KazLib: A Student-Centric Digital Platform for Academic Planning and Performance Simulation

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The efficiency of student learning is often hindered by complex academic tracking systems that prioritize administrative needs over student clarity. This project developed KazLib, a digital platform designed to optimize academic planning through transparent grade management and future performance simulation. The architecture integrates technical features such as automated GPA calculation, goal-setting modules, and a "what-if" grade simulator for predicting academic outcomes based on hypothetical data inputs. To evaluate the system's performance, the developers conducted rigorous functional validation and technical debugging using their own historical academic datasets. This iterative process focused on enhancing navigation and data visualization through algorithmic optimization. Technical analysis confirmed the platform’s high precision in trajectory modeling and graduation requirement tracking. Furthermore, the platform reduces the administrative burden by providing automated self-service tools for data management. This engineering work demonstrates that simplifying the interaction between users and complex academic data through automated software solutions significantly enhances planning efficiency and system utility.

Awards Won:
Association for the Advancement of Artificial Intelligence: AAAI Student Memberships for each finalist that is part of the 1st, 2nd, and 3rd Prize Winning projects and 5 Honorable Mention winning projects (up to 3 students per project) (in-kind award / part of the 1st-3rd prize)