Elderly Care

Team name: King Charles School: Taoyuan Municipal Zhongli Commercial Senior High School Instructor: Zhang Jialan <u>Co</u>mpeting students: Ye Liuting, Fan Jiang Yiting, Ye Zhijun, Xie Ruiyu

Abstract of work

This system is designed to target the risk of falls for the elderly. It uses hardware devices such as motion sensors, accelerometers, and gyroscopes to monitor the activity status of the elderly at any time and issue an alarm when a fall is detected. The system can notify medical staff or family members in time through Line to reduce the damage caused by falls. This system is not only accurate and stable, but also simple and comfortable, providing additional safety protection for the elderly.

Features of

the work

Real-time monitoring: The system uses motion sensors and gyroscope hardware to monitor the activity status of the elderly at any time.

Instant warning: When the system detects abnormal movement or risk of falling, an alarm will be issued immediately.

Remote monitoring: Through the mobile phone APP, family members can keep track of the elderly's activity status at any time.

High stability: The system has high stability and accuracy, can run stably for a long time, and reduce the false alarm rate.

Reduce power consumption: The system has low power consumption characteristics, which prolongs the use time of the equipment and reduces the number of battery replacements.



Design Concept

We hope to use AI and IoT technologies to improve home safety for both the elderly and young, especially those who live alone. Because they have no family to take care of them, they may become depressed due to unhealthy eating and no one to chat with, or their family members may not know about their illness and they may not see a doctor. If they go to the hospital immediately, there will be no regrets.

