

Project Design Phase-II Data Flow Diagram & User Stories

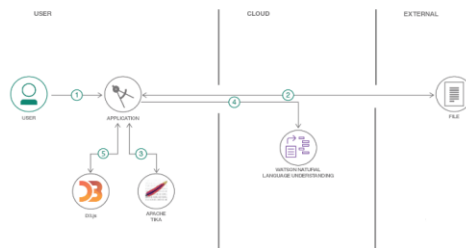
Date	26 June 2025
Team ID	LTVIP2025TMID33995
Project Name	EDUTUTOR AI – Personalized AI-Powered Learning Platform
Maximum Marks	4 Marks

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.

Example: [\(Simplified\)](#)

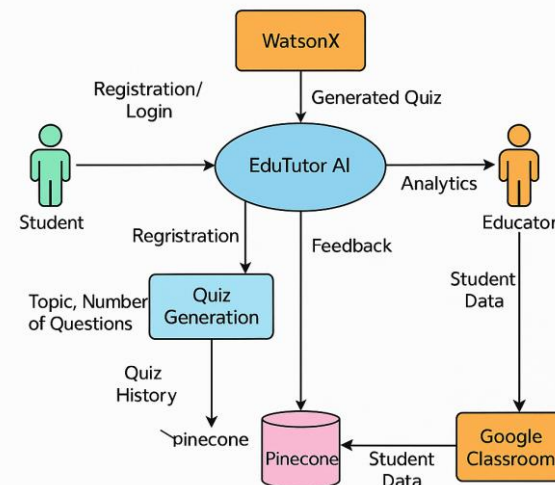
Flow



1. User configures credentials for the Watson Natural Language Understanding service and starts the app.
2. User selects data file to process and load.
3. Apache Tika extracts text from the data file.
4. Extracted text is passed to Watson NLU for enrichment.
5. Enriched data is visualized in the UI using the D3.js library.

Data flow Diagram

EduTutor AI Data Flow Diagram



User Stories

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Sprint-1	Registration/Login	USN-1	As a user, I can register/login using Google OAuth	User is redirected and logged in via Google	High	Sprint-1
Sprint-1	Quiz Input	USN-2	As a student, I can enter a topic and number of questions	Quiz input is accepted and sent for generation	High	Sprint-1
Sprint-1	Quiz Generation	USN-3	As a student, I can generate personalized quiz using WatsonX	Quiz appears with 5 MCQs from selected topic	High	Sprint-1
Sprint-2	Submission and Feedback	USN-4	As a student, I can submit quiz answers and get feedback	Correct answers and score are displayed	Medium	Sprint-2
Sprint-2	History Storage	USN-5	As a student, my quiz history is stored in Pinecone	Submitted quiz and score is saved	Medium	Sprint-2
Sprint-3	Educator Dashboard	USN-6	As an educator, I can view analytics of student performance	Dashboard shows student-level score insights	High	Sprint-3
Sprint-3	Classroom Integration	USN-7	As a teacher, I can sync student data from Google Classroom	Google Classroom students and marks appear	Medium	Sprint-3
Sprint-4	Streamlit UI Navigation	USN-8	As a user, I can navigate through panels easily	Each panel loads correctly and is responsive	Medium	Sprint-4