Data Collection and Preprocessing Phase

Date	09 February 2026
Team ID	LTVIP2026TMIDS66291
Project Title	Civil Engineering Insight Studio
Maximum Marks	2 Marks

Data Collection Plan & Raw Data Sources Identification

Data Collection Plan

Section	Description
Project Overview	The project involves a construction supervisor using an AI-powered tool called Civil Engineering Insight Studio to improve material identification and monitoring at a building construction site. By uploading images of the construction area, the system applies image analysis and computer vision techniques to detect and classify materials such as concrete, steel, and bricks.
Data Collection Plan	The data for this project is collected **directly from users at runtime** through a Streamlit-based web interface. Users provide: • Recipe topic • Desired accurate data This input data is processed in real time and sent to the AI model for content generation.
Raw Data Sources Identified	Since this project uses real-time user input and a pre-trained AI model, no external datasets (CSV, images, or files) are collected

Raw Data Sources Template

Source Name	Description	Location/URL	Format	Size	Access Permissions
User Input Data	Photo inserted by users (recipe topic & word count)	Streamlit Web Interface	Photo	medium	Public (user-provided)
AI Model Output	Generated recipe blog content	Genai	Photo	Variable	Restricted (API-based)