ECE 445
Team 21
Team Contract Fulfillment

At the beginning of the semester, the team created a basic contract to outline the responsibilities, goals, and general schedule for the project's progression. The basis of our project was the project's goal - as defined in the team contract as *"to create an automatic water bottle filling station that dispenses water and/or preworkout drink mix for use in gyms. The device will automatically stop dispensing water when the bottle is full, and will have manual selections for the water level (full, half-full, preworkout, etc)."* On the whole, these goals have been met. The core portion of our project that makes it unique is the sensing component, which, after extensive testing, works as expected. As far as the high-level requirements described, these have been met as well.

As far as team member expectations are concerned, each team member did an excellent job meeting expectations. Conflicts were communicated in a timely manner, work was shared evenly based on individual qualifications, and everyone was respectful of each other's ideas. While we did not hit our original schedule goals, each team member put significant extra effort into ensuring the project is functioning by the demo. Each team member did an excellent job of completing their individual tasks/roles, and then came together to work as a team. At the beginning of the project, we established that Priyank would handle PCB design, Jakub would handle coding, and Abby would handle hardware and deliverables. These roles were assigned based on individual strengths of the team members, and we primarily stuck to the defined roles. What changed was the team work involving testing - while testing was originally meant to be done individually, much of it was conducted either by two people or the whole team. This was a

good change to our original roles - it helped the team progress through testing much more efficiently, and kept us all on the same page on next steps moving forward.

For the agenda, our team generally made decisions together and based on hitting the final project goals. At the end of the day, our main objective was to achieve the functionality we outlined in the team contract, so all our decisions were centered around completing this. Goals were influenced primarily by deadlines (PCB order deadlines, etc). When any team member identified a potential issue, it was quickly communicated to the other team members, and then a solution was discussed. Finally - the team did not have many significant issues. Perhaps the largest hurdle we faced was the last couple of weeks leading up to the demo, we were significantly behind schedule. However, each team member stepped up to make significant progress. In hindsight, the team definitely should have been more proactive about beginning project construction earlier, but the expectations outlined in the team contract acted as an excellent guide. In general, we had a great team experience, and the contract was a helpful tool to clearly define goals and expectations.