STUDENT SYNC

PROBLEM STATEMENT:

Professors often struggle with creating marksheets and calculating CGPA, which can be both time-intensive and error-prone. Students frequently lack a clear understanding of their academic standing, future goals, and areas where they need improvement. Additionally, access to personalized study materials such as mock tests, explanatory videos, or instant doubt-solving tools is limited. Our project aims to solve these problems using Generative AI to automate marksheet generation, analyze performance, and email the results directly to students. It also allows students to monitor their progress toward their target CGPA. Another AI module will manage the university syllabus, important notes, and previous exam papers to create practice tests. A chatbot and AI-generated videos will further support learning and doubt clarification.

TARGET AUIDENCE & CONTEXT:

The primary audience includes college students (aged 18–25), professors (aged 30–60 with Master's or Ph.D. degrees), and academic administrators (aged 35–65). In higher education, students often lack personalized academic guidance, performance clarity, and access to effective preparation tools. Professors managing large classes face difficulties in offering individual support due to heavy workloads. Administrators require efficient systems for monitoring a cademic progress. This AI-driven solution addresses these challenges by automating CGPA tracking, generating personalized feedback, and streamlining academic evaluation ultimately improving learning outcomes, faculty efficiency, and institutional academic management.

RELEVANCE OF PROBLEM:

Professors often face difficulties in supporting students who are at risk of falling below the CGPA threshold required for job placements and competitive exams. Alongside this, they also deal with the burden of repetitive administrative tasks. This project introduces an AI-driven solution that monitors and evaluates student performance, offering personalized insights into the scores needed in future semesters to achieve academic goals. A built-in AI chatbot helps students by answering queries in real time and recommending tailored resources like video lessons, essential textbooks, and past exam papers thereby decreasing the workload of professors.

USE Of Gen-AI:

Generative AI can play a key role in solving these problems by making learning and management smarter and easier. For college management, Generative AI can quickly process student data, prepare result sheets, and generate detailed reports with great accuracy, saving time and reducing manual work. Additionally, it can make college websites more interactive by using AI-powered chatbots that can guide students, answer their questions instantly, and offer personalized content. For students, it can act like a personal tutor, providing quick answers, creating practice tests, and explaining difficult topics in simple words thus decreasing the work load of professor. This helps students learn at their own pace and improves their academic performance. Generative AI is the perfect fit because it is fast, reliable, and can adjust to the unique needs of both students and colleges, making the overall system more efficient and student-friendly.

SOLUTION FRAMEWORK: Supports professors by streamlining their tasks through automation, and enhances student learning with customized mock tests and individual tutoring sessions. Student marks and email IDs are entered into the system, where the AI processes the information, generates the final marksheets, compares it to average and top scores and delivers them directly to each student via email. The AI is trained using the college syllabus and past exam papers to create customized mock tests. It also uses web resources to deliver responses that are tailored to the curriculum.

FEASIBILITY & EXECUTION: To bring this idea to life, colleges can use simple tools like student management software to collect and sync student data in one place. Automated mark sheet generators can pull grades directly from these systems, saving time and reducing errors. Tools like Power BI can help visualize student performance and track progress easily. By storing records in cloud storage, colleges can quickly access and update information over time. Adding secure login systems and regular backups will keep student data safe, accurate, and always available when needed.

SCALABILITY & IMPACT: This project offers strong scalability for implementation across various educational institutions. By using Generative AI to handle tasks like marksheet creation, CGPA computation, and academic evaluation, it minimizes the workload for faculty and boosts productivity. Its modular, data-centric design allows easy customization to fit different academic structures and grading policies. For students, the integrated AI tools—such as tailored learning materials, practice exams, and a responsive chatbot—provide consistent academic support. Broad adoption of this system can modernize education management, enable informed academic decisions, and enhance both student performance and institutional effectiveness.

CONCLUSION: Our generative AI-based project significantly reduces the workload of professors by automating tasks such as student data management, performance reporting, parent communication, and query resolution through AI chatbots. This software can be offered to colleges and universities seeking advanced AI-based websites to enhance their management systems, making it a relevant and scalable business model. This project stands at the forefront of educational innovation—transforming how institutions manage, teach, and thrive with AI.