From an individual standpoint, I contributed the UI prototype that was shown at the expo. Additionally, I also contributed to the group data collection and evaluation of project progress. While we had to adjust plans as the project length went on, I did build upon skills identified in the initial assessment from the fall, particularly when it came to learning and implementing PyTorch into the project. Aside from using PyTorch, tkinter was used to build out the user interface. A combination of PyTorch models and tkinter UI elements was combined to present a prototype of the project at the senior design expo.

From a success standpoint, we were able to show a speech to text and text to notes model being trained at the demo and a UI to illustrate the project concept. A major obstacle of the project was the computing power that was needed to fully implement the models into our project’s vision. Additionally, time constraints were a limiting factor. As a result, I implemented a summarization approach using a recursive algorithm and a GPT-3 algorithm. Given more time and resources, I would have liked to transition away from the GPT-3 approach and replaced it with our trained models.

As a group, we were able to accomplish a model that worked with training data. However, a constraint of the model was that it overfit with any data that was not training data. As a group, we had to work on an alternative approach that was aggregable by all group mates. We learned that it is important to be flexible and establish an open line of communication while doing group work. The group was able to work effectively to design and implement an alternative solution in a timely manner.

All group members contributed to the project equally. The group would meet on Monday and Tuesday at 3:00pm to discuss and work on the project. At the end of the Tuesday meetings, we would delegate tasks to group members to be completed by the next scheduled meeting. The group worked well together and was able to resolve minor conflicts. While the result didn’t align perfectly with the initial group goal, the group is still satisfied with the outcome and the next steps that the project would take.