THE JOYMOUSE

Opening up the digital world to individuals with Parkinson's Disease

Statement of Intent

Design a product to be used by individuals with hand tremors to aid them in carrying out basic mouse functions on a computer, allowing for independent and efficient navigation.

Problem Space

The computer is incorporated into virtually every aspect of our daily lives and its impact can be seen in its universal use in classrooms, workplaces, and homes. Those who suffer from Parkinson's, which causes involuntary hand tremors, do not have the motor skills to effectively use a mouse to carry out digital tasks. This prevents them from surfing the web, completing work, or communicating, negatively impacting their livelihood and quality of life. We sought to create a device that would allow these individuals to continue to independently and effectively use their computers.

Design Solution

The *Joymouse* incorporates a variety of features that make it the optimal product for computer users with Parkinson's. It is adjustable, compatible, simple to understand, and has features specifically designed to reduce the effects of tremors. The joystick, which is easy to control, has a compressible head that users can squeeze to suppress their tremors. The four-directional movement prevents unwanted cursor action caused by tremors. The body of the mouse acts as an armrest for support, with an extension and cushioning for maximal comfort. The mouse is wide and weighted to lessen the effects of tremors. Moreover, the USB connection ensures that the older user won't have to worry about interference or bluetooth problems, and the displacement of the buttons from cursor control ensures that tremors won't result in accidental clicking.