

ABSTRACT

Seniors, defined as individuals aged 60 years and over, face complex health challenges resulting from the aging process, such as declines in physical and cognitive function. This decline can reduce their independence and affect their quality of life. However, modern technological developments offer potential solutions to improve the well-being of the elderly

In this Final Project, the development of Smart Bracelet technology with GPS specifically for the Elderly is carried out, which not only detects the presence of elderly people with symptoms of Dementia, but is also integrated with an application for monitoring location, temperature, and providing notifications when the elderly are outside the house around 30 meters.

The research results in this final project show that the application has high accuracy and reliability in monitoring location and body temperature, as well as providing consistent notifications via the Telegram bot when certain limits are exceeded. Location and body temperature data can be received and displayed validly, even though there are obstacles such as weak GPS signals indoors or when it rains, as well as data reception delays due to server load or GSM network interference.

Keywords: *Elderly, Smart Bracelet, Technology, Dementia, Health, Telegram Bot*