

• TEAM 4



RECOMMENDING STUDY HABITS BASED ON STUDENT BEHAVIOR

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Introduction

1. The **Study Habit Recommendation System** helps students improve learning by giving **personalized study suggestions**.
2. It analyzes behavior data like **study hours**, **quiz scores**, and focus levels to identify patterns.
3. Using this, the system recommends the **best study methods**, **time schedules**, and **break intervals** for each student.



Project Overview



CUSTOMER FEATURES

- 1.CREATE** a new user account to access the application.
- 2.LOGIN** with your username and password to use the system.
- 3.LOG STUDY BEHAVIOR** by entering study hours, quiz results, attention span, and distractions.
- 4.RECEIVE RECOMMENDATIONS** for study time, break intervals, and learning methods.
- 5.VIEW PERFORMANCE** through weekly progress tracking and feedback reports.
- 6.UPDATE OR MODIFY** your study logs to get improved suggestions.

ADMINISTRATOR FEATURES

- 1.LOGIN** with secure admin credentials to access the dashboard.
- 2.UPLOAD DATASETS** containing student study behavior and performance details.
- 3.RETRAIN MODELS** using updated data to improve recommendation accuracy.
- 4.MANAGE USERS** by monitoring student accounts and their activity.
- 5.VIEW DASHBOARD** to analyze study behavior clusters and overall system performance.
- 6.UPDATE OR MODIFY** existing data and configurations for better results.

MILESTONE-1

1. The system allows students to **register and log in** securely to access their accounts.
2. A **student dashboard** has been developed to provide easy navigation and interaction.
3. Data entered from **frontend pages** is successfully stored in the database, ensuring proper record-keeping.



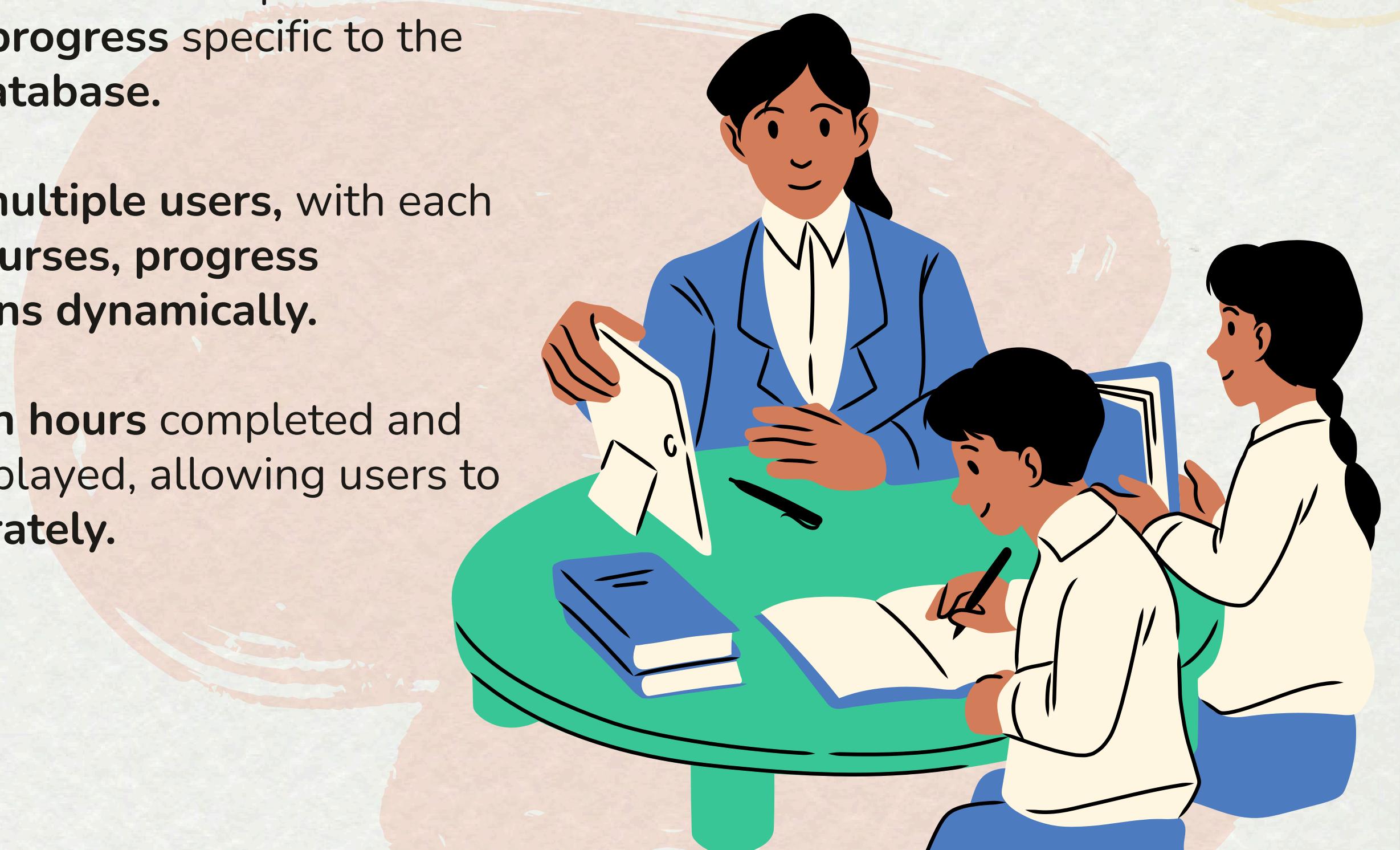
MILESTONE-2

1. A course **tracking section** has been added to the user dashboard, displaying course details such as course name, start date, end date, hours spent, completion percentage, and current status in a clear **table format**.
2. An **Admin Dashboard** has been developed with the ability to manage students. It includes a table view of all student course details and a "**New Student**" **button** that opens a form for adding new records.
3. The system now allows **data entry from the Admin Dashboard** directly into the database, ensuring accurate record management and real-time updates for both users and admins.



MILESTONE-3

1. A personalized **user dashboard** has been implemented that **fetches and displays study progress** specific to the logged-in user from the **admin database**.
2. The dashboard now supports **multiple users**, with each user seeing their own enrolled **courses, progress percentages, and course durations** dynamically.
3. Individual course modules with hours completed and status (e.g., "In Progress") are displayed, allowing users to track their **learning journey** accurately.



MILESTONE-4

1. Automated Notification System:

Send reminder emails to registered users three times a day (morning, afternoon, evening) based on their course completion percentage, encouraging them to complete the pending course.

2. Quiz Reminder Integration:

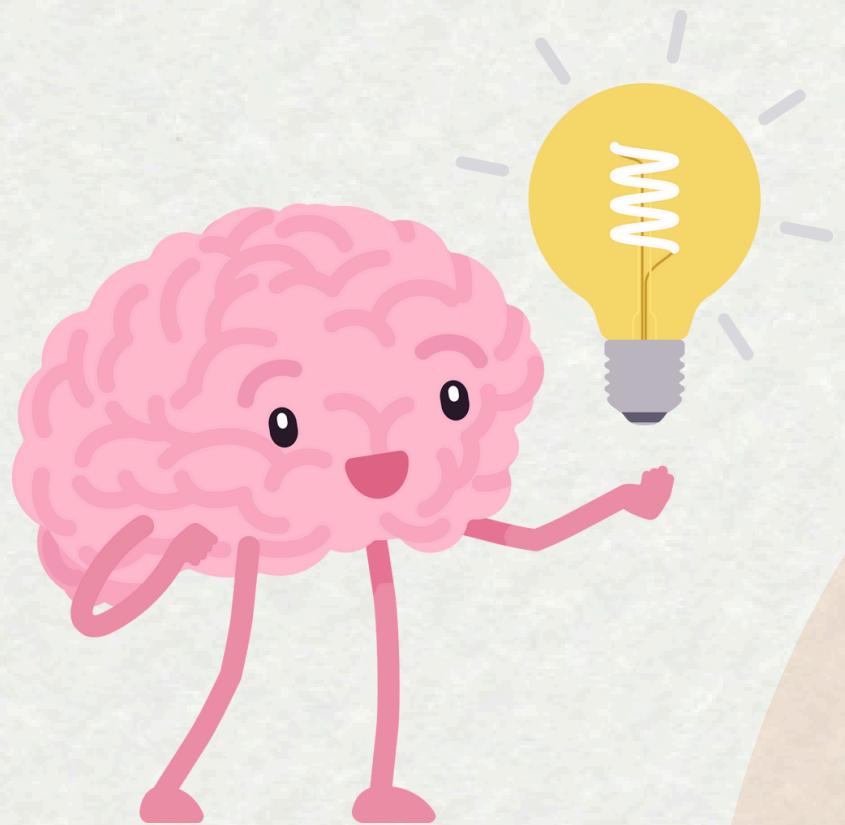
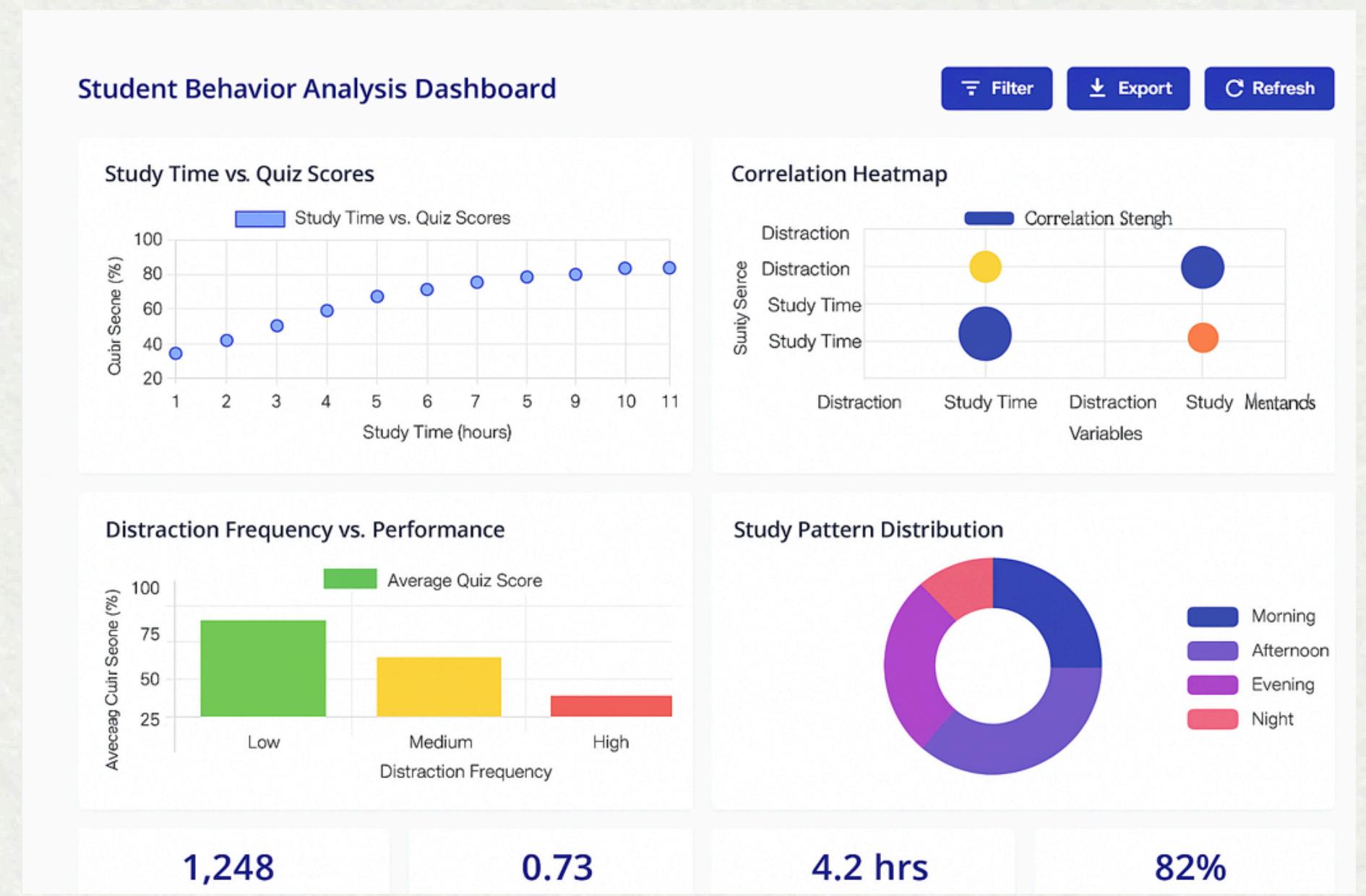
Automatically send reminders to users when a new quiz is added, prompting them to attempt the test.

3. AI-Based Dashboard Alerts:

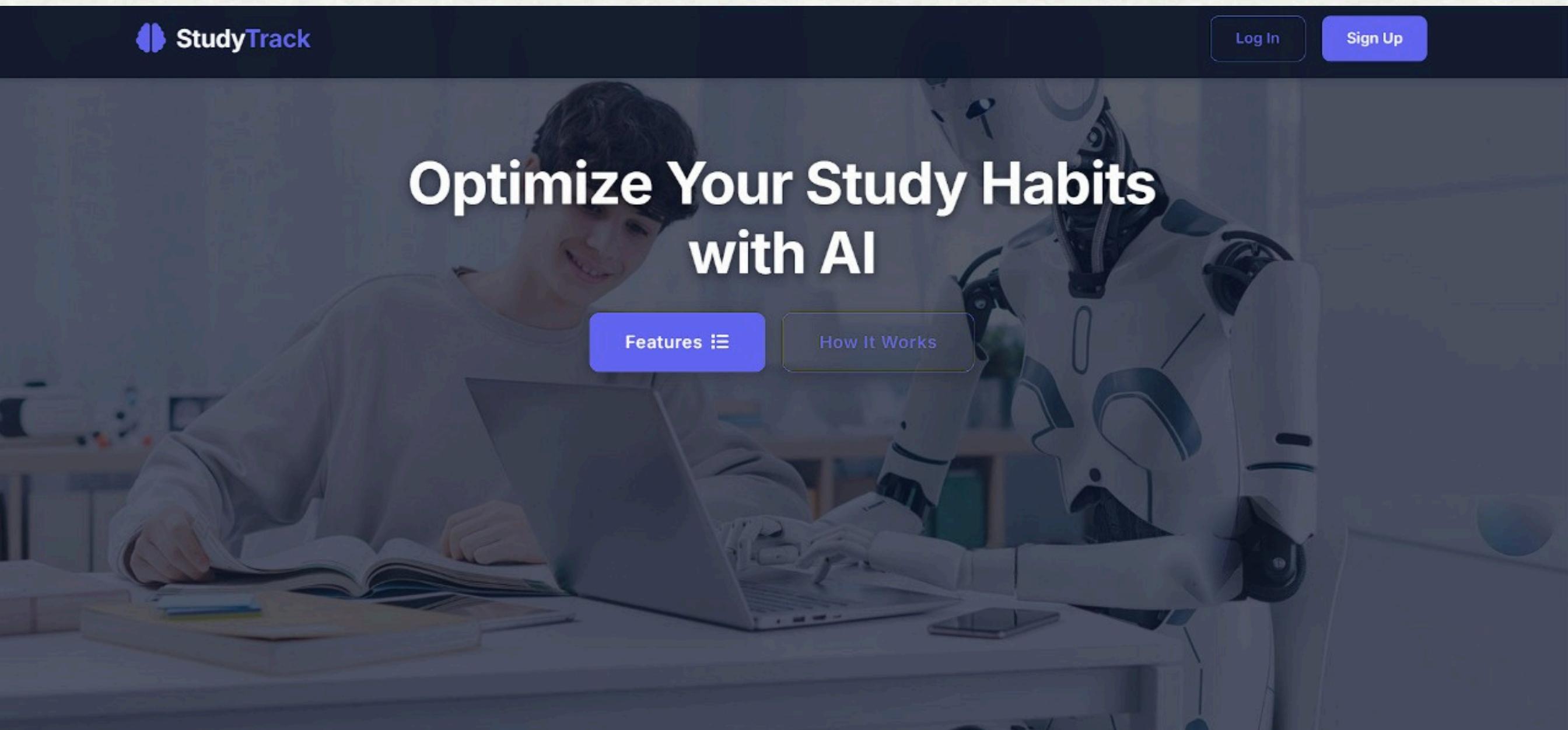
Use AI to identify courses with 75% or more completion and display alert notifications on the user dashboard, suggesting which course to complete first.



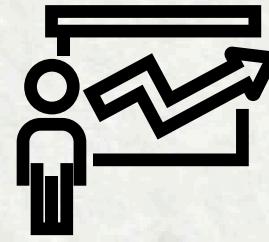
Data Preprocessing and EDA



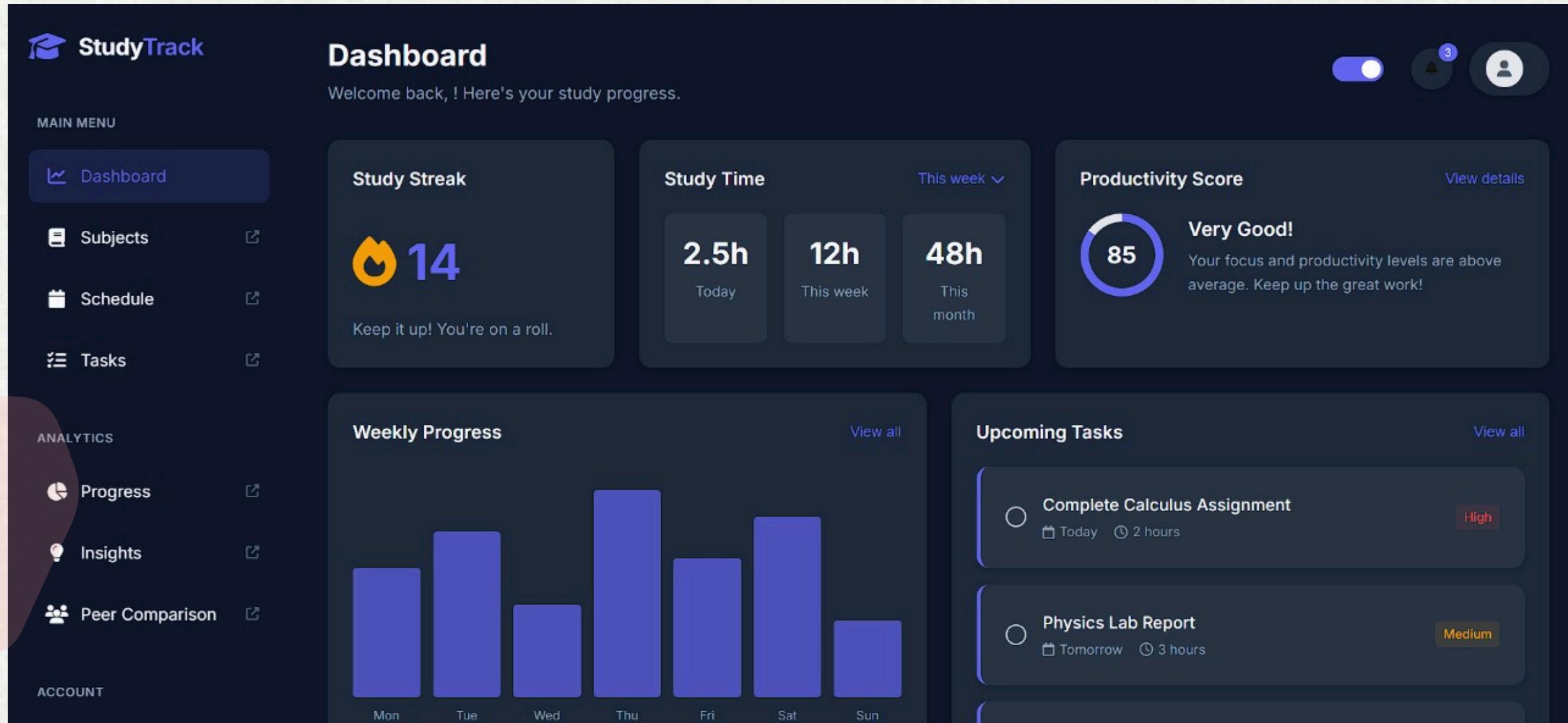
Home page



- 1. Explore Features** – Click the Features button to see what tools and benefits the platform offers.
- 2. Get Started** – Use the Log In or Sign Up buttons to create an account and begin using StudyTrack.

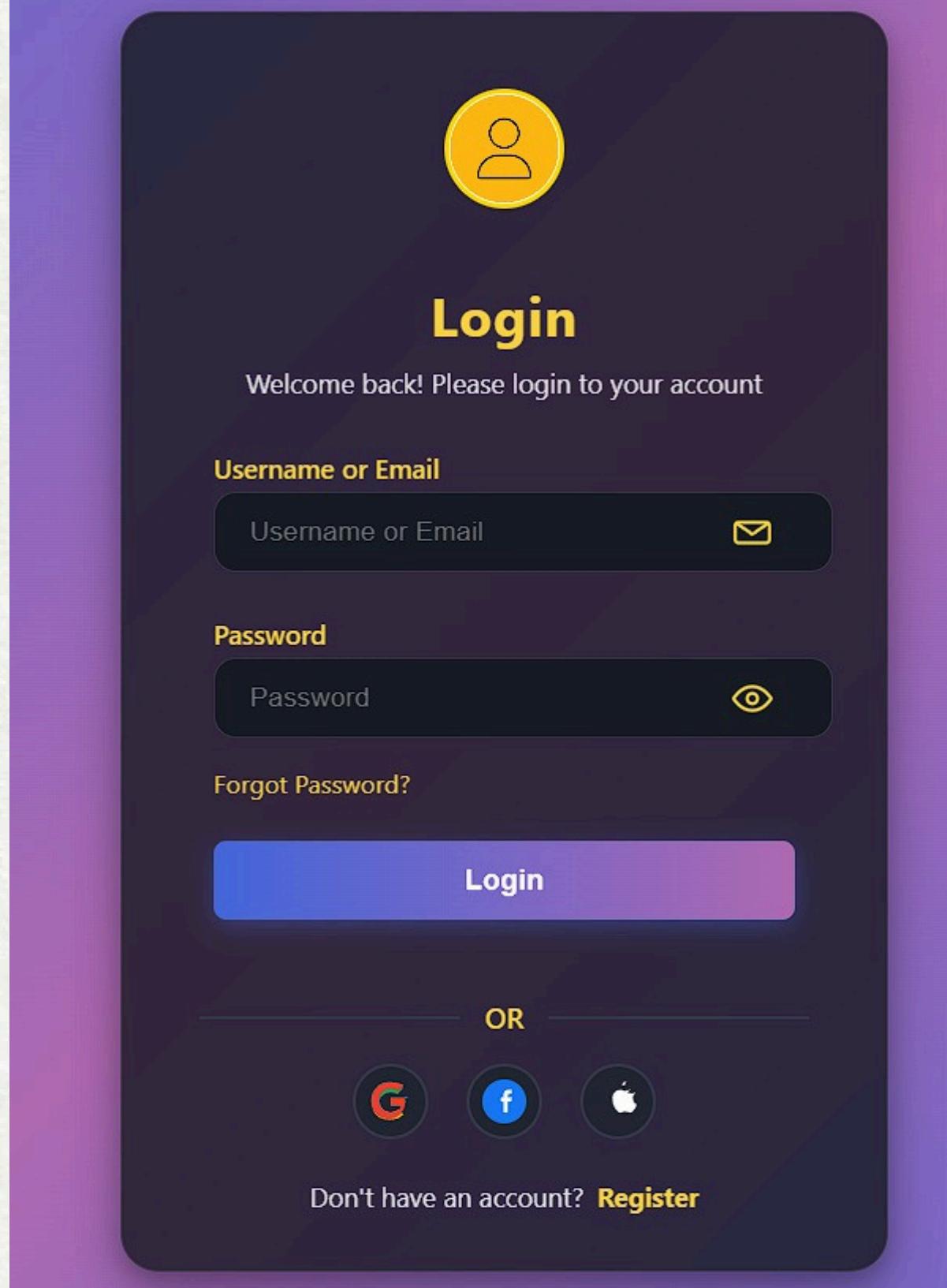


Dashboard page



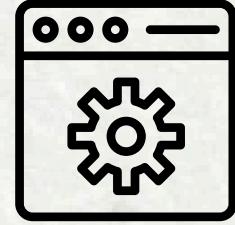
1. Shows **study streak, study time, productivity score, and weekly progress.**
2. Displays **upcoming tasks with deadlines and priorities.**

Login page



1. This page provides a **login form** with fields for Username / email, password, and a “forgot password?” options
2. It also offers **social login options** (Google, Facebook, Apple) and a link to register a new account.





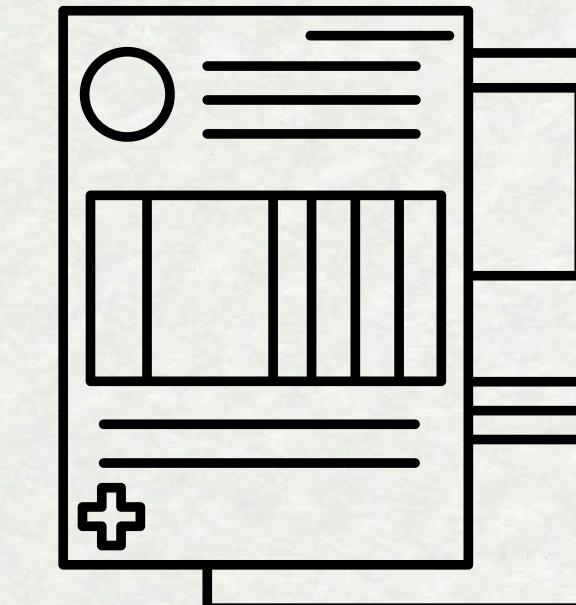
Registration page

The image shows a registration form with the following fields:

- Username
- First Name
- Last Name
- Email
- Password
- Confirm Password

Each field has a corresponding input box and a small icon (person, mail, eye). At the bottom, there is a blue "Register" button and a link "Already have an account? [Login](#)".

1. This page contains a **registration form** with fields for username, name, email, password, and confirm password.
2. It includes a **Register button** and a link to **Login** for existing users.





My Learning Dashboard

The screenshot displays the 'My Learning' dashboard from the StudyTrack application. On the left, a sidebar contains a main menu with options like Dashboard, Subjects, Schedule, Tasks, Insights, Peer Comparison, Admin Dashboard, Add Student, Settings, Help, and Logout. The main area is titled 'My Learning' and shows course progress for five courses:

Course Name	Status	Start Date	End Date	Hours Spent	Completion (%)	Progress	Action
Advanced Java Programming - Spring Boot	Ongoing	10 Sep 2025	20 Dec 2025	42.5 hrs	65%	65%	Continue
Data Science Fundamentals - Machine Learning	Ongoing	5 Aug 2025	15 Nov 2025	28.0 hrs	40%	40%	Continue
Web Development - React & Next.js	Completed	15 Jun 2025	25 Sep 2025	56.0 hrs	100%	100%	Review
Cloud Computing - AWS & Azure	Ongoing	01 Aug 2025	30 Nov 2025	12.5 hrs	20%	20%	Continue
Software Engineering	Not Started	01 Oct 2025	15 Jan 2026	0 hrs	0%	0%	Start

The dashboard also features a central 'Analytics' section with 'Insights' and 'Peer Comparison' tabs, and a 'No courses available. Add a course to get started.' message.

1. Tracks **course progress** with status & completion.
2. Shows **hours spent** for better time management.
3. Shows **hours spent** and **completion percentage** for each subject.

+ Add New Course Activity

Add New Course Activity

[← Back to Dashboard](#)

Full Name

Email Address

Course Name

Start Date End Date
 mm/dd/yyyy mm/dd/yyyy

Hours Spent Completion (%) Status
 Select Status

1. Collects **student details** – full name and email.
2. Records **course information** – name, start date, and end date.
3. Tracks **hours spent, completion percentage, and course status**.



Admin Dashboard

Admin Dashboard

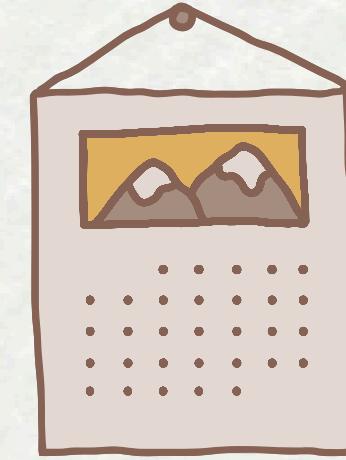
+ Add New Student

Login successful!

ID	Name	Email	Course Name	Start Date	End Date	Hours Spent	Completion %	Status	Actions
1	keerthi	chaitanyavardhineedi@gmail.com	java	Sept. 30, 2025	Nov. 19, 2025	6.0	100%	COMPLETED	
2	lahari	22A81A6165@sves.org.in	python	Sept. 28, 2025	Oct. 30, 2025	4.0	73%	ONGOING	
3	tommy	tommy1234@gmail.com	ai	Sept. 27, 2025	Oct. 15, 2025	3.0	0%	NOT STARTED	
4	chaitu	tarunrockzz5293@gmail.com	machine learning	Sept. 29, 2025	Nov. 25, 2025	5.0	85%	ONGOING	

Showing 1 to 4 of 4 entries

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1. Manages **student details with course progress.**
2. Allows **adding, editing, and deleting students.**
3. Tracks **hours spent and completion percentage.**



Student Database (MySQL)

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree, which includes the 'ui_student' schema. The main area shows the 'ui_student' table in a grid format. The table has the following columns and data:

ID	Name	Student ID	Email	Phone	Department	Year	Semester	Enrollment Date	Completion	Course Name	End Date	H
1	keerthi	STU-001	chaitanyavardhineedi@gmail.com	NULL	NULL	NULL	NULL	NULL	100	java	2025-11-19	6
2	lahari	STU-002	22A81A6165@sves.org.in	NULL	NULL	NULL	NULL	NULL	73	python	2025-10-30	4
3	tommy	STU-003	tommy1234@gmail.com	NULL	NULL	NULL	NULL	NULL	0	ai	2025-10-15	3
4	chaitu	STU-004	tarunrockzz5293@gmail.com	NULL	NULL	NULL	NULL	NULL	85	machine learning	2025-11-25	5

The interface also includes various toolbars and panels for managing databases and queries.

1. Stores **student details** like ID, email, and course info.
2. Tracks **course completion** and enrollment dates.
3. Acts as **backend support** for the dashboard system.



Study Progress Overview

Welcome back, keerthi! Here's your study progress.

Study Streak
14
Keep it up! You're on a roll.

My Courses
4 Enrolled Courses
1 Completed 4 Active
View Dashboard →

Productivity Score
85 Very Good!
Your focus and productivity levels are above average. Keep up the great work!

1. You are maintaining a consistent and positive study streak.
2. You are actively progressing through your enrolled courses.
3. Your productivity and focus levels are rated highly.



Candidate - Progress

[← Back to Dashboard](#)

Data Science with Machine Learning

Master data analysis and ML algorithms

Overall Progress: 0%

0.0 hours completed | 0% Complete | Status: In Progress

Course Modules

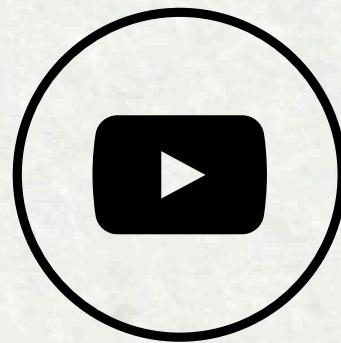
Data Analysis with Pandas
0.0/20.0 hours

Module 1 of Data Science with Machine Learning

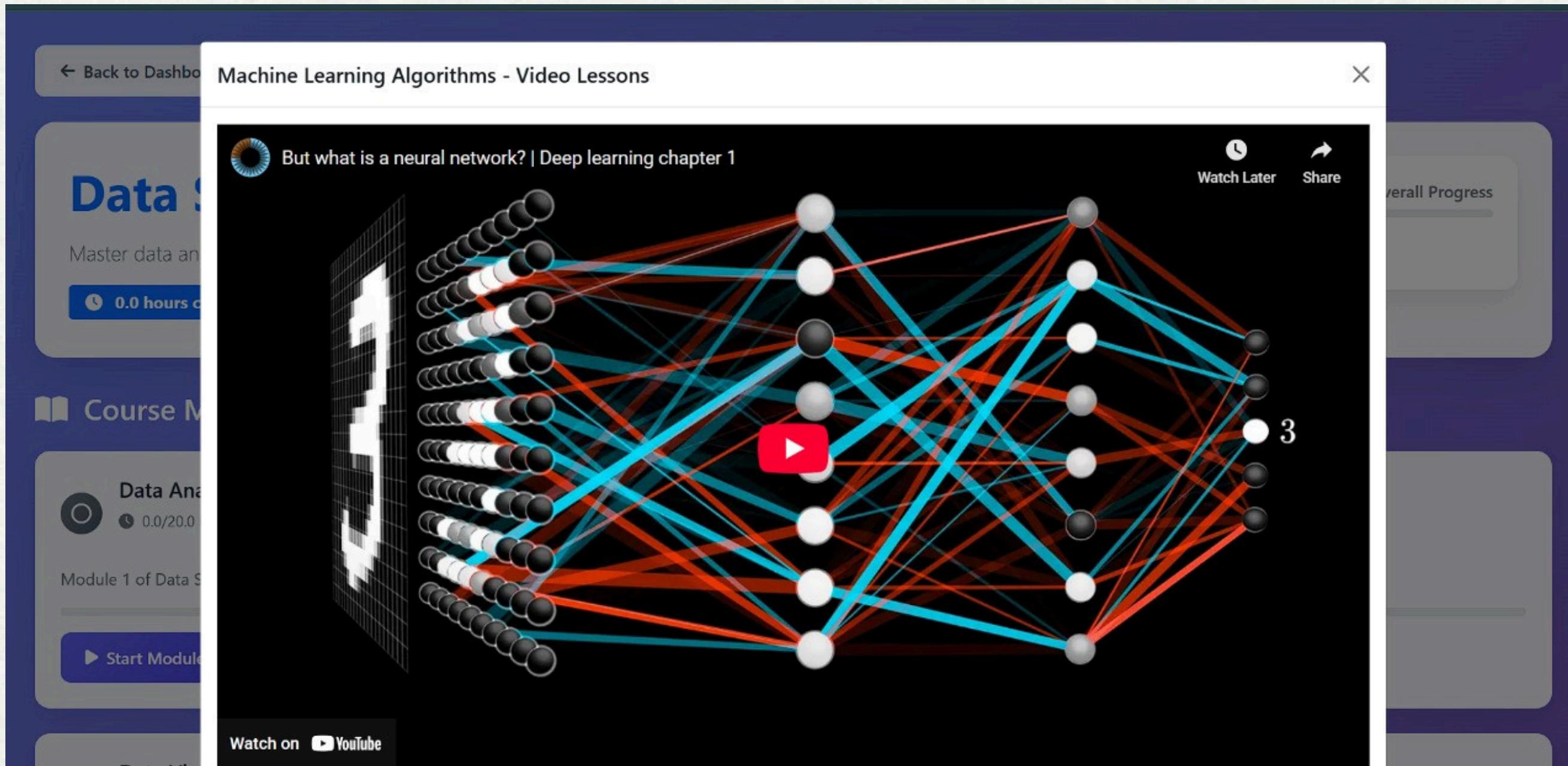
Start Module | **Module Info**

Data Visualization

1. The course has just begun with no hours completed yet.
2. The first module focuses on data analysis with Pandas.
3. The overall course status is currently marked as in progress.



YouTube Video About the Course



1. Relevant YouTube videos are integrated directly into the course modules.
2. Video content, such as neural network explanations, is available for online viewing.
3. Features like "Watch Later" allow you to save videos and manage your learning pace.



Candidates Learning Progress

Welcome back, Keerthi! 🙌

Here's your learning progress overview

October 14, 2025

[View My Courses](#) [Home](#) [Logout](#)

4 Total Courses

0 Completed

4 In Progress

0% Overall

My Learning Courses
Track your progress and continue learning

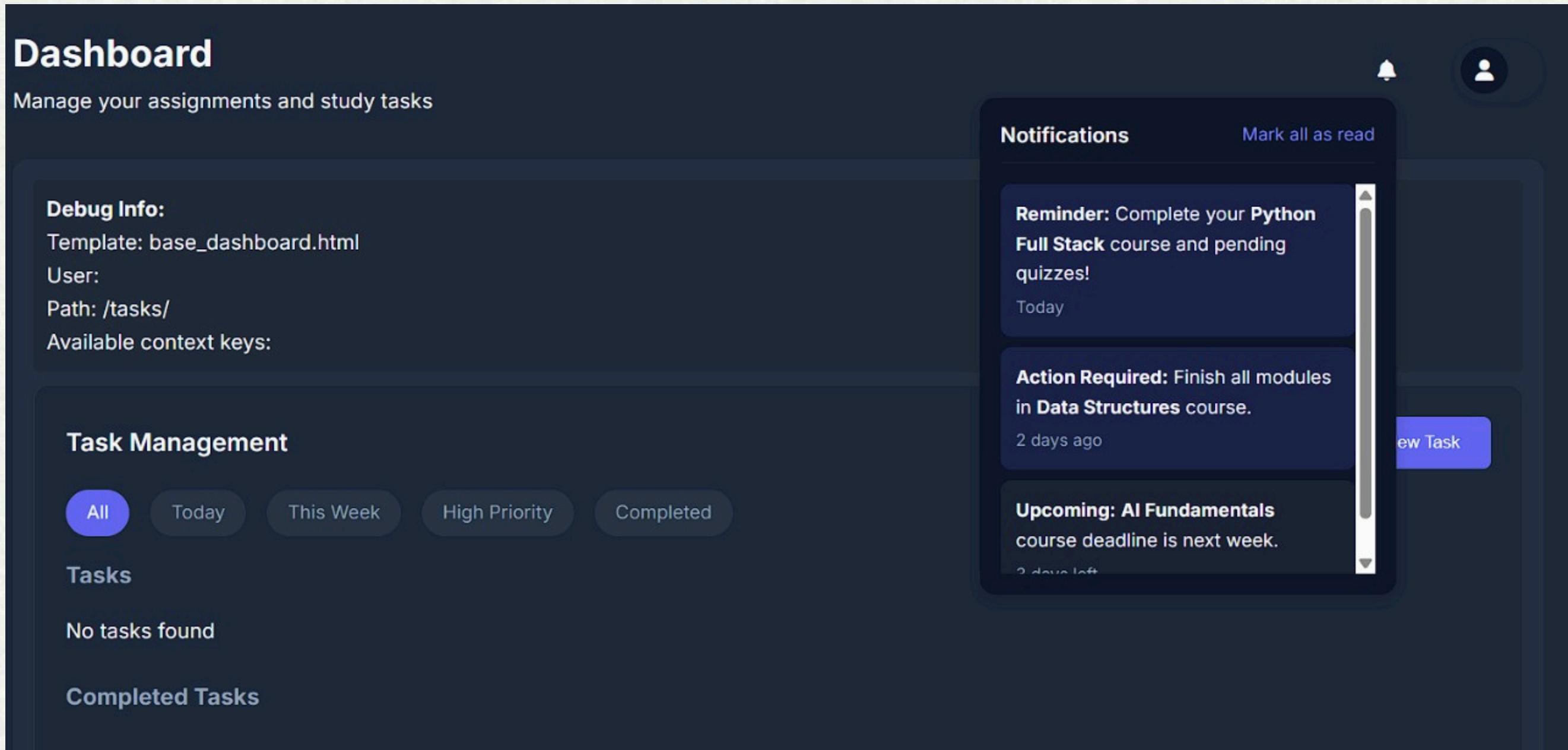
4 enrolled
0.0% overall completion

Python Programming Fundamentals
Learn Python from basics to advanced concepts

OVERDUE

[My Courses](#)

🔔 Smart Notification & Reminder System

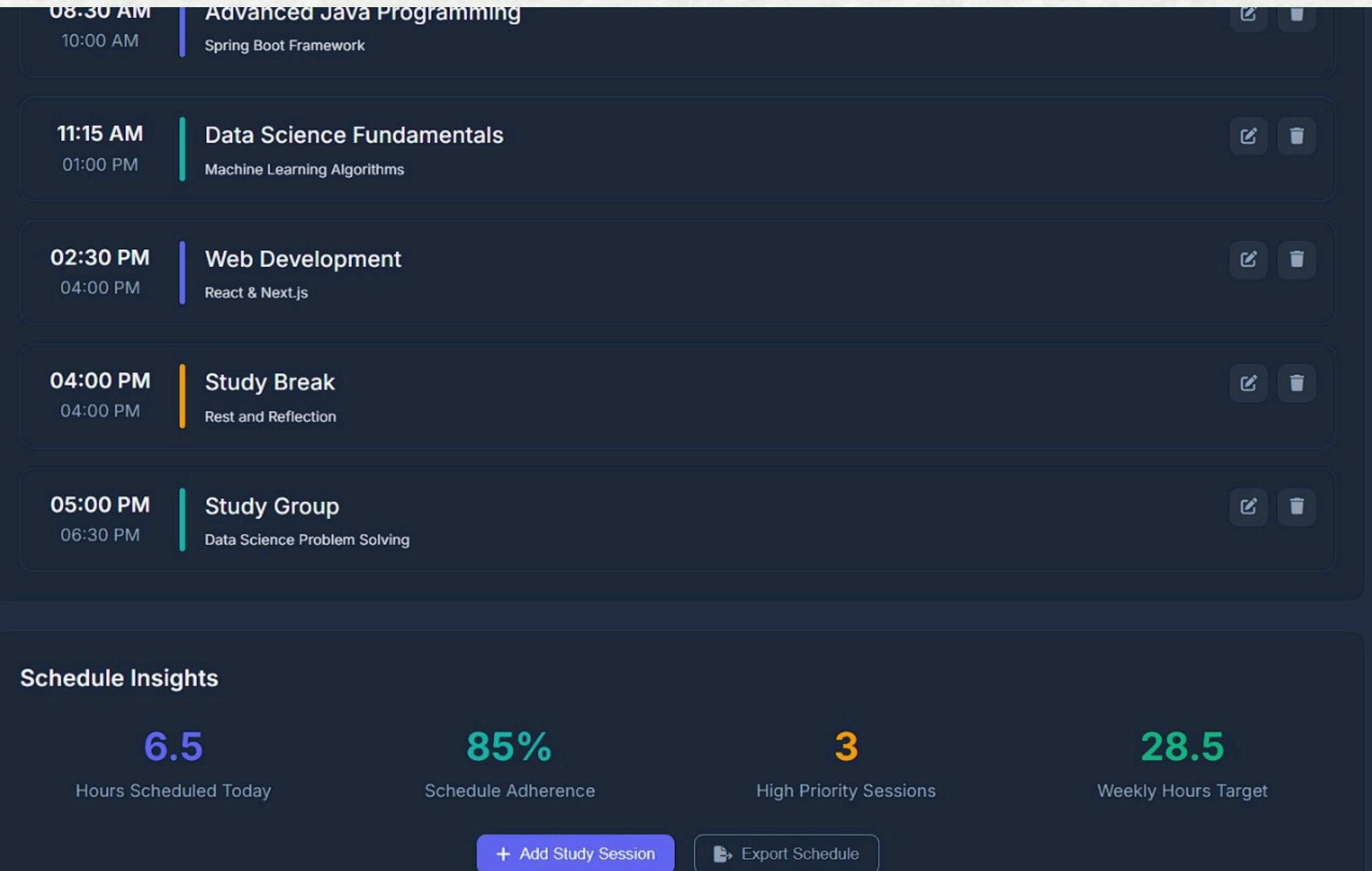


The screenshot shows a dark-themed dashboard interface. At the top left is a yellow bell icon. The main title is "Dashboard" with the subtitle "Manage your assignments and study tasks". A "Debug Info" section lists: Template: base_dashboard.html, User: (empty), Path: /tasks/, and Available context keys: (empty). Below this is a "Task Management" section with tabs: All (selected), Today, This Week, High Priority, and Completed. Under "Tasks", it says "No tasks found". Under "Completed Tasks", there is no visible data. On the right side, a "Notifications" panel is open, showing three items: 1. "Reminder: Complete your Python Full Stack course and pending quizzes!" (Today). 2. "Action Required: Finish all modules in Data Structures course." (2 days ago). 3. "Upcoming: AI Fundamentals course deadline is next week." (3 days left). There is a "Mark all as read" button at the top of the notifications panel.

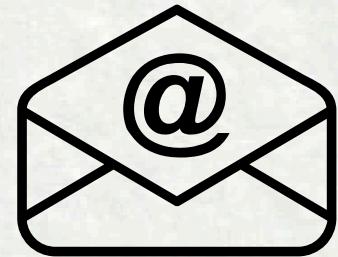
1. Send scheduled **notifications** to remind **users** to complete their ongoing courses.
2. Notify users automatically when a new quiz is added, encouraging them to take the test.



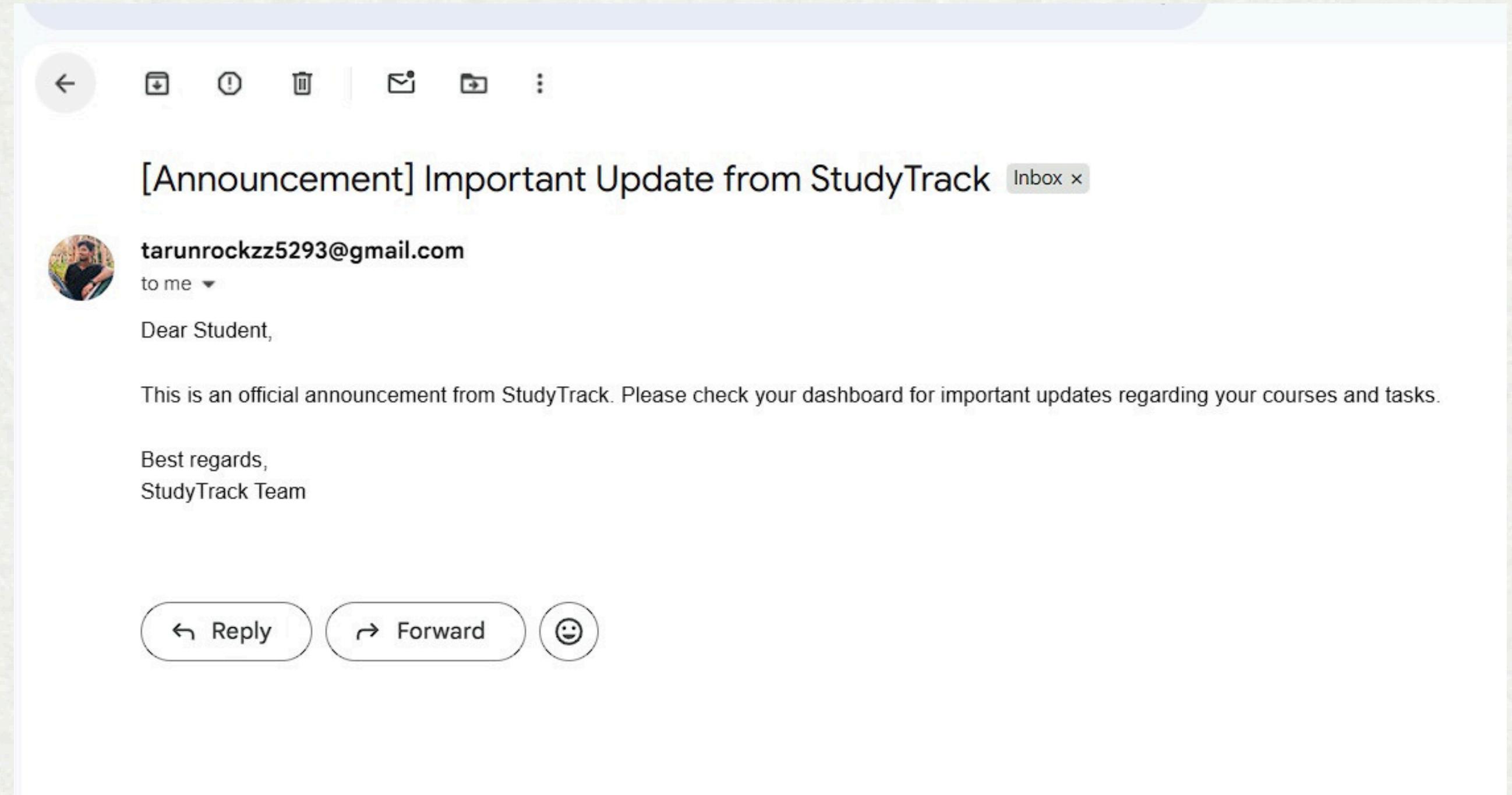
Quiz Reminder Notification



1. Alerts users about pending quizzes in enrolled courses.
2. Offers action choices — Take Quiz immediately or Maybe Later to postpone.
3. It displays reminders directly on the user dashboard.



StudyTrack Notification Email



A screenshot of an email interface showing a notification from StudyTrack. The subject line is '[Announcement] Important Update from StudyTrack'. The email is from tarunrockzz5293@gmail.com, addressed 'to me'. The body of the email reads:

Dear Student,

This is an official announcement from StudyTrack. Please check your dashboard for important updates regarding your courses and tasks.

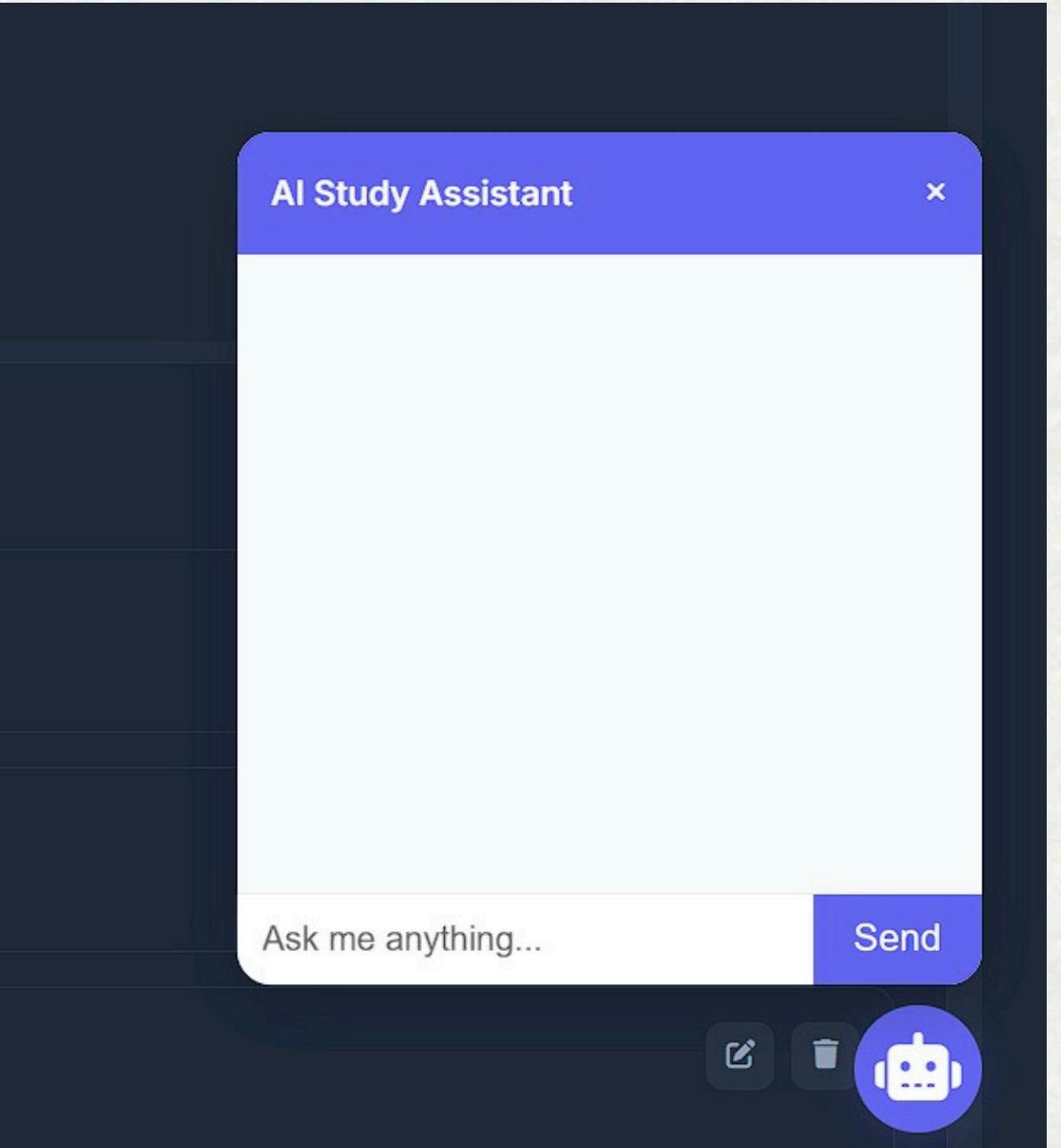
Best regards,
StudyTrack Team

At the bottom of the email interface, there are three buttons: 'Reply' with a left arrow icon, 'Forward' with a right arrow icon, and a smiley face icon.

1. Official announcement sent directly to your registered email.
2. Instructs students to check their dashboard for crucial updates.



AI Smart-Assist Reminder



1. Helps users manage their studies by setting reminders for daily study sessions and upcoming quizzes.
2. Notifies about important assignment deadlines for enrolled courses.

Conclusion

The Study Habit Recommendation System **improves learning by analyzing student behavior** and giving personalized study suggestions.

It helps **students build better study routines** through smart notifications, progress tracking, and **AI-based recommendations**, while administrators can easily manage and update data for improved performance.



Team members

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*Thank
You*