

Data Collection plan and Raw Data Sources

Date	05 February 2026
Team ID	LTVIP2026TMIDS66183
Project Title	Civil Engineering Insight Studio
Maximum Marks	2 Marks

Data Collection Plan & Raw Data Sources Identification

This phase data is collected from project planning documents, construction progress reports, cost and budget records, resource utilization logs, and infrastructure inspection reports, along with simulated and open-source datasets, which are cleaned, validated, and stored in a centralized database for analysis and visualization.

Data Collection Plan

Section	Description
Project Overview	<i>The Civil Engineering Insight Studio is a data-driven analytics and visualization platform designed to support efficient planning, monitoring, and management of civil engineering projects. It centralizes project-related data such as construction progress, cost, schedule, and resource usage, and converts it into actionable insights through analytical processing and interactive dashboards. The system helps engineers, project managers, and stakeholders track performance, identify risks early, and make informed decisions, ultimately improving project efficiency, transparency, and reliability.</i>
Data Collection Plan	Civil Engineering Insight Studio project is collected from project planning documents, construction progress reports, cost and budget records, resource utilization logs, and infrastructure inspection reports. Additional data is obtained from simulated academic datasets and open-source civil engineering sources. The collected data is

	cleaned, validated, and organized in a centralized database to support effective analysis, visualization, and decision-making.
RawDataSources Identified	The raw data for the Civil Engineering Insight Studio project consists of unprocessed project-related information collected from construction and infrastructure activities. This includes project details, daily and weekly construction progress reports, cost and expenditure records, resource utilization logs, schedules, and infrastructure inspection data. The raw data is initially available in formats such as spreadsheets, CSV files, and manual records, which are later cleaned and structured for analysis and visualization..

Raw Data Sources

Source Name	Description	Location / Source	Format	Size	Access Permissions
User Input – Project Details	Project information entered by the user (project name, location, type)	Web Interface / Application Form	Text	Small (per entry)	Public (User Provided)
User Input – Progress Data	Construction progress updates entered by site engineers	Web Interface / Data Entry Module	Numeric / Text	Small to Medium	Authorized Users
User Input – Cost Data	Budget and expenditure details entered by project managers	Web Interface / Data Entry Module	Numeric	Small to Medium	Authorized Users