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<div align="center">Roomba Race</div>

In CS-330 Robotics, the class was put into groups and assigned a project involving making the iRobot Create 2 race against the other groups' robots. For this project, we had to make a graphical user interface (GUI) that allows us to control the robot's actions. We also had to give the keyboard the ability to make the robot move as well. The assignment was challenging at first, but as we worked more with it and understood what we were doing, it turned out to be a fun project.

The hardest part of the project was definitely the beginning. First we made a mock-up design of the GUI on a piece of paper and then split up the responsibilities between the two of us. One of us was in charge of making the GUI, and the other was in charge of getting the keyboard input working the desired way. Each one of us had struggles throughout this project. One of the struggles on the GUI side was trying to get an image to display and rotate when the robot is moving in certain directions. This ended up taking too much time for us to figure out and we ended up not solving this issue because of our other major struggle. We started off the keyboard input by using the "keyboard" library to handle movement. We later found out that the keyboard and tkinter libraries don't play nice with each other, so we had to pivot to something else. Luckily, tkinter has its own way for handling keyboard input, so it went smoothly from there.

After we figured out how to handle keyboard input using tkinter, we didn't have too many issues. To wrap up, we had to implement a few more things like changing some LED colors and making it play a song. Overall, we think this was the most fun project yet in this class, and in the future, it might not be such a good idea to split the responsibilities the way we did.