

My simple invention, designed to keep my grandfather safe

Kenneth Shinozuka | TEDYouth 2014

Listening

1) Complete this summary with words from the TED Talk [*My simple invention, designed to keep my grandfather safe*](#) by Kenneth Shinozuka (TEDYouth 2014).

Summary

Kenneth Shinozuka shares his story in this TED Talk about creating a simple device to help people with Alzheimer's disease. He talks about a societal

_____ (1) of an increasing elderly population suffering from Alzheimer's Disease. His invention addresses the _____ (2) of caring for family members with dementia.



The Problem and Idea



Shinozuka noticed his grandfather getting out of bed at night, which worried his aunt. He searched for a _____ (3) and remembered his childhood idea of a _____ (4) bathroom system with sensors. Instead, he focused on a _____ (5) sensor for the foot to _____ (6) when the patient stands up.

How It Works

The device uses a _____ (7) sensor in a sock or attached to the foot that feels the weight when someone steps down. It sends an _____ (8) alert to the caregiver's phone right away. He explains designing a _____ (9) and using connectivity between the particles based on electrical _____ (10) to save power, since _____ (11) signal transmission consumes lots of power.



Testing and Features



The sensor runs on a _____ (12) battery for long use and allows _____ (13) monitor from anywhere. Shinozuka made a re-attachable sensor assembly that can be _____ (14) anywhere on the foot. He did a _____ (two words) (15) of his device at several residential care facilities in California.

Academic Skills Mechatronics

2) Based on the information from the TED Talk, address flaws of the invention and explain how they could be minimized.



References

Task 1

The test for the summary was created with the help of perplexity.ai with keywords I had previously chosen.

The pictures of the socks come from pixabay.

Task 2

The picture of the sock with sensor was created using copilot.