Data Collection and Preprocessing Phase

Date	03 July 2024
Team ID	SWTID1720085445
Project Name	Hydration Essentials: Classifying Water Bottle Images
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	The project "Hydration Essentials: Classification of Water Bottle Levels" aims to develop a deep learning model that can classify the level of water in a bottle using images. This application could be useful in various scenarios, such as monitoring hydration levels in healthcare settings, smart home devices, or fitness applications.
Data Collection Plan	• **Image Acquisition:** Gather a diverse set of images of water bottles with varying water levels. • **Labeling:** Manually label the images with corresponding water levels (e.g., empty, low, half, full).

	• **Data Augmentation:** Apply techniques such as rotation, scaling, and flipping to increase the diversity and robustness of the dataset. • **Normalization:** Scale pixel values to a standard range,
Raw Data Sources Identified	https://www.kaggle.com/datasets/chethuhn/water-bottle-dataset

Raw Data Sources Template

Source Name	Description	Location/URL	Format	Size	Access Permissions
Water-bottle-dataset	This dataset contains three folders namely over-flown, full water , half water. Totally it consists of 486 images.	https://www.kaggle.com/datasets/chethuhn/water-bottle-dataset	Image	67MB	Private (with access)