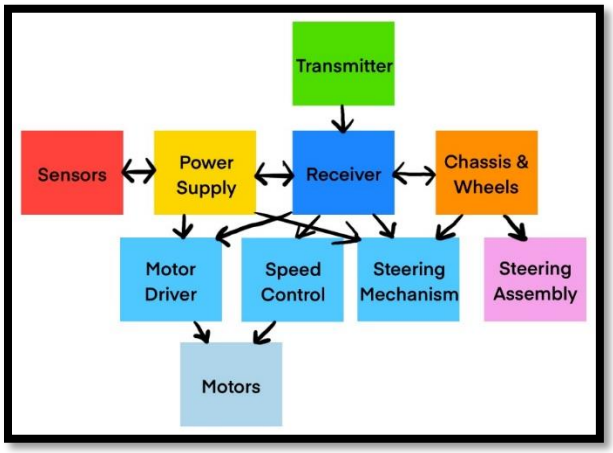
ECE 5780 Mini-Project Proposal

Basic RC Car

1. Beverly Yee, Nicholas Eloff, Carter Edginton, Krishna Dhekar
2. A recreation of an RC Controller in which the insides are laid bare on a breadboard instead of encased in a box. In the interest of time, instead of controlling an actual RC car, at first a screen will display the controls that are triggered. Once we have the screen implementation working is when we can move onto physical components of the car itself.
3. Block Level Diagram



4. Milestones
    a. Have half the circuit built. Start building and programming the circuit.
    b. Entire circuit complete, with programming started, for screen implementation.
    c. Finished programming, started debugging and testing on a mock car.
    d. Finish the project by having a functioning car.
5. Risk of fire from overheating components. Mitigation can include keeping in mind the temperature threshold of components and/or use heat dissipating material. A section of the circuit not functioning as expected due to some unexpected defect that cannot easily be found, I.e., the steering wheel turning slowly for the large turn rate. Mitigation or compensation can be to focus on other sections of the circuit and make sure those are robust such that a product can be delivered. Rather than having a product that partially works in all aspects.