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Team #2

### Team Contract Fulfillment

**Project Goals:** This section should begin with a short description of what you planned on building at the start of the semester. What were the goals of your project? You should elaborate on whether these goals were met.

At a high level, our design will revolve around modifying an existing door to fit our dog door. This dog door is controlled by the user through an app. Subsystems of this design include the app, the door, the sensors, mechanical, the power system, and the camera. Motion detectors will be used to alert the customer when the pet is near the door and needs to enter. A camera will also be used to prevent unwanted visitors or other animals from entering. In addition, the app can also be used to manually open the door and close it immediately. This system will be on both sides of the door, so the pet can get in and out and not be trapped outside.

For the end of our project, we expect the project to be fully functional by the time of the final demo. We need to make sure the sensor can accurately detect motion and alert the camera to turn it on. This alert must also be able to send a signal to our app and feed the camera footage to the app. The app from here must be able to work properly (buttons and camera). The button when pressed should be able to successfully send a signal to the door and cause it to open. This same criteria should be applied to the other side of the door as well. Once all these functions are working properly, then we can determine the project is effective.

**Expectations:** This section should address whether the expectations set in the “Expectations” section in your team contract were met. Essentially, were the ground rules your team set out at the start of the semester followed?

Our group successfully met the project expectations. Members successfully offered constructive feedback while ensuring high-quality work. All team members came prepared to meetings and held accountability for their tasks. We worked together to problem solve and assist each other.

**Roles:** At the beginning of the course, your team outlined roles as part of the team contract. Please describe what your roles are now and—if your roles changed—how they evolved as the semester progressed. Did you assign a leader? Were pieces of the project tackled as a group or individually? Why?

The roles of our team were maintained. We delegated tasks based on individual strengths and weaknesses. Matthew mostly focused on the software of our microcontroller and app, while Jeffrey worked on the mechanical related design as well as the PCB orders. Norbert worked on designing various subsystems, technical writing, part selection, and bridging the gap between software and hardware.

**Agenda:** How did your team make decisions about the project? How were goals set? When an issue with the project came up, how did your team plan to fix it?

We made decisions on the project together as a team, where we each had a say in design related choices. At the beginning of each week, we determined the agenda and for what needs to be accomplished in order to stay on track. In order to stick to our schedule, we communicated plans through our group chat. When an issue arose, we met together to discuss possible solutions while coming to a reasonable conclusion.

**Team Issues:** This section should cover team-related issues that your group encountered during the course. What sort of problems did you run into? How were they dealt with? Was the process set out in the team contract followed? In hindsight could you have done things differently to have a better team experience?

Overall, our team did not run into many team related issues over the course of this project so far. The only issues we had were related to coordination. Occasionally we had conflicting schedules so it was difficult at points to get all of us together for a meeting. We each put in the work that we had laid out originally in the team contract. While the pace of work done could have been improved since we are cutting it close to the final deadline. Flexibility also would have been more helpful.