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Assistive technology is used by individuals with disabilities in order to perform functions that might otherwise be difficult or impossible. Assistive technology can include mobility devices and mechanisms such as walkers and wheelchairs, as well as hardware and software. For example, people with limited hand function may use a keyboard with large keys or a special mouse to operate a computer, people who are blind may use software that reads text on the screen in a computer-generated voice, people with low vision may use software that enlarges screen content, people who are deaf may use a text telephone, or people with speech impairments may use a device that speaks out loud as they enter text via a keyboard.

The purpose of this work is to present design and fabrication of several mechanisms that can be used to empower people with disabilities in order for them to function their full occupational potential. The work scope of design project, schedule, budget, project team and the external collaborations from outside of the college are presented and the design and fabrication of the mechanisms are explained. This work is a collaborative effort among different majors in the college of engineering.