

ClassLog

Your AI-Powered Teaching Assistant

Group 4

Market research

The Hindu Article Excerpt:

ABAD: A report titled 'Involvement of Teachers in Non-teaching Activities and its Effect on Education' stated that government teachers in the country spend a mere 19.1 per cent of their working hours teaching. The rest of the time, they are either engaged in election campaigns and maintaining mid-day meal registers or in other activities released by the National Institute of Education and Research (NIER). According to the report, only 19.1 per cent of a teacher's time goes in 42.6 per cent non-teaching core activities, 16.5 per cent in non-teaching school-related activities and 6.5 per cent in personal activities.

Deccan Chronicle Article Excerpt:

end only 19.1 per cent time te

Problems of a teacher

"Teachers often spend a significant portion of their time on administrative tasks. This reduces the availability of time for lesson planning, creating class notes, analysis of class and creating quizzes. This administrative workload hampers their ability to focus on personalized instruction and enhances burnout, ultimately affecting the quality of education."

Product Vision

“Our product empowers teachers to automate generation of lesson planning, class transcription, lecture video analysis and quiz generation. We help educators reclaim time by enabling them to focus more on teaching and engaging with students through streamlined automation and intelligent tools.”

Feature List

Dynamic Lesson Plan
Generation

Lecture Notes
Generation

Quiz Generation

Lecture Video
Analysis



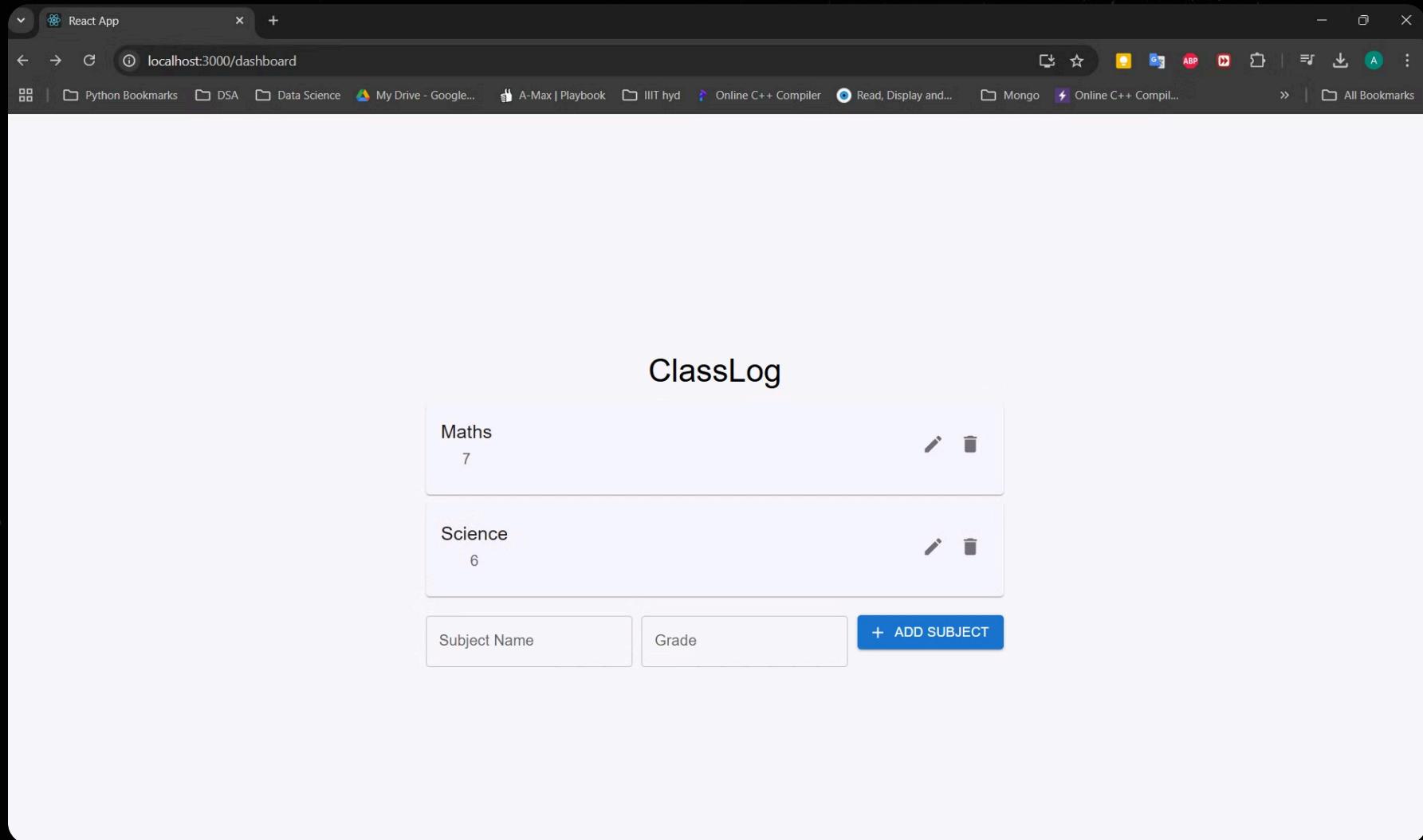
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Workflow

Screen print of a Textbook ToC

| Mathematics VII class | | | |
|--------------------------|--|-------------------------------|-----------|
| S. No. | Contents | Syllabus to be covered during | Page No |
| 1. | Integers | June | 1 - 25 |
| 2. | Fractions, Decimals and Rational Numbers | June, July | 26 - 58 |
| 3. | Simple Equations | July | 59 - 68 |
| 4. | Lines and Angles | August | 69 - 87 |
| 5. | Triangle and Its Properties | August | 88 - 109 |
| 6. | Ratio - Applications | September | 110 - 141 |
| 7. | Data Handling | September | 142 - 162 |
| 8. | Congruency of Triangles | October | 163 - 181 |
| 9. | Construction of Triangles | November | 182 - 191 |
| 10. | Algebraic Expressions | November | 192 - 210 |
| 11. | Powers and Exponents | December | 211 - 226 |
| 12. | Quadrilaterals | December | 227 - 244 |
| 13. | Area and Perimeter | January | 245 - 264 |
| 14. | Understanding 3D and 2D Shapes | February | 265 - 276 |

Teacher can Add, Remove & Edit Subjects on the Dashboard



Chapters of a subject

The screenshot shows a web application titled "ClassLog" for managing a "Subject Course Outline". The interface includes a header with a logo, a title, and a subtitle. Below the header is a search bar and a navigation menu. The main content area displays a table of chapters, each with a title, duration, and edit/delete buttons.

| Chapter Name | Number of Lectures | Action |
|---|--------------------|-------------|
| Integers (4 Lectures) | 4 | Edit Delete |
| Fractions, Decimals and Rational Numbers (6 Lectures) | 6 | Edit Delete |
| Simple Equations (8 Lectures) | 8 | Edit Delete |
| Lines and Angles (3 Lectures) | 3 | Edit Delete |
| Triangle and Its Properties (4 Lectures) | 4 | Edit Delete |
| Ratio - Applications (2 Lectures) | 2 | Edit Delete |

Add & manage

Chapters

React App

localhost:3000/courseOutline/72bd31df-a11b-4dc4-bacd-6ebfe87ce171

Python Bookmarks DSA Data Science My Drive - Google... A-Max | Playbook IIIT hyd Online C++ Compiler Read, Display and... Mongo Online C++ Compil... All Bookmarks

ClassLog

Subject Course Outline

Chapter Name Number of Lectures Add Chapter

Data Handling (11 Lectures) Edit Delete

Fractions and Decimals (12 Lectures) Edit Delete

| Name | Description | Number of Lectures | Actions |
|-----------------------------|---|--------------------|-------------|
| Multiplication of Fractions | Multiplication rules for fractions, proper and improper | 2 | Edit Delete |
| Fraction as an Operator | Understanding 'of' as multiplication | 1 | Edit Delete |
| Division of Fractions | Rules for dividing whole numbers and fractions | 1.5 | Edit Delete |

Topic Name Description Number of Lectures Add Topic

Lecture Navigation

Lecture 1 Lecture 2 Lecture 3

Lecture Number Add Lecture

Lesson Plan Generator

The screenshot shows a web browser window titled "React App" with the URL "localhost:3000/lecture/6b103006-2cb7-4864-9d78-001023f22267". The page is titled "Lecture Plan" and displays a "Lecture 1" section. A "Duration (minutes):" input field contains the value "60", and a "Generate Lecture Plan" button is next to it. Below this, the "Lecture Plan Content" section includes a "Lesson Title: Essential Math Skills: From Numbers to Motion for Class 7" and a "Connection to Self and Community" paragraph. It also lists "Learning Outcomes" such as defining variables, solving equations, understanding simple harmonic motion, calculating statistics, and interpreting graphs. The "Aligned Objectives for the Next Grade" section notes that the lesson builds a foundation for advanced algebra, data analysis, physics, and pre-calculus. The "Activities and Assessment" section lists worksheets, group activities, demonstrations, and statistics projects. At the bottom, there are five buttons: "Edit Lecture Plan" (yellow), "Back to Dashboard", "Generate Quiz", "Generate Notes", and "Upload Class Video".

Lecture Plan Content

Lesson Title: Essential Math Skills: From Numbers to Motion for Class 7

Connection to Self and Community: This lesson covers fundamental mathematical concepts that are crucial for everyday life. Understanding variables, equations, and averages helps in managing finances (budgeting, calculating discounts), interpreting data (understanding statistics in news reports), and making informed decisions. Simple harmonic motion is relevant to understanding the world around us, from the swinging of a pendulum to the vibrations of musical instruments. These skills are also essential for success in future academic pursuits in science, engineering, and other fields.

Learning Outcomes:

- Students will be able to define and use variables in simple equations.
- Students will be able to solve basic algebraic equations.
- Students will be able to understand the concept of simple harmonic motion and its applications.
- Students will be able to calculate the arithmetic mean, median, mode, and range of a data set.
- Students will be able to construct and interpret bar graphs and double bar graphs.
- Students will be able to multiply and divide fractions.
- Students will be able to understand fractions as operators.

Aligned Objectives for the Next Grade: This lesson builds a strong foundation for more advanced algebra, data analysis, physics (including more complex harmonic motion), and pre-calculus. Students will use these fundamental skills to solve more complex equations, analyze larger datasets, and understand more intricate mathematical models.

Activities and Assessment:

- Variables & Equations:** Worksheet with practice problems; group activity involving creating and solving real-world problems using equations (e.g., calculating the cost of groceries).
- Simple Harmonic Motion:** Demonstration of a simple pendulum; discussion of real-world examples; drawing diagrams to illustrate the concept.
- Statistics:** Analyze a real-world dataset (e.g., class test scores) to calculate mean, median, mode, and range. Create and interpret bar graphs and double bar graphs based on this data.

[Edit Lecture Plan](#)

[Back to Dashboard](#)

[Generate Quiz](#)

[Generate Notes](#)

[Upload Class Video](#)

Lecture Notes Generator

Generate Notes

Generate Notes

Generate Notes

Introduction to Fractions (Class 7)

Overview

This lecture introduces the fundamental concepts of fractions, including their representation, simplification, comparison, addition, subtraction, multiplication, and division. We will explore different types of fractions and learn how to solve various problems involving fractions in everyday life.

Key Concepts

- What is a Fraction? A fraction represents a part of a whole. It is written as a ratio of two integers, the numerator (top number) and the denominator (bottom number). The denominator indicates the total number of equal parts, and the numerator indicates how many of those parts are being considered. For example, $\frac{3}{4}$ represents 3 parts out of a total of 4 equal parts.
- Types of Fractions:
 - Proper Fractions: The numerator is smaller than the denominator (e.g., $\frac{2}{5}, \frac{1}{3}$).

Hey Teach, Above is your current generate notes. What changes would you like me to make?

Message Generate Notes

Send

Quiz Generation

Generate Quiz

Generate Quiz



Class 7 Fractions Quiz

Instructions

This quiz tests your understanding of basic fractions. Choose the best answer for each multiple-choice question. There is only one correct answer per question.

Questions

1. What is the fraction represented by the shaded portion of the image? (Assume the whole is divided into equal parts). (*Imagine a circle divided into 4 equal parts, with 1 part shaded*)

- 1/2
- 1/4
- 3/4
- 2/4

Hey Teach, Above is your current generate quiz. What changes would you like me to make?

Make it a bit harder

Send



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Quiz Generation (cont...)

Generate Quiz

Generate Quiz  

Advanced Fraction & Decimal Quiz

Instructions

This quiz tests your understanding of fractions and decimals at a more advanced level. Choose the best answer for each multiple-choice question. There is only one correct answer per question. Calculators are NOT permitted.

Questions

1. What is the result of $(3/4) \div (2/5)$?

- 15/8
- 6/20
- 8/15
- 2/5

Hey Teach, Above is your current generate quiz. What changes would you like me to make?

Make it a bit harder

Here's the updated generate quiz based on your request.

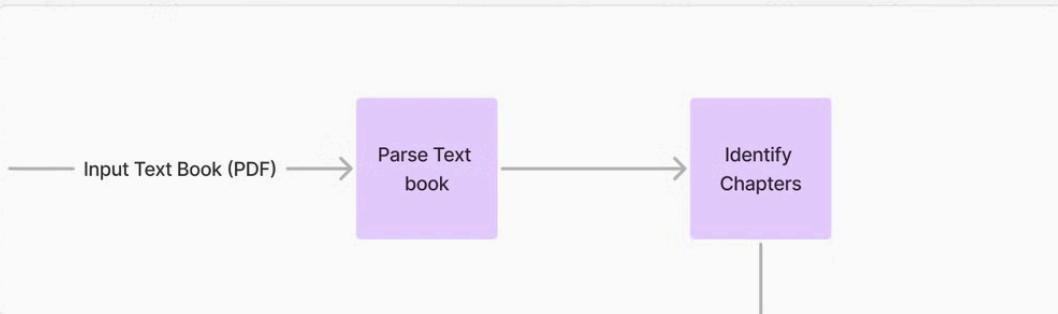
Video Upload

Lecture - 1

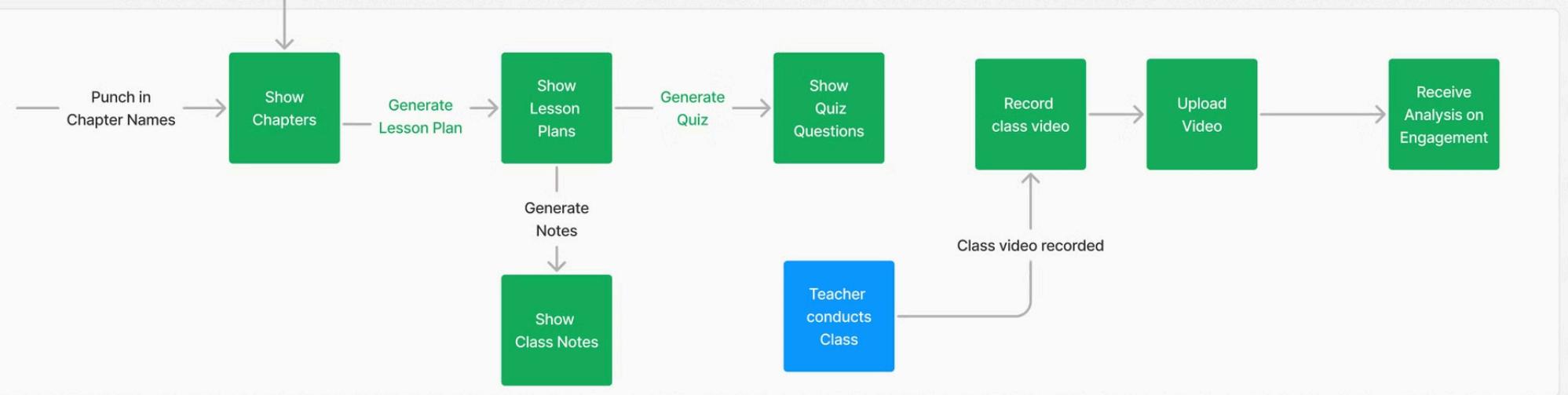
Drag and drop or browse files

Upload Video

Future State



Current State



Tech Stack

Frontend

ClassLog's user interface is built using the ReactJS framework, ensuring a smooth and responsive user experience.

Backend

The backend of ClassLog is powered by the Flask Python web framework, enabling efficient and scalable data processing.

Database

The application's data is securely stored in a MongoDB database, providing flexibility and scalability.

Machine Learning

AI features are powered by Google Gemini

Transcript generation is done using OpenAI Whisper

Hand Raise Detection is implemented using OpenCV



Future Development Plans

PDF Support

Upcoming updates will allow users to upload PDF lecture materials for seamless integration with ClassLog's features.

Real-World Testing

ClassLog will undergo extensive real-world testing to ensure it meets the evolving needs of educators and students.

Continuous Improvement

Fine-tune AI models for enhanced accuracy and performance.



The Teams

SpurredDSI

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Yesteryears

Shubhankar Kamthankar

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Ashish Yadav

Aravind Gondi



Contribution

SpurredDSI

Lecture Video transcription
and Lecture analysis (Text
and video)

Brute Force

Dynamic Lecture Plan
Generation , Subject and
course management

Teen Tigada Kaam Bigada

Lecture notes and quiz
generation

Yesteryears

Complete Authentication
Module



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Questions ?

Thank You!!!