaggle..</p> <p>Tomato leaf disease detection using CNN..</p> <p><a href="https://www.kaggle.com/datasets/kaustubhb999/tomatoleaf">https://www.kaggle.com/datasets/kaustubhb999/tomatoleaf</a></p> </div>
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## Raw Data Sources Template

Source Name	Description	Location/URL	Format	Size	Access Permissions
Kagle Dataset	<p>The data has different types of diseases for tomato leaves.</p> <p><b>Here goes the list:</b></p> <ul style="list-style-type: none"> <li>• Tomato_mosaic_virus</li> <li>• Target_Spot</li> <li>• Bacterial_spot</li> <li>• Tomato_Yellow_Leaf_Curl_Virus</li> <li>• Late_blight</li> <li>• Leaf_Mold</li> <li>• Early_blight</li> <li>• Spider_mites Two-spotted_spider_mite</li> <li>• Tomato___healthy</li> <li>• Septoria_leaf_spot</li> </ul>	<a href="https://www.kaggle.com/datasets/kaustubhb99/tomatoleaf">https://www.kaggle.com/datasets/kaustubhb99/tomatoleaf</a>	Images	188 MB	Public