



MEET THE TEAM



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MEET THE SPONSOR

Quality of Life Plus (QL+): A people-driven company based out of Virginia that supports programs aimed to bring students together in the creation of life-transforming, assistive technology for America's wounded heroes, specifically for quadriplegics and paraplegics.

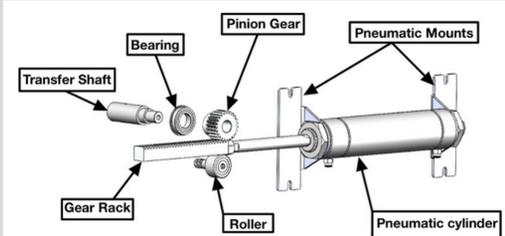
PROJECT OVERVIEW

Problem: People who are paraplegic/quadruplegic still have a desire to take up new hobbies or continue old hobbies such as golfing. Due to the lack of mobility and motor functions, swinging a golf club is not a possible for these individuals. Most of their day-to-day tasks are done through a Sip-N-Puff device. The capabilities of each user varies by case therefore, our device must be as universal as possible.

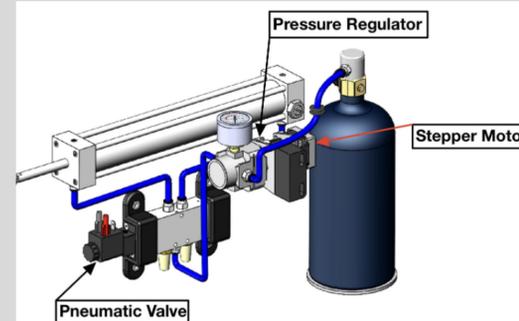
Goal: The goal is to create a device that allows paraplegic/quadruplegic people to be able to hit a golf ball down a driving range. Our design will include a plug-and-play system to increase adaptability across a wide variety of users. The device shall be mounted onto the user's wheelchairs in order to allow the device and the wheelchair to move as one.

SUBSYSTEMS

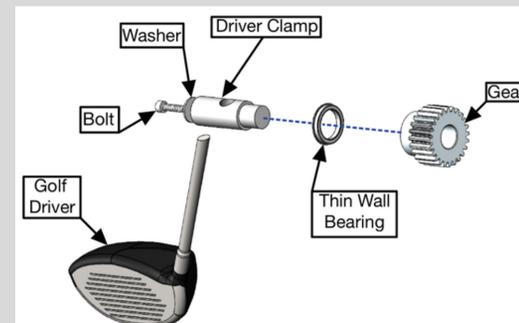
Pneumatic Cylinder Drive Setup



Air Line System

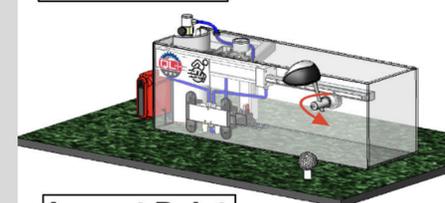


Golf Driver Mount Setup

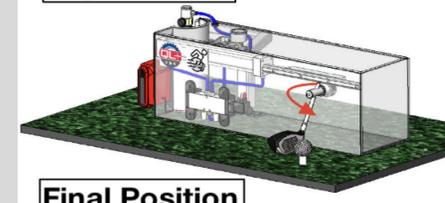


USE CASE

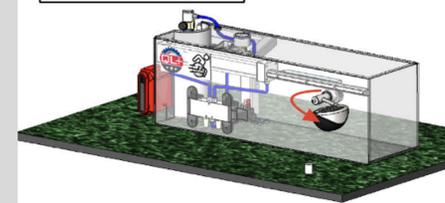
Start Position



Impact Point



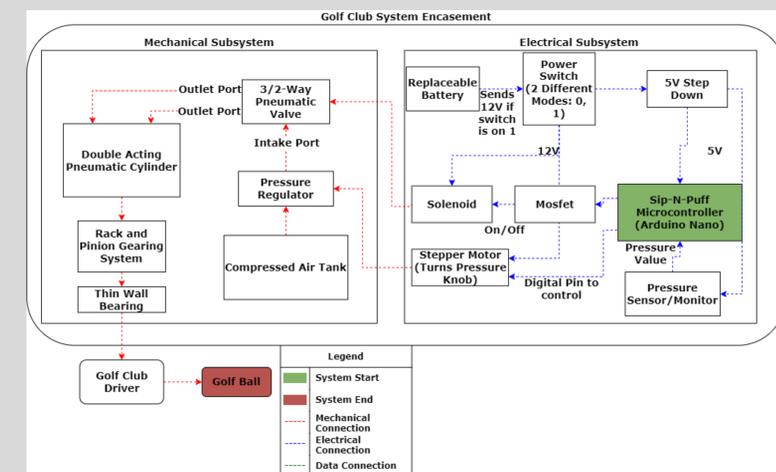
Final Position



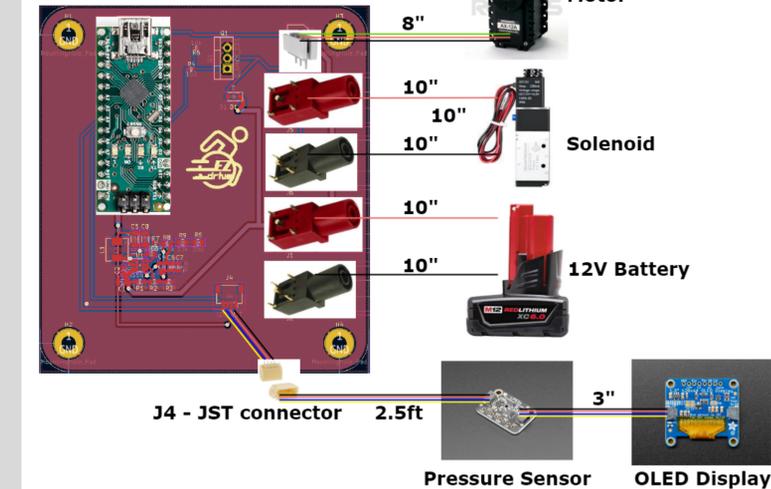
ACKNOWLEDGMENTS

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SYSTEM LEVEL DIAGRAM



EZ Drive Controller Board



TESTING

