Individual Contributions for Leverage Inc.

Project Manager: Klaudia Cymerska, 12582116

- The project manager, **Klaudia Cymerska**, was responsible for making the Solidworks part for the lever arm and elbow and the corresponding engineering drawings. Also, maintained communication between the rest of the group and Professor King, set up meeting times and locations, oversaw team progress, worked on the rough sketch, trained on 3D printers, and provided a location for 3D printing. Took part in assembling the lever prototype and worked together with the group to put together all parts and information for the instructables.

Manufacturer: Wenyan Lei, ID 9479594

- The manufacturer, **Wenyan Lei**, was responsible for making the Solidworks part for the clutch and the plate and the engineering drawings that went along with it. Also took part in the assembling of the actual prototype and recording the steps took to assemble the prototype. She was also responsible for the 3D drawing and ordering the parts for the prototype. Worked on the instructables and helped other members who were busy and needed help (making engineering drawings).

Materials Engineer: Jenna Moore, 86285638

- The materials engineer, **Jenna Moore**, was responsible for researching and analyzing the materials for the final design as well as choosing appropriate materials for the prototype. An analysis was done on all materials and parts to determine what materials would best optimize the design. As the materials engineer, the cost analysis was also determined and contributed to prototype and final design decisions. Took part in assembling the prototype and choosing materials and glues to put the prototype together. Helped create the outline for the instructables, work on finishing the instructables, helped organize files and make sure all engineering drawings followed rubric.

Tester: Craig Tod, 63246222

- The tester, **Craig Tod**, was responsible for helping to research and plan the design for the planetary gearbox as well as to input the design into solidworks. Also helped with the building of the prototype and testing and redesign process. With the instructable helped to add drawings and tutorials for making parts as well as helped with free body diagram and equations.

Lead Designer: Jessica Herrera, 47224777

- The lead designer, **Jessica Herrera**, was responsible for making sure that all of the parts of the design fit together and helped with the design process and assembly of the prototype. She assisted with 3D printing and created the ratchet, the click, the hinge connect, and the pipe in Solidworks. She created the solidworks assembly of the lever, the exploded view, engineering drawing, and motion analysis. Finally, she worked together with the group to make the instructables.

Researcher: Salonee Darbari, 13739150

- The researcher, **Salonee Darbari**, was responsible for assisting with the documentation for the phase 1 presentation along with the Free Body Diagram and initial designs of the planetary gear. She also performed market and patent research as necessary and helped organize and create the instructables while assisting with the prototype assembly. She also assisted with the 3D printing for prototyping.

Designer: Sina Habibi, ID NEEDED
The designer, Sina Habibi, was responsible for assisting the lead design with designing parts, creating engineering sketches for parts such as the ratchet and pawl. Additionally, he helped construct and test the prototype by buying parts, operating the wheelchair, and assisting with setup and teardown.

Team Signatures:

Sign: Klaudia Cymerska  Date: 06/08/2018  Printed Name: Klaudia Cymerska

Sign: Jenna Moore  Date: 06/08/2018  Printed Name: Jenna Moore

Sign: Craig Tod  Date: 06/08/2018  Printed Name: Craig Tod

Sign: Wenyan Lei  Date: 06/08/2018  Printed Name: Wenyan Lei

Sign: Jessica Herrera  Date: 06/08/2018  Printed Name: Jessica Herrera

Sign: Salonee Darbari  Date: 6/8/2018  Printed Name: Salonee Darbari

Sign: Sina Habibi  Date: 6/8/2018  Printed Name: Sina Habibi