

Project Design Phase-II

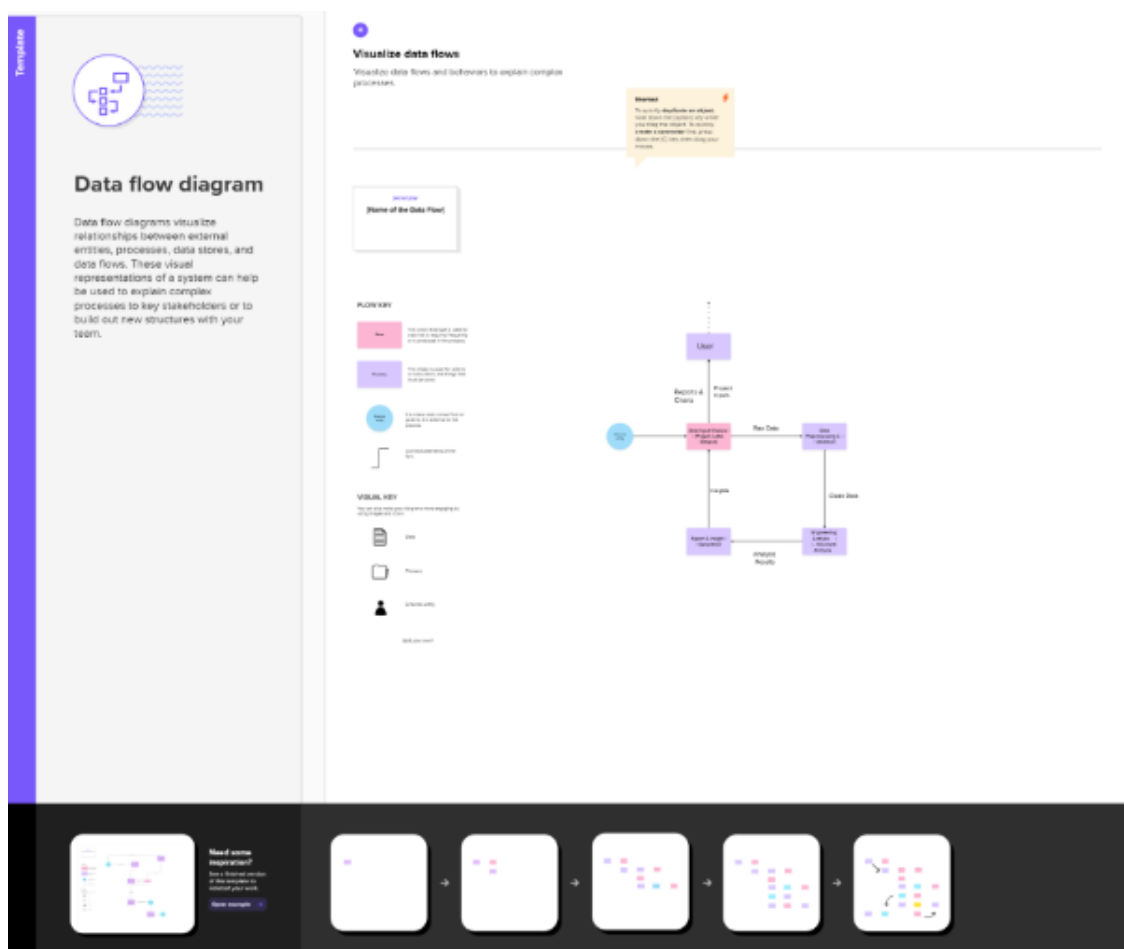
Data Flow Diagram & User Stories

Date	7 th February 2026
Team ID	LTVIP2026TMIDS84448
Project Name	Civil Engineering Insight Studio
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

Flow Diagram:



3.2.2 User Stories

Use the below template to list all the user stories for the product

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Civil Engineer	Structural Performance AnalysisEstimation	USN-1	As a Civil Engineer, I want to analyze structural loads and safety factors so that I can ensure safe and reliable designs.	System accurately calculates load distribution and safety factors. Results are clearly displayed and validated against standard engineering principles.	High	Sprint 1
SiteEngineer	Project Progress & Performance Monitoring	USN-2	As a Site Engineer, I want to view project progress and performance insights to monitor construction activities effectively.	System displays updated project metrics such as progress status and performance indicators.	High	Sprint 1
Structural Analyst	Engineering Data Insights	USN-3	As a Structural Analyst, I want detailed analytical reports showing stress, performance trends, and design comparisons.	Reports present clear insights across different project phases and design options.	Medium	Sprint 2
System Developer	Analytical Model Integration	USN-4	As a System Developer, I want to integrate engineering analysis models into the platform for accurate and consistent insight generation.	Models provide reliable outputs and are well-documented for easy maintenance and expansion.	High	Sprint 2
Urban Planner	Customizable Infrastructure Insights	USN-5	As an Urban Planner, I want customizable analytical insights to support different infrastructure development needs.	System allows parameter customization and adapts insights based on selected project conditions.	High	Sprint 3
Educational Institutions	Training	USN-6	As an academic user, I want the	System supports testing with	medium	Sprint 4

	Learning		platform to support learning through engineering simulations and case-based analysis.	sample datasets and produces understandable analytical outputs.		
QA Engineer	Testing & quality assurance	USN-7	As a QA Engineer, I want to thoroughly test analytical modules and the interface to ensure accuracy and usability.	All modules function correctly with validated outputs and minimal errors after testing.	medium	Sprint 5