Data Collection & preprocessing phase

Date	07 February 2026
Team ID	LTVIP2026TMIDS66183
Project Title	Civil Engineering Insight Studio
Maximum Marks	2 Marks

Data Quality Report

Quality is ensured for all content used in the **Civil Engineering Insight Studio** by maintaining accuracy, consistency, completeness, and reliability of the data. The collected project data is validated to remove errors, duplicates, and missing values before analysis. Standardized formats and units are used across all datasets to ensure consistency. Regular checks are performed to maintain data integrity, and only authorized users are allowed to enter or modify data, ensuring the overall quality and reliability of the project insights.

Data Source	Data Quality Issue	Severity	Resolution Plan
User Input (Project Details)	Missing or incorrect project information	High	Mandatory fields and input validation ensure complete and accurate project details.
User Input (Construction Progress)	Incomplete or inconsistent progress updates	High	Standardized data entry formats and validation checks are applied.
User Input (Cost & Budget Data)	Incorrect or unrealistic cost values	High	Numeric range validation and cross-checking with budget limits are enforced.
User Input (Resource Utilization)	Missing or inconsistent labor or material data	Moderate	Predefined templates and input constraints are used.
Inspection & Maintenance Records	Outdated or inaccurate inspection data	Moderate	Periodic data review and updates are scheduled.