

*According to data from the Central Statistics Agency (BPS) in 2014, the number of elderly people reached 207,930,000 people, and it is estimated that by 2035 the total elderly in Indonesia will reach 481,987,000 people, which will continue to increase every year. Rheumatism is one of the most common diseases experienced by the elderly. Rheumatism can be caused by several things, such as genetic factors, obesity factors, and age factors of course. Due to the Covid-19 pandemic that has hit the world, many of the elderly are no longer doing gymnastics for their fitness because it requires them to stay at home. Therefore, researchers designed a fitness application for the elderly so that the elderly have guidance and enthusiasm for doing gymnastics. This study uses the User-Centered Design method because the needs and desires of users are the main focus. Researchers also conducted usability testing on one of the fitness applications, namely senior fitness to see what the application lacks and the results are as follows Effectiveness of 51%, namely for users who do not experience errors and 80% for users who can complete tasks, Efficiency of 34.5 %, Learnability of 43.4%, Memorability of 4.4%, and SUS score of 45.5 or included in category F. After getting the information, the researcher designed a fitness application for the elderly and did usability testing to see if the application could satisfy user or not. The following are the results of research on fitness applications for the elderly, namely Effectiveness of 97.5% for users with no errors and 99.1% for users who can complete tasks, Efficiency of 84.8%, Learnability of 82.5%, Memorability of 1, 7%, and a SUS score of 90 or falls into category A. With these numbers, it can be concluded that fitness applications for the elderly are acceptable to users and by existing requirements.*

*Keywords: Elderly, Fitness, System Usability Scale, , Usability Testing, User Centered Design, User Interface.*