Data Collection and Preprocessing Phase

Date	15 March 2025
Team ID	739798
Project Title	Virtual Eye – Lifeguard for Active Swimming Drowning Detection
Maximum Marks	2 Marks

Data Quality Report Template

The Data Quality Report Template will summarize data quality issues from the selected source, including severity levels and resolution plans. It will aid in systematically identifying and rectifying data discrepancies.

Data Source	Data Quality Issue	Severity	Resolution Plan
FrameLabel1	Incorrect or missing labels for 'drowning' vs 'swimming' objects in annotation files (YOLO format).	High	Review and validate all annotations using tools like Roboflow. Ensure bounding boxes are tight and class labels are accurate.
FrameSet4	Dataset is imbalanced with far more 'swimming' cases than 'drowning'.	Medium	Augment minority class (drowning) via flipping, brightness variation, and synthetic data techniques. Consider oversampling

			techniques or weight adjustments during training.