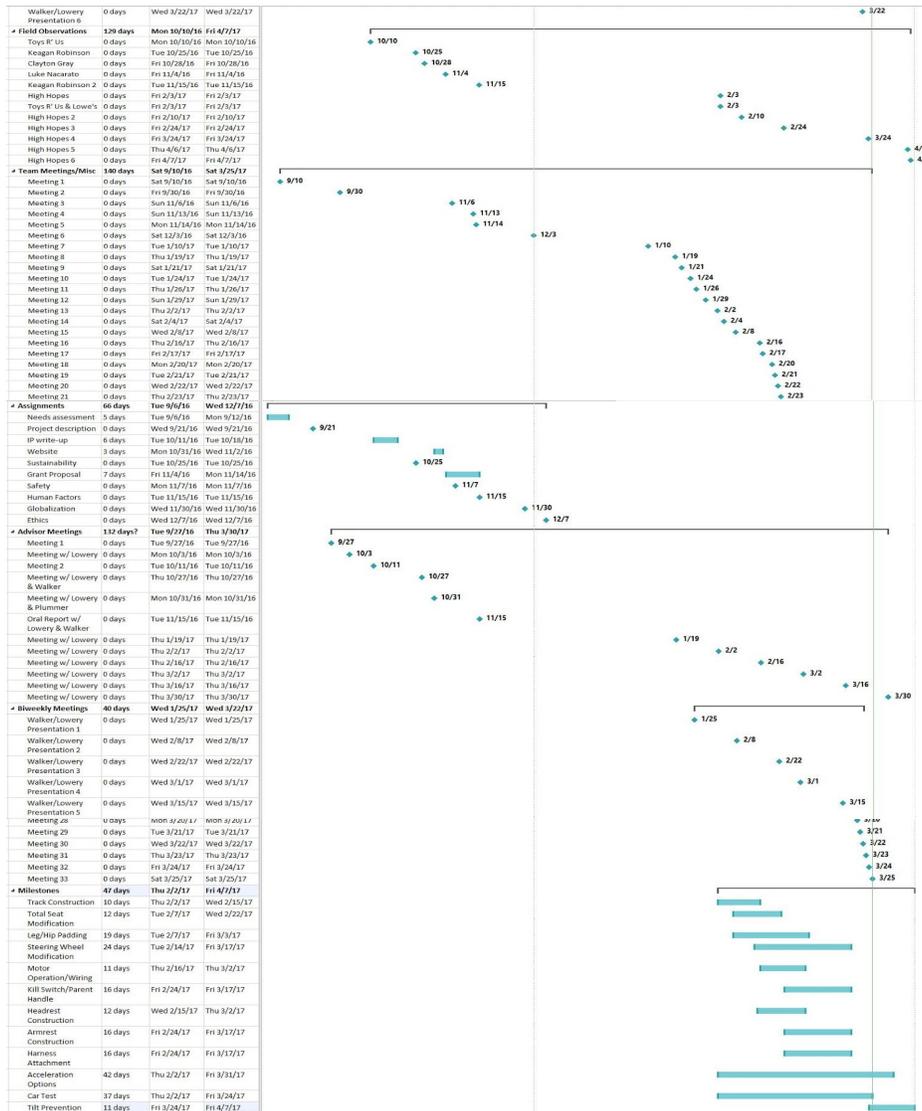


Children with mobility impairments advance at a slower rate than their typical peers in areas of both cognitive and social development. Currently, there are no powered mobility solutions capable of being operated by these children. Our solution is to build a modified power wheels car with modular components, which will support children with a variety of conditions. We will donate the car to High Hopes Preschool and Pediatric Therapy Clinic in Franklin, TN at the completion of the project. This may not be a solution for the global issue at hand, but we believe it's a small step in the right direction.

This past week we were able to finish a prototype of the car. The car is completely wired and running, and we have accomplished the following modifications: installing the kill switch into the existing circuit, finishing the backrest, attaching the adjustable harness, installing the female side of the audio jack, constructing a functioning button for activation, and installing the back steering (but have not secured it yet.) We're currently in the process of finalizing each component and altering modifications as necessary according to feedback that we've received from Dr. Walker, Dr. Lowery, and the lead Occupational Therapist, Nancy Darr, at High Hopes. A lot of work was done prior to our visit to High Hopes on 3/24/2017 so that our car would be ready to bring in and we could see how the children interacted with the changes made to the car at that point. We have been meeting most days this past week in order to catch up on some pushed back deadlines. The poster for the Design Day presentation has been started as well.

One setback for us has been the seat tracks. At the moment, it's very difficult to get under the seat to adjust the seat position and tilt. It is possible we will need to completely redesign the tracks, but we are hoping to work with what we have and find a feasible solution. Another

setback we had was once we bolted in the back steering it was apparent that it was not secure enough.



Looking forward, we will be fine-tuning some of our current designs such as the back steering and seat adjustment, finishing up the rest of our button activation options, and working on our poster to be ready for presentation at design day. All setbacks aside, we will be able to complete the car by the April 24, 2017 deadline. As for budget, the project has only cost around \$120 and we do not anticipate needing to purchase more materials.