**Data Collection and Preprocessing Phase**

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| Date | 12 July 2024 |
| Team ID | SWTID1719935963 |
| Project Title | Automated Weather Classification using Transfer Learning |
| 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**

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| **Section** | **Description** |
| Project Overview | This project uses deep learning to classify weather images (sunny, cloudy, rainy, foggy, sunrise). Pre-trained models improve accuracy and efficiency. This benefits farmers (water usage), environmental agencies (fog advisories), and disaster management (early warnings). Overall, it improves weather understanding and decision-making. |
| Data Collection Plan | Search for datasets related to weather images and choose the suitable dataset |
| Raw Data Sources Identified | The raw data sources for this project include datasets obtained from Kaggle. the popular platform for data science competitions and repositories |

**Raw Data Sources Template**

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| --- | --- | --- | --- | --- | --- |
| **Source Name** | **Description** | **Location/URL** | **Format** | **Size** | **Access Permissions** |
| **Weather Classification** | The dataset features 5 different classes of weather collected from the above said different sources, however it's real life data so any system for weather classification must be able to handle this sort of images. The dataset contains about 1500 labelled images including the validation images. Images are not of fixed dimensions and the photos are of different sizes. Each image has only one weather category and are saved in separate folder as of the labelled class. | https://www.kaggle.com/datasets/vijaygiitk/multiclass-weather-dataset | ZIP | 141 MB | Public |