Data Collection and Preprocessing Phase

Date	07 February 2026
Team ID	LTVIP2026TMIDS66291
Project Title	Civil Engineering Insight Studio
Maximum Marks	2 Marks

Data Quality Report

The data quality for the Civil Engineering Insight Studio project focuses on ensuring that uploaded construction site images and user inputs are accurate, clear, and suitable for AI-based analysis. Image quality plays a critical role in achieving reliable results; therefore, images must be clear, properly illuminated, and free from excessive blur, obstruction, or distortion.

Data Source	Data Quality Issue	Severity	Resolution Plan
User Input (Image)	Image Recognition	High	Train the AI model with diverse construction datasets covering different materials and environments.
User Input (Image)	Data and Accuracy	Moderate	Regularly update and retrain the AI model using real construction data.
User Input (Image)	Misinterpretation of descriptions	Low	Provide clear visualization (labels, highlighted areas) for easier interpretation.
User Input (Image)	Practical Problems	Low	Perform **regular image updates** during different construction stages.