Data Collection and Preprocessing Phase

Date	15 March 2024
Team ID	team-739735
Project Title	Natural Disasters Intensity Analysis and Classification using AI
Maximum Marks	2 Marks

Data Collection Plan & Raw Data Sources Identification Template

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

Data Collection Plan Template

Section	Description
Project Overview	The AI-powered disaster detection system aims to classify various types of natural disasters (e.g., earthquakes, floods, wildfires, cyclones) and analyze their intensity using real-time video input. By leveraging a labeled dataset containing images of different disaster scenarios, the system is designed to recognize and categorize them effectively through deep learning models.
Data Collection Plan	The project requires a large and diverse dataset of natural disaster images to train the convolutional neural network. The data collection involves sourcing publicly available datasets from trusted platforms such asGoogle Open Images, and disaster-specific repositories. The dataset must include various disaster types and represent multiple intensity levels. Preprocessing steps include

	image resizing, augmentation (rotation, flipping, brightness adjustment), normalization, and label encoding to prepare the data for model training and validation.
Raw Data Sources Identified	The identified raw data sources include datasets available on platforms such as Google.

Raw Data Sources Template

Source Name	Description	Location/URL	Format	Size	Access Permissions
Google	Dataset containing facial expressions for detecting emotions and non-verbal cues critical for real-time communication.	https://drive.google.com/drive/folders/1lnf-UGhsh7yEhLLInSRvKWbsYqW8I89Z?usp=sharing	JPG	1 GB	Public