



## **Data Collection and Preprocessing Phase**

| Date          | 20 October 2024   |
|---------------|---|
| Team ID       | 739734  |
|               | Ai-powered vehicle damage assessment and cost estimation for insurance claims |
| 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<br>Source   | Data Quality Issue                                | Severity | Resolution Plan   |
|------------------|---|----------|---|
| Comments Dataset | Imbalanced classes (toxic vs. non-toxic)          | high     | Use techniques like SMOTE (Synthetic Minority Oversampling Technique) or resampling to balance classes. |
| Comments Dataset | Presence of null or missing comments              | moderate | Remove rows with null entries or replace them using context-based data imputation.                      |
| Comments Dataset | Presence of offensive keywords in non-toxic class | high     | Manual relabeling or use a semi-<br>supervised learning approach to<br>refine the labels.               |





| Comments Dataset | High variance in comment length | low | Normalize lengths by truncating excessively long comments and padding short ones.      |
|------------------|---------------------------------|-----|--|
| Comments Dataset | Mismatch in encoding or format  | low | Convert all text data into UTF-8 encoding and standardize format during preprocessing. |