

Individual Capstone Assessment:

Introduction:

From my academic standpoint as a computer science student, our senior design project aims to address the challenges that professors face in accurately verifying student attendance in their courses. This is to be accomplished by designing a website where professors can provide a code for students to log in and mark their attendance. Recognizing a potential flaw wherein students might share the code with others and skip class, our solution will incorporate a combination of IP address checks, facial recognition, and possibly GPS tracking to ensure students are indeed on campus when logging their attendance.

College Curriculum:

Throughout my time at the university, I've engaged in a variety of computer science courses that have endowed me with both the theoretical and practical knowledge necessary for this project. Courses such as Advanced Database Management and Web Development have provided me with a solid foundation in database operations and user-interface design respectively. These courses have not only imparted technical skills but also honed my problem-solving capabilities and collaborative approach in group projects.

EEP Program Experience:

My foray into the EEP has been transformative. While I may not have had traditional co-op experiences, the EEP program exposed me to a plethora of programming skills. I devoted substantial time to LinkedIn Learning videos, absorbing a gamut of programming nuances, best practices, and real-world application scenarios. This self-

paced learning has not only supplemented my classroom learnings but has also fostered self-discipline, initiative, and a keen eye for detail—traits I consider vital for our senior design project.

Motivation & Preliminary Approach:

The motivation behind this project stems from the belief that the true essence of education is not just attendance, but genuine participation. By ensuring students are genuinely present, we uphold the integrity of the educational process. I am excited about this project as it bridges the gap between traditional classroom experiences and technology. Our preliminary approach involves a modular design, beginning with a functional UI for professor-student interaction, followed by the integration of facial recognition, IP checks, and potentially GPS verification.

Expected Results & Self-evaluation:

By the conclusion of this project, I anticipate we'll have a robust platform that efficiently tackles the attendance dilemma, enhancing the educational experience for both professors and students. As for self-evaluation, I plan on setting iterative goals and conducting regular self and peer assessments. I believe in iterative feedback, so continuous testing and subsequent refinements will be integral. A successful outcome for me would be the creation of a system that not only verifies attendance but also respects students' privacy and data security.