This application was designed as a tool to be used as a complement to occupational therapy, particularly therapy aimed at improving fine motor skills and dexterity of finger and whole arm.

My aunt who was originally diagnosed with breast cancer at the age of 27 was the inspiration for this app. Over the last 14 years, she had combated the disease and in 2011 it returned for the 3rd time, having metastasized to several organs including her, brain, lungs, ovaries and adrenal glands. After being in remission for 6 months in 2014, she began experiencing stroke-like paralysis and, as a result, was unable to use her left hand. Scans showed the cancer had returned for a 4th time with new lesions on her brain. Swelling surrounding the lesions were found to be the cause of the paralysis. After surgery to remove them, she began occupational therapy to regain functionality of her hand.

Being present in her occupational therapy sessions both at home and at the rehab, I wanted to be able to help her recover. Coming from a background in Computer Science, it was only natural to develop an app that she could use to practice the various skills that occupational therapy aims to improve. Through researching existing technology and therapy techniques, I developed a simple game where the user has one minute to catch a ball using the mouse pointer as many times as possible. My intention is to be able to improve the user’s ability to use their fingers, wrist and arms by targeting fine motor skills and dexterity.

As no studies were done to show my programs effectiveness, no results are guaranteed but I believe this can be a very valuable tool for occupational therapists and their clients. It can be used as a motivational tool because of its progress reports; a client can see their progress over many sessions, if they were able to catch more or less circles in the minute compared to all previous sessions. The three difficulty settings kept minimal ability in mind so the user can be challenged at a level they feel comfortable with.