

Lessons Learned –

This was the first major milestone in which we really moved on from the planning phase to the actual development and implementation phase. We focused on creating a functional prototype of the student's interface, which included the facial recognition and attendance recording function, the ability to immediately view your previous attendance records, as well as implementing role-based access control. We'd say the sprint taught us a lot about balancing quality with progress. We all know this is a long-term project and it's going to take time to complete and perfect, and it's definitely not going to be perfect from the get-go. I think we initially set the bar of our prototype pretty high and had big plans when it came to what we wanted to be implemented by sprint 2. However, between all of our schedules, it just wasn't practical. As the complexity of the prototype increased, it became pretty evident of that. Some of the initial implementations were written in a way that made them a bit difficult to debug or modify without breaking something. With that, we began to separate features and functions into smaller, individual parts, and it made it incredibly more manageable. Moving forward, we plan to implement stricter standards for code consistency and documentation from the start of each sprint.

We've also noticed a few typical issues with team coordination, which we will continue to address. Communication between team members when it came to each other being aligned with one another on things like data – how is it structured or available, etc. Better documentation and better task descriptions on our end would likely reduce the overall occurrence of these issues. We have weekly team meetings; we may still need to consider more mid-sprint check-ins with one another to help resolve any confusion or misunderstandings as well.

Improvement Plan –

For our improvement plan, we intend to consider the following:

- Add some sort of on-screen message that appears when a face scan fails, if we're able to determine the reason. The message would provide tips like "move closer" or "increase lighting."
- Implement the ability to toggle dark mode to make the UI easier to use in the evening. This would also better the accessibility of our system.
- Improve the sidebar layout to better support various zoom levels.
- Analyze the frontend and backend code for better consistency and clarity, clean up any shared components, try standardizing file structures, and use consistent naming conventions.
- Try to improve our communication between the frontend and backend by documenting how we're structuring shared data in an attempt to reduce confusion and any reworking during development.
- Have more mid-sprint check-ins with each other to keep everyone aligned and informed on the system's current status and progress.
- Explore potential layout improvements, especially for the calendar as it's kind of bulky in its current state. Start considering improvements for future portability to mobile devices.
- Add the ability to report bug or system errors.