



Data Collection and Preprocessing Phase

| Date | 18 June 2025 | |
|-----------------------------------|--|--|
| Team ID | SWTID1750052396 | |
| Sentiment Analysis of App Reviews | Analysis of medium app review from Google Play Store | |
| 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 |
|-------------|--------------------------------|----------|-------------------------------|
| | | | |
| dataset.csv | Missing values in | Moderate | Filled with mode using |
| | reviewCreatedVersion | | df['reviewCreatedVersion'].fi |
| | | | Ilna(mode, inplace=True) |
| dataset.csv | Missing values in replyContent | Moderate | Filled with mode |
| dataset.csv | Missing values in repliedAt | Low | Filled with mode |
| dataset.csv | Missing values in appVersion | Low | Filled with mode |
| dataset.csv | Redundant columns like | Low | Dropped them using |
| | reviewId, at, repliedAt, | | df.drop(, axis=1) |
| | replyContent, appVersion, | | |
| | reviewCreatedVersion | | |
| content | Inconsistent casing and | Moderate | Lowercased all text and |
| | special characters | | removed special characters |
| | | | using regex |
| content | Presence of stopwords | Low | Removed using NLTK's |
| | | | stopword list |
| content | Unequal text lengths and | Moderate | Applied TfidfVectorizer with |
| | sparsity | | min_df=2, |
| | | | ngram_range=(1,3) |