Project Summary

Thiscustom project that our team presented to our instructor originally included having a custom flight controller. With the timeline challenges and lack of available parts that came with this design we switched to creating a custom controller to control a drone built using a commercially available flight controller. Our team approached this by looking at all the parts that came with a fully functional drone and deciding what we were all able to create within a reasonable amount of time.

Our team learned about every aspect of RC drones. We learned how to take various user inputs such as switches, buttons and joysticks, and turn them into signals that are capable of being transmitted over radio frequencies. We then learned how to take those signals and convert them into a form that a transceiver can give to an RC vehicle, such as a drone. We also learned about the protocols that a drone uses to communicate between its many parts. Ultimately we learned about clear communication and how to troubleshoot our various problems.